AGENDA

GARDEN GROVE PLANNING COMMISSION

MAY 21, 2026 – 7:00 pm

COMMUNITY MEETING CENTER
11300 STANFORD AVENUE

Meeting Assistance: Any person requiring auxiliary aids and services, due to a disability, to address the Planning Commission, should contact the Community Development Department at (714) 741-5312 or email planning@ggcity.org 72 hours prior to the meeting to arrange for special accommodations. (Government Code §5494.3.2).

Agenda Item Descriptions: Agenda item descriptions are intended to give a brief and general description of the item. The Planning Commission may take legislative action deemed appropriate with respect to the item and is not limited to the recommended action indicated in staff reports or the agenda.

Documents/Writings: Any revised or additional documents/writings related to an item on the agenda distributed to all or a majority of the Planning Commission within 72 hours of a meeting, are made available for public inspection at the same time (1) in the Planning Services Division Office at 11222 Acacia Parkway, Garden Grove, CA 92840, during normal business hours; and (2) at the Community Meeting Center at the time of the meeting.

Public Comments: Members of the public who attend the meeting in-person and would like to address the Planning Commission are requested to complete a yellow speaker card indicating their name and address, and identifying the subject matter they wish to address. This card should be given to the Recording Secretary before the meeting begins. General comments are made during "Oral Communications" and are limited to three (3) minutes and to matters the Planning Commission has jurisdiction over. Persons wishing to address the Planning Commission regarding a Public Hearing matter will be called to the podium at the time the matter is being considered. Members of the public who wish to comment on matters before the Commission, in lieu of doing so in person, may submit comments by emailing public-comment@ggcity.org no later than 3:00 p.m. the day of the meeting. The comments will be provided to the Commission as part of the meeting record.

PLEASE SILENCE YOUR CELL PHONES DURING THE MEETING.

REGULAR MEETING AGENDA

ROLL CALL: COMMISSIONERS ASHLAND, BEARD, CUEVA, FLANDERS, LARICCHIA, LINDSAY, RAMIREZ

PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

A. ORAL COMMUNICATIONS - PUBLIC

B. APPROVAL OF MINUTES – May 7, 2026

C. PUBLIC HEARING(S) (Authorization for the Chair to execute Resolution shall be included in the motion.)

C.1. SITE PLAN NO. SP-171-2026

APPLICANT: TONY LAM
LOCATION: 8892 LAMPSON AVENUE

REQUEST: A request for Site Plan approval to construct a four (4) unit, two-story, multi-family residential apartment development and associated site improvements on an approximately 0.39 acre lot. In conjunction with the request, the Planning Commission will consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

STAFF RECOMMENDATION: Adopt a Resolution approving Site Plan No. SP-171-2026 pursuant to the recommended Conditions of Approval.

C.2. CONDITIONAL USE PERMIT NO. CUP-295-2026

APPLICANT: JUSTINE CHAVEZ
LOCATION: 8271 GARDEN GROVE BOULEVARD

REQUEST: A request for Conditional Use Permit approval to allow the operation of a new "Tattoo, General" in a 760 square-foot business within an existing multi-tenant commercial shopping center. In conjunction with the request, the Planning Commission will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

STAFF RECOMMENDATION: Adopt a Resolution approving Conditional Use Permit No. CUP-295-2026 pursuant to the recommended Conditions of Approval.

C.3. GENERAL PLAN AMENDMENT NO. GPA-001-2026
AMENDMENT NO. A-046-2026
PLANNED UNIT DEVELOPMENT NO. PUD-020-2026
SITE PLAN NO. SP-168-2026
VESTING TENTATIVE TRACT MAP NO. TT 19447

APPLICANT: MELIA HOMES INC.
LOCATION: 9822 RUSSELL AVE.

REQUEST: A request that the Planning Commission recommend City Council approval of a General Plan Amendment, Zoning Map Amendment, Planned Unit Development, and related entitlements for a proposed 26-unit multiple-family residential project on an approximately 1.8-acre site. The specific land use entitlement approvals requested include the following:

(i) General Plan Amendment to change the Land Use Designation of the subject property from LDR (Low Density Residential) to LMR (Low Medium Residential);

(ii) Zoning Map Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone;

(iii) Residential Planned Unit Development to establish standards of development to facilitate the development of the project;

(iv) Site Plan approval to construct twenty-six (26) two-story townhomes and associated site improvements;

(v) Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium; and

(vi) A Revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01, which previously allowed for the operation of an elementary school, and operation of a wireless facility on the subject property.

The Planning Commission will also consider a recommendation that the City Council adopt a Mitigated Negative Declaration and an associated Mitigation Monitoring and Reporting Program for the project.

STAFF RECOMMENDATION: Recommend adoption of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, and approval of General Plan Amendment No. GPA-001-2026, Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, Vesting Tentative Tract Map No. TT 19447, to City Council, pursuant to the recommended Conditions of Approval.

D. MATTERS FROM COMMISSIONERS

E. MATTERS FROM STAFF

F. ADJOURNMENT

GARDEN GROVE PLANNING COMMISSION
Community Meeting Center
11300 Stanford Avenue, Garden Grove, CA 92840

Meeting Minutes
Thursday, May 7, 2026

CALL TO ORDER: 7:00 p.m.

ROLL CALL:

Commissioner Ashland
Commissioner Beard
Commissioner Cueva
Commissioner Flanders
Commissioner Laricchia
Commissioner Lindsay
Commissioner Ramirez

PLEDGE OF ALLEGIANCE: Led by Commissioner Laricchia.

ORAL COMMUNICATIONS – PUBLIC – None

April 16, 2026 MINUTES:

Action: Received and filed.

Motion: Lindsay Second: Ramirez

Ayes:	(7)	Ashland, Beard, Cueva, Flanders, Laricchia, Lindsay, Ramirez
Noes:	(0)	
Absent:	(0)	
Abstain:	(0)	

PUBLIC HEARING – PLANNED UNIT DEVELOPMENT NO. PUD-141-01(A), SITE PLAN NO. SP-107-2022 (REV. 2026), SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR PROPERTY LOCATED ON THE NORTHWEST CORNER OF TWINTREE AVENUE AND HARBOR BOULEVARD, AT 12241 HARBOR BOULEVARD, 12241 HARBOR BOULEVARD (APN: 231-471-06), 12261 HARBOR BOULEVARD (APN: 231-471-07), 12271 HARBOR BOULEVARD (APN: 231-471-08), 12291 HARBOR BOULEVARD (APN: 231-471-09), 12311 HARBOR BOULEVARD (APN: 231-471-10), 12321 HARBOR BOULEVARD (APN: 231-471-11), 12323 HARBOR BOULEVARD (APN: 231-471-11), 12246 THACKERY DRIVE (APN: 231-471-18), 12252 THACKERY DRIVE (APN: 231-471-17), 12262 THACKERY DRIVE (APN: 231-471-16), 12282 THACKERY DRIVE (APN: 231-471-15), 12292 THACKERY DRIVE (APN: 231-471-14), 12312 THACKERY DRIVE (APN: 231-471-13), 12322 THACKERY DRIVE (APN: 231-471-12), 12251 THACKERY DRIVE (APN: 231-471-19), 12261 THACKERY DRIVE (APN: 231-471-20),

12281 THACKERY DRIVE (APN: 231-471-21), 12291 THACKERY DRIVE (APN: 231-471-22), 12311 THACKERY DRIVE (APN: 231-471-23), 12321 THACKERY DRIVE (APN: 231-471-24), VACATED THACKERY DRIVE (APN: 231-471-54), AND VACATED ALLEY (NO APN)

Applicant: KAM SONG CO., INC.
Date: May 7, 2026

Request: Pursuant to a Writ Of Mandate issued by the Orange County Superior Court in Marlene Perez Et Al. v. City Of Garden Grove *et al.,* O.C.S.C. Case No. 30-2022-01281816-CU-WM-CXC, the Planning Commission will consider a recommendation to the City Council to: (1) certify a Supplemental Environmental Impact Report (SEIR), adopt a Supplemental Mitigation Monitoring and Reporting Program, and adopt Findings, including a Statement of Overriding Considerations; (2) approve revisions to the Conditions of Approval associated with Site Plan No. SP-107-2022; and (3) reapprove Planned Unit Development No. PUD-141-01(A) with modifications limited to the Planned Unit Development Performance Standards to incorporate the mitigation measures and project design features identified in the SEIR for the previously approved Site B2 Project on 3.72 acres (Nickelodeon Resort Hotel).

The applicant's representatives, John Hicks, addressed the Commission and answered questions. The applicant representative was asked if they had read and agreed with the Conditions of Approval, and they responded that they had.

Action: Resolutions No. 6133-26, 6134-26, and 6135-26 were approved.

The following members of the public spoke and expressed concerns about the project: Vanesa Cruz, Jake, Antonio Monanes, Greta Corona, Jamie Hall, Nathan Delgadila, Elizabeth Galindo, Teresa Garcia, Maria Mazaneges, Juan Munoz, and Tammi Ha.

The City received 94 letters of opposition.

One member of the public, Tony Velasquez, spoke on behalf of the Carpenters' Union and expressed support for the project.

The City received 1 letter of support.

Motion: Beard Second: Lindsay

Ayes: (7) Ashland, Beard, Cueva, Flanders, Laricchia, Lindsay, Ramirez
Noes: (0)

Absent: (0)

MATTERS FROM COMMISSIONERS: Commission Lindsay mentioned that the Strawberry Festival is in two weeks. Commissioner Laricchia requested staff to look into the tour bus parking and possible posting no bus parking signage in the area of Twintree Lane, and staff mentioned that they will discuss with other city departments. Commissioner Ramirez requested that the developer or contractor keep in contact with the neighbor (Tammi Ha) when construction begins.

MATTERS FROM STAFF: Staff gave a brief description of the May 21th meeting agenda.

ADJOURNMENT: At 8:59 p.m.

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Carol Sebbo
Recording Secretary

COMMUNITY DEVELOPMENT DEPARTMENT PLANNING STAFF REPORT

AGENDA ITEM NO.: C.1	**SITE LOCATION:** The south side of Lampson Avenue, west of Magnolia Street, at 8892 Lampson Avenue
HEARING DATE: May 21, 2026	**GENERAL PLAN:** Medium Density Residential (MDR)
CASE NOS.: Site Plan No. SP-171-2026	**ZONE:** R-3 (Multiple-Family Residential)
APPLICANT: Tony Lam	**APN:** 133-272-41
PROPERTY OWNER: Same as Applicant	**CEQA DETERMINATION:** Exempt - Section 15303 - "Small Structures"

REQUEST:

A request for Site Plan approval to construct a four (4) unit, two-story, multiple-family residential apartment development and associated site improvements on an approximately 0.39-acre lot. In conjunction with the request, the Planning Commission will consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

BACKGROUND:

The subject site is a rectangular-shaped lot located on the south side of Lampson Avenue, west of Magnolia Street, at 8892 Lampson Avenue. The site has a total gross lot area of 16,798 square feet (0.39 acres). The site has a General Plan Land Use Designation of MDR (Medium Density Residential) and is zoned R-3 (Multiple-Family Residential). The site abuts R-3 properties to the north across Lampson Avenue, east and west, and R-1 (Single Family Residential) zoned properties to the south. Surrounding uses include multiple-family residential structures to the north, east, and west, and single-family residential to the south. The project site is currently improved with a single-family dwelling with an attached garage. The existing improvements were constructed in 1961.

The current property owner purchased the property in February 2025, and the property is currently occupied by a renter. The applicant is requesting Site Plan approval to demolish the existing improvements and to construct a four (4) unit, two-story, multiple-family residential apartment development with associated site improvements. Each unit is proposed to consist of a kitchen, a dining area, a living room, four (4) bedrooms, three (3) full bathrooms, a private deck, storage room, and a three-car garage. The site is proposed to be improved with two (2) covered guest parking spaces, including one (1) handicap parking stall, a trash enclosure, a barbecue area with picnic tables, central drive aisle with concrete paver, and site landscaping.

The project site is located in the Medium Density Residential (MDR) Land Use Designation. The MDR Land Use Designation is intended to create, maintain, and enhance residential areas characterized by mostly traditional multiple-family apartments, condominiums, townhomes, and single-family small-lot subdivisions. Densities for the MDR land use designation are intended to range from 21.1 to 32.0 dwelling units per acre, and are implemented by the R-3 zone. The Land Use Element provides that where density is expressed in ranges, the top of the range is the maximum density permitted, however, densities below the bottom of the range are permitted. The project is proposed to be developed at a density of ten (10) dwelling units per acre, which is permitted by the General Plan Land Use Element and R-3 zone.

PROJECT STATISTICS:

Standard	Provided	Code Requirement	Meets Code
Lot Size			
Gross area	16,798 square feet (0.39 acres)	7,200 square feet	Yes
Lot Coverage	32.4%	Max. 50%	Yes
Building Setbacks			
Front	20’-0”	20’-0”	Yes
Rear	25’-0”	10’-0”	Yes
Side	10’-0”	10’-0”	Yes
Density	4 units (10 units per acre)	12 units (32 units per acre)	Yes
Total Parking	14 spaces (12 Enclosed, 2 Open)	14 spaces	Yes
Recreation Area Total	900 square feet	Min. 900 square feet	Yes
Standard	**Provided**	**Code Requirement**	**Meets Code**
Building Height	27’-8”	Max. 35’-0”	Yes
Stories	2 stories	3 stories	Yes
Unit Size			
4- bedroom unit	1,615 square feet	Min. 1,050 square feet	Yes

DISCUSSION:

SITE PLAN:

Site Design and Circulation

The proposed design consists of two (2), two-story apartment buildings, each containing two (2) units. The buildings would mirror each other and would be set back 20’-0” from the front/northerly property line along Lampson Avenue. The structures would front Lampson Avenue with parking toward the interior of the lot, accessed via a shared 28’-0” wide drive aisle that would run in between the structures. The drive aisle would be accessed from a drive approach that would be centrally located on the northerly property line along Lampson Avenue, making it the only vehicular access point to the site. Building 1, the building located to the east of the site, would be comprised of Units 1 and 2, and would be set back 10’-0” from the easterly property line. Building 2, the

building located to the west of the site, would be comprised of Units 3 and 4, and would be set back 10'-0" from the westerly property line. The project would meet the building separation standards of the R-3 zone per Municipal Code Section 9.12.040.050 (Special Requirements – Multiple Family Residential).

Each unit would consist of an enclosed three-car garage that faces the interior of the site and the shared drive aisle. Two (2) additional covered guest parking spaces, located at the ends of each building, would also have access from the shared drive aisle. A handicap open guest parking space would be located at the rear of the site, directly south of Building 1. A recreation area improved with a barbecue and two (2) outdoor picnic tables would be located in the southwest corner of the site directly south of Building 2. A trash enclosure is also proposed along the southeast corner of the property, opposite the common recreational area. The new drive approach, drive aisle, trash enclosure, and parking layout have been designed in accordance with City standards to provide adequate access for trash trucks and emergency vehicles.

Each unit would be accessed from its attached three-car garage, or from the public right-of-way via internal pedestrian walkways leading to each unit's main entry. Units 1 and 3 have main entries that are oriented toward the front of the site and Units 2 and 4 have main entries oriented to the southerly property line.

Unit Design

The proposed project would consist of four (4) apartment units with two unit types and with each building being made up of one of each unit. The buildings mirror each other and contain one of each of the unit types.

Units 1 and 3 would be the front units of each building and would be 1,615 square feet. Each of these units would consist of a 683 square-foot, three-car garage, a laundry closet, one (1) bedroom with a full bath and walk-in closet, and a storage area with 160 square feet of cubic capacity on the ground floor. The second story would consist of a living room, three (3) bedrooms, two (2) full bathrooms, a dining area and an outdoor 300 square-foot deck.

Units 2 and 4 are proposed to the rear of the building and would be 2,000 square feet each. Each unit would consist of a 683 square-foot, three-car garage, a laundry closet, one (1) bedroom with a full bath and walk in closet, and a storage area with 160 square feet of cubic capacity on the ground floor. The second story would consist of a living room, three (3) bedrooms including a master bedroom, two (2) full bathrooms including a master bathroom, a dining area and an outdoor 300 square-foot deck.

Unit Types

Unit Plan Types	Bedrooms	Bathrooms	Living Area
Building 1			
Unit 1	4	3	1,615 S.F.
Unit 2	4	3	2,000 S.F.

Building 2 **Unit 3** **Unit 4**	 4 4	 3 3	 1,615 S.F. 2,000 S.F.

Parking

The residential units have been parked per the parking requirements of the R-3 zone, which establishes the minimum parking requirement for residential units based on the bedroom count of each unit. The four (4) proposed units would consist of four (4) bedrooms each. Accounting for guest and resident parking, the Code requires 3.5 parking spaces per every unit with more than two (2) bedrooms. Therefore, the project is required to provide fourteen (14) parking spaces per the following breakdown:

Parking Spaces Required per Unit

Unit Number	Number of Bedrooms	Required parking spaces
Unit 1	4 Bedrooms	3.5
Unit 2	4 Bedrooms	3.5
Unit 3	4 Bedrooms	3.5
Unit 4	4 Bedrooms	3.5
Total	**14 spaces**	

Per the proposed design, twelve (12) parking spaces would be provided in the form of four (4) enclosed three-car garages. Guest parking would be provided in the form of two (2) open tuck-under parking spaces, including one (1) handicap parking space to ensure ADA compliance. With a total of fourteen (14) parking spaces, the project would meet the minimum required parking per Municipal Code Section 9.12.040.180 (Parking Spaces Required).

Open Space and Recreational Area

Section 9.12.040.050.I of the Municipal Code requires that the proposed development provide a minimum of 1,200 square feet of recreation area, which is calculated at 300 square feet per unit as a mix of private and common open areas. Each private recreation area is required to be at least 60 square feet and have minimum dimension of 6’-0” in any direction. Each unit is proposed to provide a 300 square-foot second-story deck that would have a minimum dimension of 16’-0”. The private decks would have access from the living room located on the second story of each unit. The combined area of the decks would be 1,200 square feet and would face the interior of the project site. Therefore, the project would exceed the minimum requirements for private recreation area, as required by the Municipal Code.

In addition to the private recreation areas, because the site is over 14,400 square feet, the Municipal Code also requires a common active recreation area that has minimum dimensions of 30’-0” by 30’-0”. The project proposes an active recreation to satisfy the open space requirements. The recreation area would be 900 square feet and would have

clear dimensions of 30’-0” x 30’-0”. The area and dimensions would meet the minimum threshold established for active recreation areas in the R-3 zone under Municipal Code Section 9.12.040.050.I.7. The recreation area would be improved with a barbecue area with outdoor picnic tables, which meets the minimum amenity requirements for a four unit project.

With the 1,200 square-foot private recreation space and 900 square feet of active recreational area, the proposed development would provide a combined area of 2,100 square feet of recreation space. Thus, the project exceeds the minimum open space requirement of the Municipal Code.

Landscaping

Section 9.12.040.090 (Landscaping Requirements) of the Municipal Code requires all areas that are not designated for walkways, parking spaces, drive aisles, and private recreation areas, to be fully landscaped and irrigated. In addition, the applicant is required to provide a landscape and irrigation plan that complies with the requirements of the Municipal Code. The project proposes landscaping in all required setbacks including front, side, and rear, with the exception of areas designated for the drive aisle or walkways, using a variety of plant materials. All of the landscaped areas would be fitted with automatic irrigation systems that comply with the City’s Water Efficiency Guidelines.

Building Architecture

The proposed multiple-family apartment buildings would be two stories with a peak height of 27’-8”, and are designed in a Mediterranean architectural style. The buildings feature smooth stucco exteriors, cement S-tile roofing, and a varied, hipped roof. The apartments incorporate stone veneer that emphasizes the entryways and a two-tone paint scheme that adds depth and visual interest. Variations in rooflines and recessed entryways are provided to help break up the overall building massing. To better comply with the City’s Municipal Code requirements for second-story additions, the proposed development includes fixed, obscured windows along second-story elevations adjacent to neighboring residential properties in order to preserve privacy. In addition, the project has been designed so that walls along the southerly property line do not contain windows, further minimizing potential privacy impacts on adjoining residences.

REPLACEMENT HOUSING AND TENANT PROTECTIONS

Pursuant to Government Code §66300.6(a), the City may not approve a housing development project that would require the demolition of residential dwelling units unless the project would create at least as many residential dwelling units as would be demolished. This proposed project satisfies this requirement because it would replace one (1) existing unit with four (4) new dwelling units.

In order to prevent new development projects from displacing existing lower income rental households, Government Code §66300.6(b) also imposes several requirements that the City must require a developer to comply with when a proposed development

project would require the demolition of occupied or vacant "protected units". "Protected units" include residential dwelling units that are or were occupied by lower or very-low-income rental households within the past five (5) years. In the instances where tenant information is not readily available, the units are presumed to be rented at income levels proportional to the citywide rental income levels. Any lower income unit demolished shall be replaced by a unit of equal or lower income level.

The current tenant has provided income information that places them within the "Above Moderate Income" category. Therefore, there is no obligation for the applicant to provide a replacement affordable unit.

NO NET LOSS FINDINGS

Government Code Section 65863 requires jurisdictions to maintain adequate sites to accommodate their remaining unmet Regional Housing Needs Allocation (RHNA) by each income category at all times throughout the Housing Element planning period. A jurisdiction may not take any action to reduce a parcel's residential density unless it makes findings that the reduction is consistent with the General Plan, including the Housing Element, and that the remaining sites identified in its Housing Element sites inventory can accommodate its remaining unmet RHNA by each income category, or it identifies additional sites so that there is no net loss of residential unit capacity.

In addition, if a jurisdiction approves a development on a parcel identified in its Housing Element sites inventory with fewer units than shown in the Housing Element, the jurisdiction must either make findings that the Housing Element's remaining sites have sufficient capacity to accommodate the remaining unmet RHNA by each income level, or identify and make available additional adequate sites to accommodate the remaining unmet RHNA for each income category. However, a jurisdiction may not disapprove a housing development project on the basis that approval of the development would trigger the identification or zoning of additional adequate sites to accommodate the remaining RHNA.

The project site is identified in the Housing Element site inventory as having a realistic capacity to accommodate ten (10) "above moderate-income" units. The proposed project consists of four (4) "above moderate-income" units. Because the proposed project includes fewer "above moderate-income" units than shown in the Housing Element sites inventory, the City must determine whether the remaining Housing Element inventory sites have sufficient capacity to accommodate the City's remaining unmet RHNA by income level if the project is approved as proposed. Staff has evaluated the housing projects that have been permitted or approved during the current planning period, or which are otherwise not accounted for in the Housing Element site analysis, and has determined that the remaining sites identified in the sites inventory have sufficient capacity to accommodate the City's remaining unmet RHNA need for each income level.

At the time the Housing Element was prepared and adopted, the City's *unmet* RHNA was calculated to be 18,208 units, broken down as follows: 6,567 "low- and very low-income" units, 3,087 "moderate-income" units, and 8,554 "above

moderate-income" units. The sites identified in the certified adopted Housing Element were determined adequate to accommodate a total of 19,239 units, including 442 more units than the City's unmet RHNA in the "low- and very low-income" categories, 207 more units than the City's unmet RHNA for the "moderate-income" category, and 382 more units than the City's unmet RHNA for the "above moderate-income" category. Overall, the sites inventory in the adopted Housing Element reflected a total capacity surplus of 1,031 units.

After accounting for permitted and entitled units since the beginning of the 6th RHNA cycle, October 15, 2021, and the four (4) units in the proposed project, the City's total remaining unmet RHNA would be 15,424 units, broken down as follows: 6,393 "low- and very low-income" units, 3,079 "moderate-income" units, and 5,952 "above moderate-income" units. The remaining capacity of the sites identified in the Housing Element would be 18,723 units, resulting in a total capacity surplus of 3,299 units. The remaining sites are also adequate to accommodate a surplus of "low-" and "very low-income" units (479), "moderate-income" units (7), and "above -moderate-income" units (2,813). Due to this surplus, the overall residential capacity on sites identified in the Housing Element would still be sufficient to accommodate the City's total remaining unmet RHNA if the proposed project is approved. After accounting for permitted and entitled units since the beginning of the 6th RHNA cycle, October 15, 2021, and the four (4) units in the proposed project, the City's total remaining unmet RHNA would be 17,553 units, broken down as follows: 6,519 "low- and very low-income" units, 3,081 "moderate-income" units, and 7,953 "above moderate-income" units. The remaining capacity of the sites identified in the Housing Element would be 15,424 units, resulting in a total capacity surplus of 3,229 units. The remaining sites are also adequate to accommodate a surplus of "low- and very low-income" units (479), "moderate-income" units (7), and "above-moderate-income" units (2,813). Due to this surplus, the overall residential capacity on sites identified in the Housing Element would still be sufficient to accommodate the City's total remaining unmet RHNA if the proposed project is approved. The required No Net Loss findings can be made and are included in Resolution No. 6123-26 (Attachment 3).

California Environmental Quality Act

The proposed development has been determined to be exempt from California Environmental Quality Act (CEQA) pursuant to the Class 3 exemption. CEQA's Class 3 exemption applies to new construction, or conversion of small structures (CEQA Guidelines §15303.). This includes the construction of a duplex or similar multi-family use with up to 4 units, or 6 units in urbanized areas. The proposal would be in an urbanized area, would be comprised of six (6) or fewer units, would be a listed use in the Class 3 exemption, and would be permitted under the R-3 zoning designation. Therefore, staff recommends that the Planning Commission determine the project to be exempt from CEQA.

RECOMMENDATION:

Staff recommends that the Planning Commission take the following action:

1. Adopt Resolution No. 6123-26 approving Site Plan No. SP-171-2026, subject to the recommended Conditions of Approval.

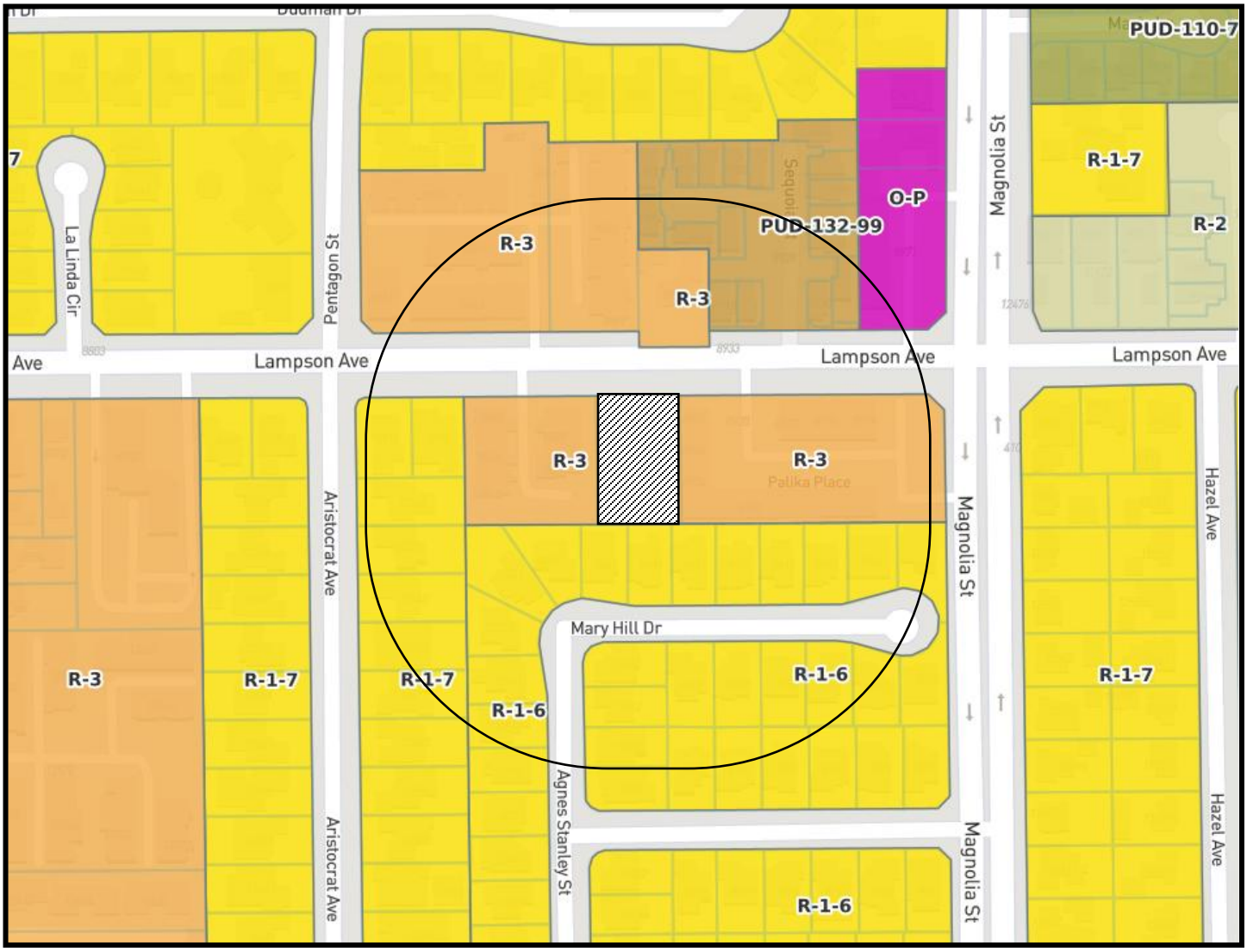
Maria Parra
Planning Services Manager

By: Christian Farmer
Urban Planner

Attachment 1: Vicinity Map
Attachment 2: Plans
Attachment 3: Resolution No. 6123-25 with Exhibit "A" – Conditions of Approval

ATTACHMENT 1 - Vicinity Map

SITE PLAN NO. SP-171-2026



LEGEND

SUBJECT SITE(S) – 8892 Lampson Avenue

300 FOOT RADIUS

NOTES

1. SITE ADDRESSES – 8892 LAMPSON AVENUE
2. ZONING: MULTIPLE FAMILY RESIDENTIAL R-3

CITY OF GARDEN GROVE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
MAY 2026

Attachment 2 - Project Plans

LEGAL DESCRIPTION: CITY OF GARDEN GROVE, COUNTY OF ORANGE

ASSESSOR'S NUMBER : 133-272-41

EXISTING ZONE : R-3
OCC GROUP : R-2 (APARTMENT) /U GARAGE

TYPE OF CONST: TYPE V-B, 3 STORY BUILDING, SPRINKLERS

SCOPE OF WORK: -DEMO EXISTING HOUSE AND CONSTRUCT NEW 4 UNITS APARTMENT AND ATTACHED 3 CAR GARAGE FOR EACH UNIT WITH 2 GUEST PARKING

- FIRE SPRINKLER TO BE SUBMITTED AS SEPARATED PERMIT. SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH CRC R313.3 OR **NFPA 13R WITH UNDERGROUND FIRE WATER SUPPLY PER NFPA 24**

- TRUSS CALCULATION TO BE SUBMITTED AS DEFERED ITEM. TRUSS PLANS/ CALCULATIONS SIGNED & STAMP BY A LICENSED ENGINEER SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR THE OVERALL BUILDING FOR REVIEW PRIOR TO SUBMITTAL TO BUILDING DIVISION, THE ENGINEER OF RECORD SHALL PROVIDE A NOTE WITH STAMP & SIGNATURE ON THE TRUSS PLANS/ CALCULATIONS STATING THAT THE TRUSS PLANS/ CALCULATIONS ARE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING.

-TRASH ENCLOSURE & BOUNDARY WALL UNDER SEPARATE PERMIT

APPLICABLE BUILDING CODES: LOCALLY ADOPTED BUILDING CODE AND APPLICABLE
CALIFORNIA ADMINISTRATIVE CODE(S)
2025 CBC, CMC, CPC, CEC, CFC
2025 GBC CALIFORNIA GREEN BUILDING STANDARD CODE
2025 CALIFORNIA ENERGY CODE
CITY OF GARDEN GROVE ORDINANCE

SITE SUMMARY

- LOT SIZE : 16,798.2 SF. = 0.39 acres
-PRODUCT TYPE : 2 STORIES APARTMENT
-DWELLING UNITS : 4 UNITS
- ZONE : R-3
- NET DENSITY : 4,199.5 SF/UNIT
LOT COVERAGE : (2518 + 2438 + 1770+400 (open park'g) =7126/ 16,798.2 SF= 42.4 %

UNIT SUMMARY

- UNIT 1,and 3 - IDENTICAL (4 BED / 3 BATH)

1ST FLR AREA : 550 SF
2ND FLR AREA : 1,065 SF
3 CAR GARAGE : 683 SF
PORCH : 26 SF
TOTAL AREA : 1,615 SF
UNIT 1 & 3 FOOT PRINT : 550+683+26 = 1259 SF X 2 UNIT = 2518 SF

- UNIT 2, and 4 - IDENTICAL (4 BED / 3 BATH)

1ST FLR AREA : 550 SF
2ND FLR AREA : 1,450 SF
3 CAR GARAGE : 683 SF
PORCH : 26 SF
TOTAL AREA : 2,000 SF
UNIT 2 & 4 FOOT PRINT : 550+683+26 = 1259 SF X 2 UNIT = 2518 SF

BUILDING FOOT PRINT (UNIT 1,2,3,4) :540+ 683 +26 = 1,249 SF X 4 = 4,996 SF

- TOTAL BUILDING AREA :(1615 X 2) +(2000 X2) = 7,230 SF

LOT COVERAGE : (2518 + 2518 + 400 (open park'g) =5436/ 16,798.2 SF= 32.4 %

PARKING SUMMARY

PARKING REQUIRED
4 UNITS X 3.5 = 14 SPACES REQUIRED

PARKING PROVIDED
PRIVATE GARAGE : 12 SPACE
OPEN SPACE : 1 SPACE + 1 H.C SPACE= 2 SPACE
TOTAL PARKING PROVIDED : 14 SPACE-COMPLIED

DEVELOPMENT STANDARD

	REQUIRED	PROVIDED
1ST FLR'S FRONT SET BACK	20'	20'
2ND FLR'S FRONT SET BACK	20'	21'
HEIGHT	35'-0"	27'-8"

PRIVATE OPEN SPACE

REQUIRED OPEN SPACE FOR EACH UNIT IS 300 SF x 4 = 1200 sf
TOTAL PRIVATE OPENING SPACE AT 2ND FLOOR'DECK FOR ALL UNIT 1200 --OK

-RECREATION AREA AT REAR 900 SF

LANDSCAPING AREA(FRONT): 1114 SF / (105x20) = 53 %
TOTAL LANDSCAPING(FRONT & REAR) 1034+900+327+327 = 2588 SF/16798.2= 15.4 %

DRIVEWAY AREA : 5,781 SF



LIST OF AMENITIES FOR 4 UNITS AND 2 ADU				
NUMBER OF UNIT	REQUIRED	PROVIDED	LOCATION	MEET CODE
	COMMUNITY GARDEN AREA-32 SF MINIMUM 8SF/4 UNIT, PROPOSED DEVELOPMENT IS REQUIRED TO HAVE 52 SF OF COMMUNITY GARDEN AREA	PROVIDED 2 PICNIC TABLES AND 1 BBQ STATION AT COMMON AREA 1514 SF AT REAR YARD	AT REAR YARD	YES

VICINITY MAP



SHEET INDEX	
Sheet Number	Sheet Name
A0	TITLE SHEET
A1	OVERALL SITE PLAN
A1.2	bbq AND PICNIC TABLE
A1.3	EXIST/DEMO SITE PLAN
A2.1	1ST FLOOR PLAN
A2.2	2ND FLOOR PLAN
A2.3	OVERALL ROOF PLAN
A2.4	WINDOW AND DOOR SCHEDULE
A3.0	elevation
A3.1	ELEVATION
A3.2	3D VIEW
A3.3	3D VIEW
A3.4	FLOW TEST

FL DESIGN GROUP
Residential & Commercial Design
14211 Riata St, Westminster, CA. 92683
Tel: 714-414-5636
DESIGN GROUP, LLC

4 Units of Apartments
Owner : Tony Lam
8892 Lampson Street, Garden Grove, CA 92683

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SIGN DATE 02-10-17

Project No: 75-01
Date 10-25-2025

TITLE SHEET

A0

APARTMENTS -R3

ALL UTILITIES SHALL BE UNDERGROUND

EXISTING POWER POLE

(E) 6' H BLOCK WALL

LANDSCAPING

150 FEET HOSE PULL DISTANCE

PATH OF TRAVEL

NEW 4' H SCREENED BLOCK WALL

A/C

SLDG DR

PORCH

FOYER

STOR. 186 CUFT 10H

UL

W

WH

D

SHWR

BATH

WIC

BEDROOM 1

3 CAR GARAGE

UNIT 1

UNIT 2

ACCESSIBLE UNIT

H.C BATH

BEDRM 1

LANDSCAPING Not Enclosed

NO PARKING

H.C

TRASH PICK UP UPS TRUCK

TRASH ENCLOSURE

6' BLOCK WALL

(E) 6' H BLOCK WALL

FIRE TRUCK

20' FIRE LANE- NO PARKING

NEW CONC. SIDE WALK

(N) LANDSCAPING 517 SF

GAS METER

LAMPSON AVENUE IS CURRENTLY UNDER A STREET MORATORIUM. ANY UTILITY TRENCH HAZARD RESULTING FROM THE PROJECT ON LAMPSON AVENUE IS SUBJECT TO 15-FEET OF ASPHALT RESURFACING (UP TO 2-INCHES OF ASPHALT GRIND AND CAP) FROM THE CENTER LINE OF PROPOSED UTILITY (WATER, GAS, SEWER, COMMUNICATION CABLES) IN BOTH DIRECTIONS AND MAY EXTEND THE FULL WIDTH OF THE STREET AS DETERMINED BY CITY ENGINEER.

CONCRETE PAVER BY AQUA-BRIC COLOR : BEACON HILL BLEND MODEL : 60MM COBBLE ROUND SEE SPECIFICATION ON A1.2

A3.0 1

A3.1 1

3 A3.0

2 A3.1

3 A3.1

2 A3.0

R-1

52' - 3"

42' - 0"

(E) 6' H BLOCK WALL

112' - 0"

46' - 0"

82' - 9"

93' - 0"

41' - 6"

48' - 0"

RECREATION AREA

30' - 0"

PILOT ROCK COVER PARK GRILL-MODEL EC 26B2-SEE SPEC ON SHEET A1.2

RECEATION AREA 983 SF

HEXAGON PICNIC TABLE-MODEL PB6HEX-ADA CEDAR/BLACK SEE A1.2 FOR SPEC

4

CONSTRUCT CURB AND GUTTER REPLACING ANY EXISTING DEPRESSED CURB ACROSS THE PROPERTY FRONTAGE IN ACCORDANCE WITH CITY STANDARD PLAN B-113 & B-114.

LAMPSON AVE

FIRE TRUCK

20' FIRE LANE- NO PARKING

NEW CONC. SIDE WALK

(N) LANDSCAPING 557 SF

GAS METER

UNIT 3

UNIT 4

BEDROOM 1

BEDRM 1

WIC

BATH

SHWR

PORCH

FOYER

SLDG DR

STOR. 160 CUFT 10H

UL

W

WH

D

NEW 4' H SCREENED BLOCK WALL

A/C

PATH OF TRAVEL

150 FEET HOSE PULL DISTANCE

LANDSCAPING

(E) 6' H BLOCK WALL

EXISTING FIRE HYDRANT- APPROX 120 FEET AWAY

APARTMENTS -R3

1 Overall Site Plan
1/8" = 1'-0"

PARKING AREA AT REAR 48' X 105 '= 5040 SF

LANDSCAPPING- RECREATION AREA 1063 SF
LANDSCAPING AT PARKING 305 SF
TOTAL LANDSCAPING 1063+305 = 1368 SF/ 5040 SF = 27 %

FLOOR PLAN SYMBOLS

EXISTING WALL
EXISTING WALL TO BE REMOVED
NEW WALL
DOOR
WINDOW
SECTION MARKER
DETAIL MARKER
ELEVATION MARKER

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SIGN DATE 02-10-17

Project No: 75-01
Date 10-25-2025

OVERALL SITE PLAN

A1

DO NOT DISCARD!

– IMPORTANT INFORMATION –

Assembly and Installation Instructions for

EC Series
COVERED PARK GRILLS

MODEL EC-26 B2: 18-1/2" x 28" FIREBOX
MODEL EC-40 B2: 18-1/2" x 40" FIREBOX

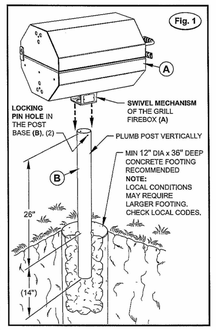
Provided for Each EC Series COVERED PARK GRILL
- **A)** (1) Covered Grill –EC-26 or EC-40
- **B)** (1) 40" long Model B2 Post Base for concrete embedment
- **C)** (1) Cover Strut
- **D)** (1) 6" Locking Pin to secure the Grill to the Post Base
- **E)** (4) Vent Covers with adjusting handles
- **F)** (1) Model S2 Utility Shelf
- **G)** (1) Bottom Grate Hook
- (8) 3/8" x 3/4" Zinc Plated Carriage Bolts & "2-way" Lock Nuts

Pilot Rock
PARK • STREET • CAMP
SITE PRODUCTS

RJ Thomas Mfg. Co., Inc., P.O. Box 946
Cherokee, IA 51012

FORM ASM-1039 / Rev. 5-13 © 2013 R. J. Thomas Mfg. Co., Inc.

Fig. 1



1. Use a post hole digger to make a hole a minimum of 12" in diameter x 36" deep. Fill the hole with concrete (see Fig. 1).

   Note: *Local soil conditions may require a larger footing. Check local codes.*

2. Take the end of the Model B2 Post Base **(B)** that has the (2) Locking Pin Holes in it and place the opposite end into the concrete. Install the Post 26" above ground level and plumb vertically (see Fig. 1). Allow the concrete to cure before installing the Grill on the Base.

3. Install the Grill **(A)** on the Post Base **(B)** by placing the 3-1/2" dia. Holes in the Swivel Mechanism of the Grill Firebox over the end of the Post (see Fig. 1). Line up the (2) 5/16" dia. Holes on the front and back of the Grill Swivel Mechanism with the (2) 5/16" dia. Holes at the top of the Post Base.

   Insert the 6" Locking Pin **(D)** (included in the package with the Cover Strut, Vent Covers, Bottom Grate Hook, and fasteners) through the aligned holes leaving an equal length of Pin protruding from each side of the Swivel Mechanism (see Fig. 2). Rotate the Grill one complete revolution. The Locking Pin will be bent and drawn into the Swivel Mechanism to lock the Grill onto the Post Base **(B)**.

4. Use the Cover Handle to open the Cover of the Grill **(A)** all the way back (see Fig. 3). Slide the Cover Strut **(C)** over the Grate Handle on the Firebox half of the Grill through the large hole in the middle of the Strut at the end of the slot. Slide the Strut to the inside of the Handle and line up the Square Hole in the Strut with the hole at the bottom center of the Cover end panel. Secure the Cover Strut with a 3/8" x 3/4" Zinc Plated Carriage Bolt installed through the Strut and a 3/8" "2-way" Lock Nut installed on the inside of the Grill Cover (see Fig. 3). The Bolt installs so that the square neck rests inside the Square Hole in the

continued...

Fig. 2

Fig. 3



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...continued

Cover and prevents the Bolt from rotating as the Lock Nut is tightened with a wrench on the inside of the Grill Cover.

Caution: Do Not over tighten the Lock Nut to avoid restricting the movement of the Cover Strut and the Cover.

Push the notch at the lower end of the Cover Strut **(C)** down onto the Grate Handle bar to lock the Grill Cover in the open position so that it can't accidently fall forward and close. To close the Grill Cover, tilt the Cover back and lift the lower end of the Strut to disengage the notch to allow the slot in the Strut to slide down and to the rear as the Cover pivots forward.

5. With the Grill Cover locked in the open position, the Vent Covers **(E)** may be mounted by installing a 3/8" x 3/4" Carriage Bolt through the Square Hole in the center of each Cover and through each of the holes located in the center of each cluster of three Vent Holes on both ends of the Firebox and Cover (see Figs. 4 & 5). Install 3/8" "2-way" Lock Nuts on the insides of the Cover or Firebox.

   Note: For convenience, the handle on the Vent Cover **(E)** that is located over the Clean-out Door may also be used as a hook from which to hang an ash bucket (see Fig. 4).

   Caution: Do not over tighten the Lock Nuts to avoid restricting the rotation of the Vent Covers.

Fig. 4

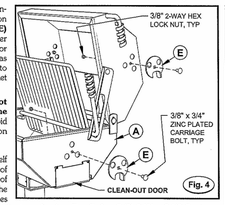
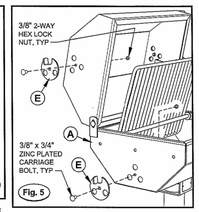


Fig. 5



6. Install the Utility Shelf **(F)** on the left end of the Firebox half of the Grill **(A)** using the (3) 7/16" dia. holes about 2" down from the top edge (see Fig. 6). Install (3) 3/8" x 3/4" Carriage Bolts through the Square Holes in the Shelf and (3) Lock Nuts on the inside of the Firebox.

7. The Bottom Grate Hook **(G)** (see Fig. 7) is used to pull the Bottom Coal Grate in the Firebox up and out of the way to allow easy clean-out of ashes through the Clean-out Door. It is **not a part to be installed** on the grill. When not in use the Bottom Grate Hook may be stored in between the side wall of the Swivel Mechanism and the Base Post **(B)** (see Fig. 7).

Fig. 6

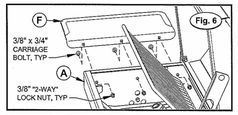
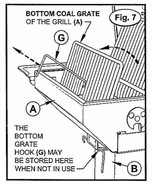


Fig. 7



The EC Series Covered Park Grills are also available with the Model B12 portable Caster Base or Model B4 portable Disc Base (see Fig. 8). **NOTE: The Locking Pin is NOT usually installed** when using a B12 or B4 portable base so that the Grill may be detached for easier moving.

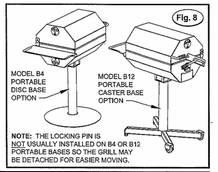
IMPORTANT! GRILL MAINTENANCE:

In order to maximize the useful lifetime of your grill firebox and cooking grate, follow these steps:

1. Regularly clean out all coal and wood ash from the firebox bottom. Rainwater and ash accelerates the rusting process.
2. The high heat paint will last between one and two years depending on use. When there are signs of rusting, wire brush off surface rust and spray or brush apply another coat of non-toxic high heat black enamel.
3. Do not re-coat the cooking grate as the grease from cooking meat will usually keep rust at bay and a good wire brushing after the grate is hot also helps. If there is still rust on the grate, use aluminum foil between your food and the grate.

Local environment and climatic conditions may require more frequent maintenance. Lack of proper maintenance will void any warranty. Pilot Rock Grills that have been properly maintained have lasted for many years.

Fig. 8



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4 Units of Apartments
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GLOBAL™
globalindustrial.com

72" Hex Table
Assembly Instructions

Model #s: B264040, B264042, B2331053

Assembly Instructions
Customer Service
US: 1-800-645-2986



CONTENTS

Ref.	Qty.	Description	Ref.	Qty.	Description
1	1	Pre-Assembled Top	4	3	Support Arms
2	3	Base Supports	5	6	Anchor Blocks
3	3	Left Seats Right Seats	H1	1	Hardware Pack*

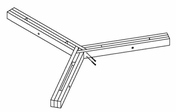
*Contains: (6) 2 1/2" Hex Lag Screws
(30) 3 1/2" Hex Lag Screws
(36) Flat Washers
(9) 3" Deck Screws

Before you begin: Check components to verify all are included. Assembly requires two people and must be performed on a flat and even surface. Do not overtighten hardware as damage can occur.



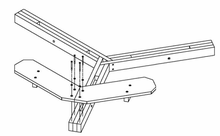
Step 1

Secure anchor blocks to the bottom of each seat using 3 1/2" hex lag screws and flat washers. The pre-drilled hole in the block will face the seat side with three edges. Each seat will have one (1) anchor block.



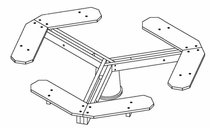
Step 2

Place the three (3) support arms on a flat surface. Fasten the support arms together with 3" deck screws, two (2) per side. Do not overtighten.



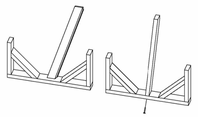
Step 3

Align the pre-drilled holes in the seats and support arms, attach using 3 1/2" hex lag screws and flat washers.
Installation Tip: Seats may fit tigthly side by side, tilt the seats up slightly as you tighten lag screws to pull them down flush against the support arms.



Step 4

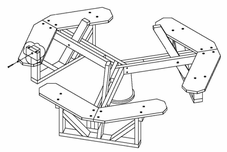
Position the assembled seats and support arms assembly approximately 10" to 15" above the floor. Tip: A five gallon bucket under the center point of the assembly works well.



Step 5

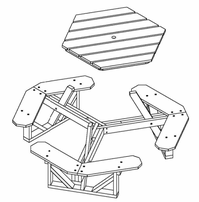
The three (3) base support legs are rotated for shipping purposes. A single deck screw is pre-installed, rotate the leg 90 degrees and align the pre-drilled holes. Secure the leg with a supplied deck screw. Repeat for all three (3) legs.

IMPORTANT NOTE FOR THE NEXT STEPS: DO NOT OVERTIGHTEN LAG BOLTS. DO NOT LEAN ON TABLE TOP OR SEATS WHEN ASSEMBLING.



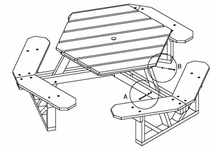
Step 6

Insert a base support in the open space of each of the three (3) support arms, centering each leg on the pre-drilled countersunk holes of the support arms. Attach the base support uprights to the seat blocks with 2 1/2" hex lag screws and flat washers. Ensure the seats are centered with the support arms.



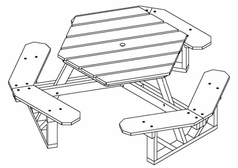
Step 7

With two people, carefully lift the table top and position the slots in the top underside frame with the three (3) uprights. Slide the top down onto the uprights. Ensure each upright is fully engaged in the slot and the top is resting even and level.



Step 8

Attach each upright to the table top using a 3 1/2" hex lag screw and flat washer, tighten fully. Hex head should be within the countersunk hole. Attach all three (3) support arms to the base uprights at the pre-drilled holes using a 3 1/2" hex lag screw and flat washer.



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SIGN DATE 02-10-17

Project No: 75-01
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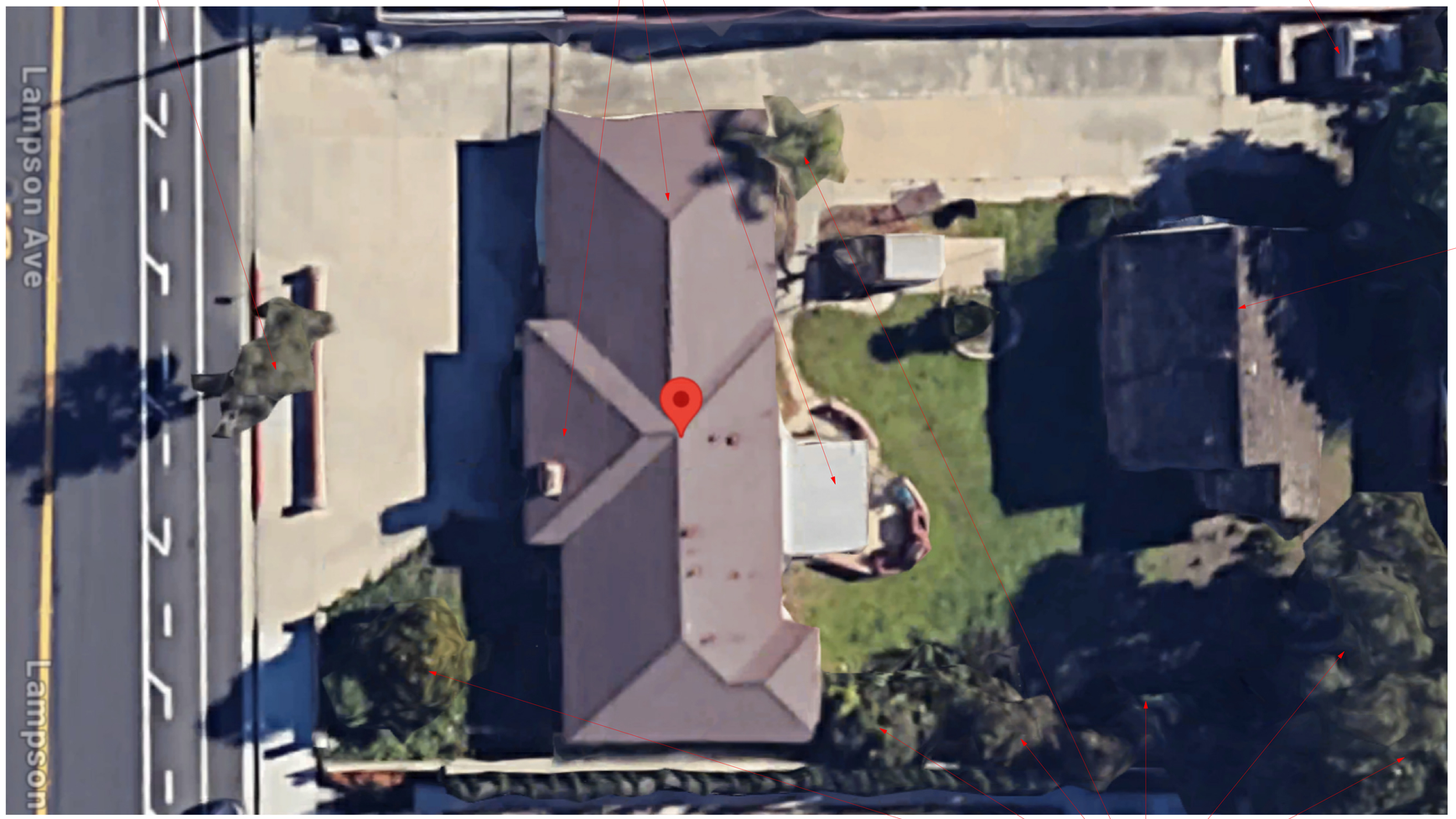
bbq AND PICNIC TABLE

A1.2



1 existing demo plan
1/8" = 1'-0"

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SIGN DATE 02-10-17

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Date	10-25-2025

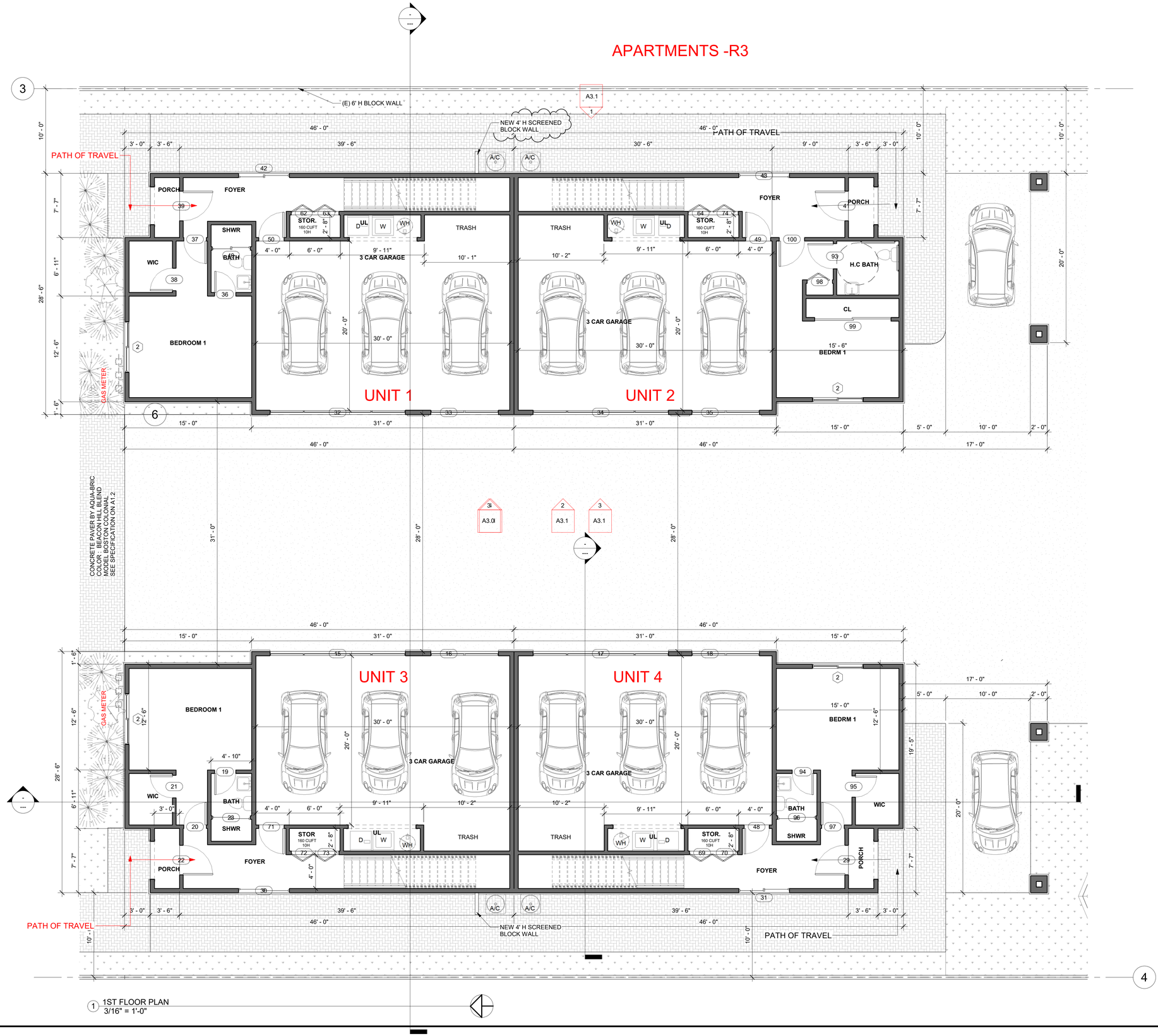
EXIST/DEMO SITE PLAN

A1.3

FLOOR PLAN SYMBOLS

EXISTING WALL
EXISTING WALL TO BE REMOVED
NEW WALL
DOOR
WINDOW
SECTION MARKER
DETAIL MARKER
ELEVATION MARKER

APARTMENTS -R3



1 1ST FLOOR PLAN
3/16" = 1'-0"

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SIGN DATE 02-10-17

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1ST FLOOR PLAN

A2.1



1 2nd FLOOR
3/16" = 1'-0"

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Date	10-25-2025

2ND FLOOR PLAN

A2.2



1 SITE -ROOF PLAN
3/16" = 1'-0"

A2.3	OVERALL ROOF PLAN	SIGN DATE 02-10-17 Project No: 75-01 Date 10-25-2025

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4 Units of Apartments
Owner : Tony Lam
8892 Lampson Street, Garden Grove, CA 92683

FL DESIGN GROUP
Residential & Commercial Design
14211 Riata St, Westminster, CA. 92683
Tel: 714-414-5636
DESIGN GROUP, LLC

Window Schedule

Type Mark	R.O. Width	R.O. Height	Family	From Room: Name	Comments
2	6' - 0"	4' - 0"	Sliding Window	BEDROOM 1	
2	6' - 0"	4' - 0"	Sliding Window	BEDRM 4	
2	6' - 0"	4' - 0"	Sliding Window	BEDROOM 2	
2	6' - 0"	4' - 0"	Sliding Window	BEDRM 1	
2	6' - 0"	4' - 0"	Sliding Window	BEDROOM 1	
2	6' - 0"	4' - 0"	Sliding Window	BEDRM 4	
2	6' - 0"	4' - 0"	Sliding Window		
2	6' - 0"	4' - 0"	Sliding Window	BEDRM 1	
2	6' - 0"	4' - 0"	Sliding Window	DECK/PRIVATE OPENING SPACE	
2	6' - 0"	4' - 0"	Sliding Window	DECK/PRIVATE OPEN SPACE	
2	6' - 0"	4' - 0"	Sliding Window	BEDRM 3	
2	6' - 0"	4' - 0"	Sliding Window		
3	5' - 0"	4' - 0"	Sliding Window	BEDRM 3	
3	5' - 0"	4' - 0"	Sliding Window	BEDRM 2	
3	5' - 0"	4' - 0"	Sliding Window	BEDRM 3	
3	5' - 0"	4' - 0"	Sliding Window	BEDRM 2	
4	5' - 0"	4' - 0"	Fixed-transparent	LIVING/KITCHEN	OBSCURED GLASS
4	5' - 0"	4' - 0"	Fixed-transparent	LIVING/KITCHEN	OBSCURED GLASS
4	8' - 0"	4' - 0"	Sliding Window	DECK/PRIVATE OPENING SPACE	
4	8' - 0"	4' - 0"	Sliding Window	MASTER BEDRM	
4	8' - 0"	4' - 0"	Sliding Window		
5	3' - 0"	3' - 0"	Sliding Window	LIVING/KITCHEN	OBSCURED GLASS
5	3' - 0"	3' - 0"	Sliding Window	MASTER BATH	OBSCURED GLASS
5	3' - 0"	3' - 0"	Sliding Window		OBSCURED GLASS
5	3' - 0"	3' - 0"	Sliding Window		OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent	LIVING/KITCHEN	OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent	CL 3	OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent	CL 3	OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent	LIVING/KITCHEN	OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent		OBSCURED GLASS
6	4' - 0"	4' - 0"	Fixed-transparent		OBSCURED GLASS
7	3' - 0"	2' - 0"	Fixed-transparent	BATH 2	OBSCURED GLASS
7	3' - 0"	2' - 0"	Fixed-transparent	BATH 2	OBSCURED GLASS

DOOR SCHEDULE

Mark	Door Width	Door Height	To Room: Name	Family	Comments
15	16' - 0"	8' - 2"	3 CAR GARAGE	16'X8' GARAGE DOOR	ROLL UP GARAGE DR OPENER
16	8' - 0"	8' - 0"	3 CAR GARAGE	8'X8' ROLL UP GARAGE DOOR	ROLL UP GARAGE DR OPENER
17	16' - 0"	8' - 2"	3 CAR GARAGE	16'X8' GARAGE DOOR	ROLL UP GARAGE DR OPENER
18	8' - 0"	8' - 0"	3 CAR GARAGE	8'X8' ROLL UP GARAGE DOOR	ROLL UP GARAGE DR OPENER
19	2' - 6"	6' - 8"	BATH	Single-Flush	
20	2' - 8"	8' - 0"	BEDROOM 1	Single-Flush	
21	2' - 8"	8' - 0"	WIC	Single-Flush	
22	3' - 6"	8' - 0"	PORCH	Single-Decorative 2	
23	4' - 6"	6' - 8"	SHWR	Sliding-2 panel	
24	3' - 0"	8' - 0"	BEDRM 4	Single-Flush	
25	3' - 0"	7' - 0"	LIVING/KITCHEN	Single-Glass 1	
26	2' - 6"	8' - 0"	BATH 3	Single-Flush1	
27	6' - 0"	8' - 0"	CL 2	Sliding-Closet	
28	6' - 0"	8' - 0"	CL 3	Sliding-Closet	
29	3' - 6"	8' - 0"	FOYER	Single-Decorative 2	
30	6' - 0"	8' - 0"	FOYER	Sliding-2 panel1	
31	6' - 0"	8' - 0"	FOYER	Sliding-2 panel1	
32	16' - 0"	8' - 2"	3 CAR GARAGE	16'X8' GARAGE DOOR	ROLL UP GARAGE DR OPENER
33	8' - 0"	8' - 0"	3 CAR GARAGE	8'X8' ROLL UP GARAGE DOOR	ROLL UP GARAGE DR OPENER
34	16' - 0"	8' - 2"	3 CAR GARAGE	16'X8' GARAGE DOOR	ROLL UP GARAGE DR OPENER
35	8' - 0"	8' - 0"	3 CAR GARAGE	8'X8' ROLL UP GARAGE DOOR	ROLL UP GARAGE DR OPENER
36	2' - 6"	6' - 8"	BEDROOM 1	Single-Flush	
37	2' - 8"	8' - 0"	FOYER	Single-Flush	
38	2' - 8"	8' - 0"	BEDROOM 1	Single-Flush	
39	3' - 6"	8' - 0"	FOYER	Single-Decorative 2	
40	4' - 6"	6' - 8"	BATH	Sliding-2 panel	
41	3' - 6"	8' - 0"	PORCH	Single-Decorative 2	
42	6' - 0"	8' - 0"	FOYER	Sliding-2 panel1	
43	6' - 0"	8' - 0"	FOYER	Sliding-2 panel1	
44	3' - 0"	7' - 0"	DECK/PRIVATE OPEN SPACE	Single-Glass 1	
45	2' - 6"	8' - 0"	BEDRM 4	Single-Flush1	
46	4' - 6"	6' - 8"	BATH 3	Sliding-2 panel	
47	3' - 0"	7' - 0"	DECK/PRIVATE OPEN SPACE	Single-Glass 1	
48	3' - 0"	8' - 0"	FOYER	Single-Flush	
49	3' - 0"	8' - 0"	FOYER	Single-Flush	
50	3' - 0"	8' - 0"	3 CAR GARAGE	Single-Flush	
51	3' - 0"	8' - 0"	BEDRM 3	Single-Flush	
52	3' - 0"	8' - 0"	BEDRM 2	Single-Flush	
53	2' - 6"	8' - 0"	BATH 2	Single-Flush	
54	4' - 6"	6' - 8"	SHWR	Sliding-2 panel	
55	3' - 0"	7' - 0"	DECK/PRIVATE OPENING SPACE	Single-Glass 1	
56	6' - 0"	8' - 0"	BEDRM 2	Sliding-Closet	
57	6' - 0"	8' - 0"	BEDRM 3	Sliding-Closet	
58	3' - 0"	8' - 0"	LIVING/KITCHEN	Single-Flush	
59	3' - 0"	8' - 0"	LIVING/KITCHEN	Single-Flush	
60	3' - 0"	8' - 0"	LIVING/KITCHEN	Single-Flush	
61	2' - 6"	8' - 0"	LIVING/KITCHEN	Single-Flush	
62	3' - 0"	6' - 8"	STOR.	Bifold-2 Panel	
63	3' - 0"	6' - 8"	STOR.	Bifold-2 Panel	
64	3' - 0"	6' - 8"	STOR.	Bifold-2 Panel	
65	4' - 6"	6' - 8"	MASTER BATH	Sliding-2 panel	
66	2' - 6"	8' - 0"	WIC	Single-Flush	
67	5' - 0"	7' - 0"	BEDRM 4	Sliding-Closet	
68	5' - 0"	7' - 0"	CL 4	Sliding-Closet	
69	3' - 0"	6' - 8"	FOYER	Bifold-2 Panel	
70	3' - 0"	6' - 8"	FOYER	Bifold-2 Panel	
71	3' - 0"	8' - 0"	FOYER	Single-Flush	
72	3' - 0"	6' - 8"	FOYER	Bifold-2 Panel	
73	3' - 0"	6' - 8"	FOYER	Bifold-2 Panel	
74	3' - 0"	6' - 8"	STOR.	Bifold-2 Panel	
76	5' - 0"	7' - 0"	CL 3	Sliding-Closet	
77	5' - 0"	7' - 0"	CL 3	Sliding-Closet	
78	4' - 6"	6' - 8"	LIVING/KITCHEN	Sliding-2 panel	
79	3' - 0"	8' - 0"	MASTER BEDRM	Single-Flush	
80	3' - 0"	8' - 0"	BEDROOM 2	Single-Flush	
81	3' - 0"	8' - 0"	BEDRM 3	Single-Flush	
82	7' - 0"	7' - 0"	CL 2	Sliding-Closet	
83	2' - 6"	8' - 0"	LIVING/KITCHEN	Single-Flush	
84	4' - 6"	6' - 8"	SHWR	Sliding-2 panel	
85	2' - 6"	8' - 0"	MASTER BATH	Single-Flush	
86	5' - 0"	7' - 0"	BEDRM 3	Sliding-Closet	
87	5' - 0"	7' - 0"	BEDRM 3	Sliding-Closet	
88	4' - 6"	6' - 8"	SHWR	Sliding-2 panel	
89	3' - 0"	8' - 0"	MASTER BEDRM	Single-Flush	
90	3' - 0"	8' - 0"	BEDRM 3	Single-Flush	
91	7' - 0"	7' - 0"	CL 2	Sliding-Closet	
92	2' - 6"	8' - 0"	LIVING/KITCHEN	Single-Flush	
93	3' - 0"	8' - 0"	H.C BATH	Single-Flush	
94	2' - 6"	6' - 8"	BEDRM 1	Single-Flush	
95	2' - 6"	8' - 0"	BEDRM 1	Single-Flush	
96	4' - 6"	6' - 8"	BATH	Sliding-2 panel	
97	2' - 8"	8' - 0"	FOYER	Single-Flush	
98	3' - 0"	6' - 8"	BEDRM 1	Bifold-2 Panel	
99	9' - 0"	7' - 0"	CL	Sliding-Closet	
100	3' - 0"	8' - 0"	BEDRM 1	Single-Flush	
102	4' - 0"	6' - 0"		Trash_Enclosure_Gate_4755	
103	4' - 0"	6' - 0"		Trash_Enclosure_Gate_4755	

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SIGN DATE 02-10-17

Project No: 75-01
Date 10-25-2025

WINDOW AND DOOR SCHEDULE

A2.4



1 NORTH ELEVATION
3/16" = 1'-0"

2 SOUTH ELEV
3/16" = 1'-0"



4 OMEGA-429 SIERRA LEONE STUCCO COLOR(2)
1" = 1'-0"

3 OMEGA - 420 FLORAL WHITE STUCCO COLOR (2)
3/8" = 1'-0"



NEW EAGLE TILE , MODEL : PONDEROSA
BLEND OF TERRACOTTA, BROWN, MAX 10 PSF,
ESR-1900 CLASS A MIN.

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SIGN DATE 02-10-17

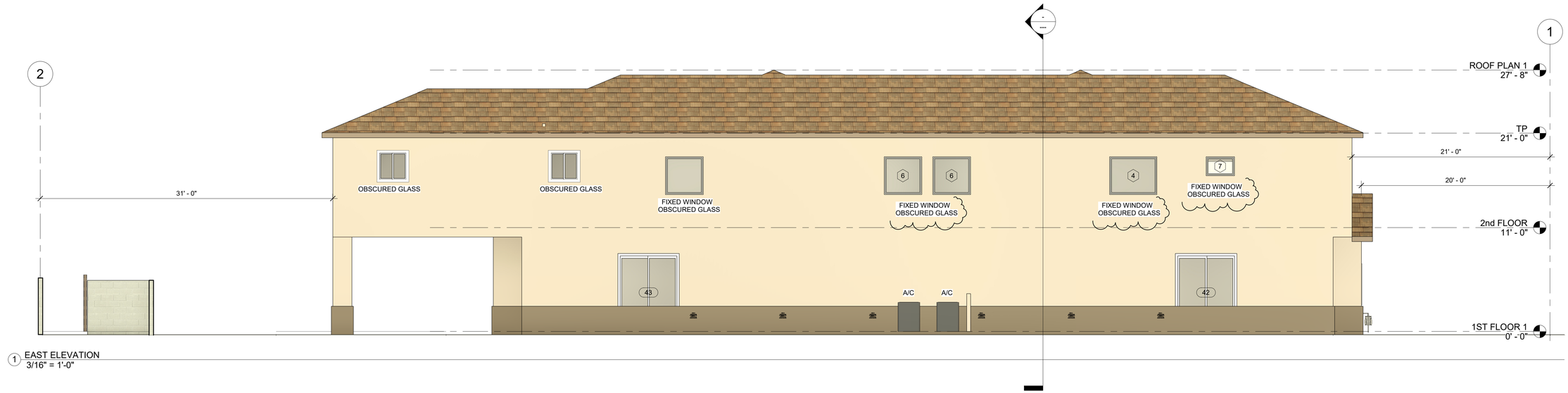
Project No:	75-01
Date	10-25-2025

elevation

A3.0



2 WEST ELEVATION
3/16" = 1'-0"



1 EAST ELEVATION
3/16" = 1'-0"



5 OMEGA-429 SIERRA LEONE STUCCO COLOR
1" = 1'-0"

3 OMEGA - 420 FLORAL WHITE STUCCO COLOR
3/8" = 1'-0"

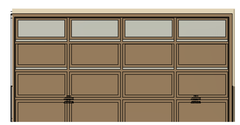


NEW EAGLE TILE , MODEL : PONDEROSA BLEND OF TERRACOTTA, BROWN, MAX 10 PSF, ESR-1900 CLASS A MIN.

SPECIFICATIONS

	TRADITIONAL GARAGE DOORS						
	THERMASTAR by PELLA® SUTHERLAND			PELLA® HILLSBORO			PELLA® OTTESON
DOOR CONSTRUCTION	1-Layer	2-Layer	3-Layer	1-Layer	2-Layer	3-Layer	3-Layer
DOOR THICKNESS	2-in	2-in	1-3/8-in	2-in	2-in	2-in	2-in
INSULATION R-VALUE	na	6.6	6.5	na	6.6	9.1	19.4 [2] | 13.35 [3]
SAFESHIELD	•	•		•	•	•	na
WIND LOAD[1]	90-155 MPH	90-155 MPH	90-155 MPH	90-155 MPH	90-155 MPH	90-155 MPH	90-155 MPH
WARRANTY							
Finish	15 Years	25 Years	Lifetime	Lifetime	Lifetime	Lifetime	Lifetime
Hardware	2 Years	4 Years	6 Years	6 Years	10 Years	Lifetime	Lifetime
Labor	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year

Pella :: Traditional Steel Doors
OTTESON



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SIGN DATE 02-10-17

Project No: 75-01
Date 10-25-2025

ELEVATION

A3.1

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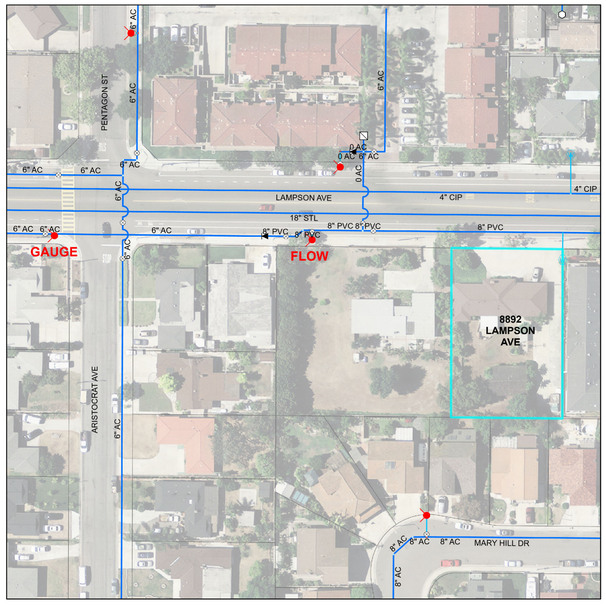
SIGN DATE 02-10-17

Project No:	75-01
Date	10-25-2025

3D VIEW

A3.2



FIRE FLOW TEST
8892
LAMPSON AVE
K-11

LEGEND

WATER
- FIRE HYDRANT
- GATE VALVE
- CHECK VALVE
- BUTTERFLY VALVE
- END CAP
- REDUCER
- WATER MAIN
- ABANDONED WATER MAIN

STORM DRAIN
- SD MANHOLE
- CATCH BASIN
- STORM DRAIN MAIN

CITY OF GARDEN GROVE PUBLIC WORKS
FIRE HYDRANT FLOW TEST

Type of F.H. CLOW / WET BARREL — Atlas Sheet K11

Fire Hyd. # 17209 — Location of flowed FH 8882 Lampson Ave

Date of Test 02-06-2025 — Weather Conditions Rainy (No Sun)

Pressure gauge placed on fire hydrant at: 12511 Aristocrat Ave

		Test1		Test2	
1.	Static pressure before test	64	psi		psi
2.	Size of outlet to be flowed	2.5	inch		inch
3.	Time of flow test	07:50:51 AM			
4.	Average pitot reading during flow	45	psi		psi
5.	Average pressure reading during flow (Residual Pressure)	61	psi		psi
6.	Drawdown (1 minus 5)	3	psi		psi
7.	Rate of flow computed at residual press	1126	gpm		gpm
8.	Rate of flow computed at 20 psi residual	4800	gpm		gpm
9.	Time of day flow ended	07:53:55 AM			
10.	Pressure reading after flow at hose bib	65	psi		psi
11.	Total time water flowed (3 minus 9)	3.066	min		min
12.	Water wasted during test (7 times 11)	3452	gals		gals

REMARKS :

Test Conducted By : Tyler Meislahn / Joel Zamora

Test Reviewed By Engineer : Carina Dan

Test Posted By : Tommy Son

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SIGN DATE 02-10-17

Project No: 75-01
Date 10-25-2025

FLOW TEST

A3.4

RESOLUTION NO. 6134-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE APPROVING SITE PLAN NO. SP-171-2026 FOR A PROPERTY LOCATED ON THE SOUTH SIDE OF LAMPSON AVENUE, WEST OF MAGNOLIA AVENUE, AT 8892 LAMPSON AVENUE, ASSESSOR'S PARCEL NO. 133-272-41.

BE IT RESOLVED that the Planning Commission of the City of Garden Grove, in a regular session assembled on May 21, 2026, hereby approves Site Plan No. SP-171-2026 for a property located on the south side of Lampson Avenue, between west of Magnolia Avenue, at 8892 Lampson Avenue, Assessor's Parcel No. 133-272-41, subject to the Conditions of Approval attached hereto as Exhibit "A".

BE IT FURTHER RESOLVED in the matter of Site Plan No. SP-171-2026, the Planning Commission of the City of Garden Grove does hereby report as follows:

1. The subject case was initiated by the owner and applicant, Tony Lam.

2. The applicant is requesting approval of a Site Plan approval to construct a four (4) unit, two-story, multiple-family residential apartment development and associated site improvements on an approximately 0.39-acre lot.

3. The City of Garden Grove Planning Commission hereby determines that the proposed project is categorically exempt from review under the California Environmental Quality Act ("CEQA") pursuant to Section 15303 (Small Structures) of the State CEQA Guidelines. This includes the construction of a duplex or similar multiple-family use with up to four (4) units, or six (6) units in urbanized areas. The proposed apartment project is within an urbanized area, is comprised of six (6) or fewer units, are a listed use in the Class 3 exemption, and is a permitted use under the R-3 (Multiple-Family Residential) zoning designation. The project is therefore exempt from CEQA review. The property has a General Plan Land Use designation of MDR (Medium Density Residential) and is zoned R-3 (Multiple-Family Residential).

4. Existing land use, zoning, and General Plan designation of property in the vicinity of the subject property have been reviewed.

5. Report submitted by the City staff was reviewed.

6. Pursuant to a legal notice, a public hearing was held on May 21, 2026, and all interested persons were given an opportunity to be heard.

7. The Planning Commission gave due and careful consideration to the matter during its meeting on May 21, 2026.

BE IT FURTHER RESOLVED, FOUND AND DETERMINED that the facts and reasons supporting the conclusion of the Planning Commission, as required under Municipal Code Section 9.32.030 are as follows:

FACTS:

The subject site is a rectangular-shaped lot located on the south side of Lampson Avenue, west of Magnolia Street, located at 8892 Lampson Avenue. The site has a total gross lot area 16,798 square feet (0.39 acres). The site has a General Plan Land Use Designation of MDR (Medium Density Residential) and is zoned R-3 (Multiple-Family Residential). The site abuts R-3 properties to the north across Lampson Avenue, east and west, and R-1 (Single Family Residential) zoned properties to the south. Surrounding uses include multiple-family residential structures to the north, east and west and single family residential to the south. The project site is currently improved with a single-family dwelling, and an attached garage that were constructed in 1961.

The applicant is requesting Site Plan approval to demolish the existing improvements to construct a four (4) unit, two-story, multiple-family residential apartment development and associated site improvements. Each unit is proposed to consist of a kitchen, a dining area, a living room, four (4) bedrooms, three (3) full bathrooms, a private deck, storage room, and a three-car garage. The site is proposed to be improved with two (2) covered guest parking spaces, including one (1) handicap open parking stall, a trash enclosure, and a barbecue area in a common recreation area.

Pursuant to Government Code §66300.6(a), the City may not approve a housing development project that would require the demolition of residential dwelling units unless the project would create at least as many residential dwelling units as would be demolished. This proposed project satisfies this requirement because it would replace one (1) existing unit with four (4) new dwelling units.

In order to prevent new development projects from displacing existing lower income rental households, Government Code §66300.6(b) also imposes several requirements that the City must require a developer to comply with when a proposed development project would require the demolition of occupied or vacant "protected units". "Protected units" include residential dwelling units that are or were occupied by lower or very-low-income rental households within the past five (5) years. In the instances where tenant information is not readily available, the units are presumed to be rented at income levels proportional to the citywide rental income levels. Any lower income unit demolished shall be replaced by a unit of equal or lower income level. The current tenant has provided income information that places them within the "Above Moderate Income" category. Therefore, there is no obligation for the applicant to provide a replacement affordable unit.

FINDINGS AND REASONS:

SITE PLAN (HOUSING DEVELOPMENTS)

1. The proposed development project is consistent, in compliance, and in conformity with the applicable, objective standards, provisions, conditions or requirements of the General Plan, Title 9, and other applicable ordinances or policies of the City.

   The proposed project includes construction of a four (4) unit, two-story, multiple-family residential apartment development along with associated site improvements. The subject site has a General Plan Land Use designation of MDR (Medium Density Residential), and is zoned R-3 (Multiple-Family Residential). The MDR Land Use Designation is intended for the development of mainly multiple-family residential neighborhoods that provide a variety of housing types, access to schools, parks, and other community services, a high-quality architectural design that preserves privacy, common spaces, recreation areas and services convenient to residents, an excellent environment for family life, and preserve residential property values. The R-3 zone implements the MDR General Plan Land Use Designation.

   The project has also been reviewed by the Public Works Department, and either complies with, or has been conditioned to meet, all applicable Public Works design requirements. The proposed Project is also consistent with the goals and policies of the General Plan Land Use Element and Housing Element, including the following:

   Goal LU-2: Stable, well-maintained residential neighborhoods in Garden Grove.

   The proposed project would incorporate a new driveway and parking areas, landscaping, pedestrian walkways, and other site features that can help create more attractive residential neighborhoods, which could be a benefit to the surrounding area as a whole. Conditions of Approval have been incorporated to help ensure proper maintenance of the property. With adherence to the Conditions of Approval, the project could contribute to the stability of the adjacent residential neighborhood.

   Goal LU-4: Uses compatible with one another.

   The project abuts residential developments on all sides. The proposed apartment project consists of four (4) units and is in the density range of the surrounding properties to the south in the LDR (Low Density Residential) that allow up to eleven (11) units per acre and parcels to the north, east and west within the MDR which allows up to 32 units per acre.

Policy H-3.7: Encourage infill housing development that is compatible in character with established residential neighborhoods.

The proposed project is surrounded on all sides by residential housing. The project would consist of the construction of a four (4) unit multiple family housing project and associated site improvements. The overall scale and design of the project has been oriented in a way such as to be less impactful on the surrounding uses. Therefore, the infill project would be consistent with the character of these surrounding uses. Further, the site is currently developed with urban uses.

LU-IMP-2B: New development shall be similar in scale to the adjoining residential neighborhood to preserve its character.

The project is located in a neighborhood that consists of both single- and multiple-family residential developments. The properties abutting the project site are zoned R-3 and R-1. The proposed project would include four (4) apartment units that are two-story in height, which is a density, use, and scale permitted by the General Plan. The proposed site has multiple-family residential on either side and across the street. By developing apartment units in an area currently developed with multiple-family developments, the proposed project would be consistent with the development pattern of the surrounding neighborhood.

LU-IMP-3D: Front multifamily housing on local streets with appropriate setbacks to be consistent with neighborhood development patterns.

The proposed apartment units would be two-story and would provide the required 20-foot front setback consistent. The front setback provided would be consistent with the requirements for a two-story multiple-family structure on an R-3 property. Furthermore, the provided setbacks would be consistent with the surrounding neighborhood development patterns.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.

The project is located in a neighborhood that consists of single- and multiple-family residential developments. The properties abutting the project site are zoned R-3 and R-1 and are improved with a mix of single and multiple-family residential units at a similar density.

2. The provisions of the California Environmental Quality Act have been complied with.

The proposed development is exempt from California Environmental Quality Act (CEQA) pursuant to the Class 3 exemption. CEQA's Class 3 exemption

applies to new construction, or conversion of small structures (CEQA Guidelines §15303.). This includes the construction of a duplex or similar multi-family use with up to four (4) units, or six (6) units in urbanized areas. The proposed apartment complex would be in an urbanized area, would be comprised of six (6) or fewer units, would be a listed use in the Class 3 exemption, and would be permitted under the R-3 zoning designation. Therefore, staff recommends that the Planning Commission determine the project to be exempt from CEQA.

3. The proposed development project will not have specific, adverse impacts, as defined in subdivision (j)(1)(A) of Government Code Section 65589.5, on public health and safety without any feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval of the proposed project.

   The proposed four (4) unit residential development would not have specific, adverse impacts on the public health and safety. The Project is at a density allowed pursuant to the Municipal Code, would be compatible with surrounding uses, would be similar in scale to the adjoining neighborhood, and would be consistent with the land use type and intensity in the immediate neighborhood.

NO NET LOSS (GOVERNMENT CODE SECTION 65863) FINDINGS

1. If approval of the proposed Project will result in development of the Site at a lower residential density, the reduction in residential density is consistent with the adopted General Plan, including the Housing Element.

   The proposed project would include construction of a two-story, four (4) unit residential development with the associated site improvements. The site has a General Plan Land Use Designation of Medium Density Residential (MDR), and is zoned R-3 (Multiple-Family Residential). The site is identified in the City's Housing Element Sites Inventory List with a realistic capacity of ten (10) "above moderate-income" units. The proposed project consists of four (4) "above moderate-income" units.

   The MDR Land Use Designation is intended to create, maintain, and enhance residential areas characterized by mostly traditional multiple-family apartments, condominiums, townhomes, and single-family small-lot subdivisions. The MDR Land Use Designation allows residential developments with densities up to 32.0 units per acre and the proposed project would not exceed that. Although the proposed project would provide fewer "above moderate-income" units than identified in the City's Housing Element Sites Inventory List, the proposed project would not result in a lower residential density than allowed by the adopted General Plan. Moreover, the proposed project would also be consistent with several goals and policies of the General Plan Land Use and Housing Elements, as noted in the findings above.

2. The remaining sites identified in the housing element are adequate to meet the requirements of Government Code Section 65583.2 and to accommodate the City's share of the regional housing need pursuant to Government Code Section 65584; or, if not, the City has, or will within 180 days, identify and make available additional adequate sites to accommodate the City's share of the regional housing need by income level.

   The City's 6th Cycle RHNA requires the City to plan for 19,168 housing units for all income levels. A component of preparing the City's Housing Element is the identification of vacant and underutilized sites suitable for residential development, and an evaluation of the housing development potential of these sites in fulfilling the City's RHNA. The project site is identified in the site inventory as having a realistic capacity to accommodate ten (10) "above moderate-income" units. The proposed project consists of four (4) "above moderate-income" units. Because the proposed project includes fewer above moderate-income units than shown in the Housing Element sites inventory, the City must determine whether the remaining Housing Element inventory sites have sufficient capacity to accommodate the City's remaining unmet RHNA by income level, if the project is approved as proposed. Staff has evaluated the housing projects that have been permitted or approved during the current planning period, or which are otherwise not accounted for in the Housing Element site analysis, and has determined that the remaining sites identified in the sites inventory have sufficient capacity to accommodate the City's remaining unmet RHNA need for each income level.

   At the time the Housing Element was prepared and adopted, the City's unmet RHNA was calculated to be 18,208 units, broken down as follows: 6,567 "low- and very low-income" units, 3,087 "moderate-income" units, and 8,554 "above moderate-income" units. The sites identified in the certified adopted Housing Element were determined adequate to accommodate a total of 19,239 units, including 442 more units than the City's unmet RHNA in the "low- and very low-income" categories, 207 more units than the City's unmet RHNA for the "moderate-income" category, and 382 more units than the City's unmet RHNA for the "above moderate-income" category. Overall, the sites inventory in the adopted Housing Element reflected a total capacity surplus of 1,031 units.

   After accounting for permitted and entitled units since the beginning of the 6th RHNA cycle, October 15, 2021, and the four (4) units in the proposed project, the City's total remaining unmet RHNA would be 15,424 units, broken down as follows: 6,393 "low- and very low-income" units, 3,079 "moderate-income" units, and 5,952 "above moderate-income" units. The remaining capacity of the sites identified in the Housing Element would be 18,723 units, resulting in a total capacity surplus of 3,299 units. The remaining sites are also adequate

to accommodate a surplus of "low" and "very low-income" units (479), "moderate-income" units (7), and "above moderate-income" units (2,813). Due to this surplus, the overall residential capacity on sites identified in the Housing Element would still be sufficient to accommodate the City's total remaining unmet RHNA if the proposed project is approved.

INCORPORATION OF FACTS AND FINDINGS SET FORTH IN STAFF REPORT

In addition to the foregoing, the Planning Commission incorporates herein by this reference, the facts and findings set forth in the staff report.

BE IT FURTHER RESOLVED that the Planning Commission does conclude:

1. The Site Plan possesses characteristics that would justify the request in accordance with Municipal Code Section 9.60.020 (Review of Housing Development Projects).

2. In order to fulfill the purpose and intent of the Municipal Code and thereby promote the health, safety, and general welfare, the attached Conditions of Approval (Exhibit "A") shall apply to Site Plan No. SP-171-2026.

EXHIBIT "A"

Site Plan No. SP-171-2026

8892 Lampson Avenue

CONDITIONS OF APPROVAL

General Conditions

1. Each owner of the property shall execute, and the applicant shall record against the property, a "Notice of Discretionary Permit Approval and Agreement with Conditions of Approval," as prepared by the City Attorney's Office, within thirty (30) days of approval. This Conditional Use Permit runs with the land and is binding upon the property owner, his/her/its heirs, assigns, and successors in interest

2. All Conditions of Approval set forth herein shall be binding on and enforceable against each of the following, and whenever used herein, the term "applicant" shall mean and refer to each of the following: the project applicant and current property owner, Tony Lam, and the future owner(s) and tenants(s) of the property, and each of their respective successors and assigns. The applicant and subsequent owner of the property shall adhere to the conditions of approval for the life of the project, regardless of property ownership. Except for minor modifications authorized to be approved by the Community Development Director pursuant to Condition No. 4, any changes of the Conditions of Approval require approval by the appropriate City hearing body.

3. Site Plan No. SP-171-2026 authorizes the development of a four (4) unit apartment project on an approximately 0.39 net-acre parcel, and associated site improvements, as depicted on the plans submitted by the applicant and made a part of the record of the May 21, 2026, Planning Commission proceedings. Approval of this Site Plan shall not be construed to mean any waiver of applicable and appropriate zoning and other regulations; and wherein not otherwise specified, all requirements of the City of Garden Grove Municipal Code shall apply.

4. The approved Site Plan and floor plan are an integral part of the decision approving this Site Plan. Minor modifications to the approved Site Plan and/or these Conditions of Approval may be approved by the Community Development Director, in his or her discretion. Proposed modifications to the approved project and/or these Conditions of Approval that would result in the intensification of the project, or create impacts that have not been previously addressed and which are determined by the Community Development Director not to be minor in nature shall be subject to approval of new and/or amended land use entitlements by the applicable City hearing body.

5. All conditions of approval shall be implemented at the applicant's expense, except where specified in the individual condition.

Engineering Division

6. A geotechnical study prepared by a registered geotechnical engineer is required. The report shall analyze the liquefaction potential of the site and make recommendations. The report shall analyze sub-surface issues related to the past uses of the site, including sub-surface tanks and basement and septic facilities. Any soil or groundwater contamination shall be remediated prior to the issuance of a building permit per the requirements of the Orange County Health Department and the mitigation requirements of governing regulatory requirements. The report shall make recommendations for foundations and pavement structural section design of interior streets and parking spaces. The report shall also test and analyze soil conditions for LID (Low Impact Development) principles and implementations, including water quality for storm water runoff, potential infiltration alternatives, soil compaction, saturation, permeability and groundwater levels.

7. Prior to the issuance of any grading or building permits, the applicant shall submit to the City for review and approval a final design Water Quality Management Plan that:

    a. Addresses required mitigation Site Design Best Management Practices (BMPs) based upon the latest Santa Ana Regional Water Quality Control Board (SARWQCB) Drainage Area Management Plan (DAMP) as identified in the geotechnical report recommendations and findings, including, but not limited to, infiltration minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas as required by the latest adopted County of Orange Technical Guidance Document (TGD).

    b. BMP's shall be sized per the requirements of the latest TGD.

    c. Incorporates the applicable Routine Source Control BMPs as defined in the DAMP.

    d. Incorporates structural and Treatment Control BMPs as defined in the DAMP.

    e. Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs.

    f. Identifies the entity that will be responsible for long-term operation and maintenance of the Treatment Control BMPs.

g. Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

h. Provides a hydrological analysis with scaled map as well as hydrologic and hydraulic calculations to size storm drains per the Orange County RDMD standards.

8. Parkway culverts shall be designed per City of Garden Grove Standard Plan B-209. Storm drain lateral pipe connections to city maintained storm drains within City right of way shall be RCP with a minimum diameter of 18-inches.

9. Grading and street improvement plans prepared by a registered Civil Engineer are required. As required under Section 107 of the California Building Code (CBC), the grading plan shall be based on a current survey of the site, including a boundary survey, topography on adjacent properties up to 30' outside the boundary, and designed to preclude cross lot drainage. Minimum grades shall be 0.50% for concrete flow lines and 1.25% for asphalt. The grading plan shall also include water and sewer improvements. The grading plan shall include a coordinated utility plan showing all existing utility facilities, easements and proposed utility facilities. All on-site improvements shall be tied by horizontal dimensional control to the property boundary as established by survey. A minimum uninterrupted 20-foot-wide throat access to the site is required from the street for the multi residential projects and shall meet the requirements of the California Fire Code throughout the site. Vehicle maneuvering, as demonstrated by AutoTurn along private streets and access ways, shall be demonstrated on the grading plan. Street improvement plans shall conform to all format and design requirements of the City Standard Drawings & Specifications.

10. All vehicular access drives to the site shall be provided in locations approved by the City Traffic Engineer. (City's Traffic Policies & Procedures – TE-17.)

11. The applicant shall coordinate with the Planning Services Division and Orange County Fire Authority to identify proper emergency vehicle access to the site and shall provide the Engineering Division a copy of the approval letters upon first submittal of the grading and street improvement plans.

12. The grading plan shall depict an accessibility route for the ADA pathway in conformance with the requirements of the Department of Justice standards, latest edition and Section 1110A of the California Building Code.

13. All trash container areas shall meet the following requirements Per City of Garden Grove Standards B-502 and State mandated commercial organic

recycling law, AB 1826, including any other applicable State recycling laws related to refuse, recyclables and/or organics including:

a. Potential conflicts with fire code access requirements and garbage pickup for access activities shall be considered in implementation of design and source control. See CASQA Storm Water Handbook Section 3.2.9 and BMP Fact Sheet SD 32 for additional information.

b. The trash enclosure and containers shall be located to allow pick-up and maneuvering, including turnarounds, in the area of enclosures, and concrete aprons for roll-out areas.

c. Pursuant to state mandated commercial organic recycling law, AB 1826, the applicant is required to coordinate storage and removal of the organics waste with local recycling/trash company.

d. Pursuant to applicable state mandated laws, the applicant is required to contact and coordinate with the operations manager of the local recycling/trash company (Republic Services, 800-700-8610) to ensure the trash enclosure includes the appropriate size and number of containers for the disposal of items such as, but may not limited to, municipal solid waste (MSW), recyclables, and organic green waste.

e. Based on the amount of waste disposed, per week, the applicant shall coordinate with the local recycling/trash company to ensure the adequate frequency of trash pick-up is serviced to the site for municipal solid waste (MSW), recyclables, and organic green waste, including any other type of waste.

f. The applicant shall ensure large bulk items, intended for coordinated and scheduled pick-up by the local recycling/trash company, are not placed in areas that encroach into drive aisles, parking spaces, pedestrian pathways, or areas in the front of the property including areas public right-of-way (e.g., street, sidewalk), during and after construction. Any large bulk items shall be out of public vantage points.

14. Any new or required block walls and/or retaining walls shall be shown on the grading plans, both in plan-view and cross sections. Cross sections shall show vertical and horizontal relations of improvements (existing and proposed) on both sides of property lines. Required wall heights shall be measured vertically from the highest adjacent finished grade. Block walls shall be designed in accordance to City of Garden Grove Standard B-504, B-505, B-506, and B-508 or designed by a professional registered engineer. In addition, the following shall apply:

a. The color and material of all proposed block walls, columns, and wrought iron fencing shall be approved by the Planning Services Division prior to installation.

b. Openings for drainage through walls shall be shown in section details and approved by the City Engineer. Cross-lot drainage is not allowed.

15. The applicant shall remove any existing substandard driveway approaches, curbs, sidewalks, ADA ramps, access gate, pavement sections, tree well and landscaping, and construct Lampson Avenue frontage improvements as identified below. All landscape, irrigation, sidewalk, and lighting improvements installed within the public right-of-way shall be maintained by the applicant and shall require the approval of the City Engineer, Street Division, and Planning Services Division.

a. Existing substandard driveways on Lampson Avenue shall be removed and replaced with new curb, gutter, and sidewalk per City standards and specifications.

b. The applicant is prohibited from installing any vehicle access gate at the main entrance of the project on Lampson Avenue or anywhere else within the property limits.

c. The new driveway approaches to the site on Lampson Avenue shall be constructed in accordance with Garden Grove Standard B-120 (option #2).

d. The applicant shall install 20 feet of red curb on both side of the proposed driveway approach on Lampson Avenue.

e. The applicant shall remove the existing improvements fronting the project on Lampson Avenue and construct new minimum 8'-0" wide sidewalk panels and City of Garden Grove Standard B-106 and the approved site plan.

f. Construct curb and gutter when replacing any existing driveway approach and other existing improvements along the property frontage on Lampson Street in accordance with City Standard Plan B-114.

g. The applicant shall locate all existing public utilities across the property frontage and within the property boundary of the project prior to commencement of grading operation and mobilization.

h. Street signs shall be installed as required and approved by the City Traffic Engineer.

16. The applicant shall coordinate with the Planning Services Division and the Public Works Street Division before placing any type of landscaping within the public right-of-way and proposed landscape area fronting Lampson Avenue. Any proposed new landscaping in said areas shall be maintained by the owner.

17. Driveway Opening Policy shall be in accordance with City's Traffic Policy & Procedures TE-8.

18. Sight Distance Standards shall be in accordance with City's Traffic Policy & Procedures TE-13.

19. Development Review and Comment Sheet shall be in accordance with City's Traffic Policy & Procedures TE-17.

20. Private Property Tow Away Sign Design shall be in accordance with City's Traffic Policy & Procedures TE-19.

21. No Parking Fire Lane Sign Design shall be in accordance with City's Traffic Policy & Procedures TE-20.

22. Traffic Impact Mitigation Fees shall be in accordance with Garden Grove City Council Resolution 9401-16.

23. Off-street parking requirements for residential uses shall be in accordance with Section 7-9-70.3 of the Orange County Code of Ordinances.

24. A minimum five-foot-by-five-foot-wide maneuvering area shall be provided at the end of a dead-end parking aisle and shall consist of a ten-foot-by-nineteen-foot-wide turnaround space.

25. The applicant shall be subject to Traffic Mitigation Fees, In-Lieu Park Fees Drainage Facilities Fees, Water Assessment Fees, and other applicable mitigation fees identified in Chapter 9.44 of the Garden Grove Municipal Code, along with all other applicable fees duly adopted by the City. The amount of said fees shall be calculated based on the City's current fee schedule at the time of permit issuance.

26. A separate street permit is required for work performed within the public right-of-way.

27. Grading fees shall be calculated based on the current fee schedule at the time of permit issuance.

28. The applicant shall identify a temporary parking site(s) for construction crew and construction trailers office staff prior to issuance of a grading permit. No construction parking is allowed on local streets. Construction vehicles should

be parked off traveled roadways in a designated parking area. Parking areas, whether onsite or off-site, shall be included and covered by the erosion control plans.

29. Prior to issuance of a grading permit, the applicant shall submit and obtain approval of a worksite traffic control plan for all the proposed improvements within public right-of-way, and shall be subject to the review and approval of the City Traffic Engineer.

30. In accordance with City of Garden Grove Municipal Code (Chapter 9.48.030), the applicant is required to underground all existing and proposed on-site and off-site utility facilities on the property associated with property which the developer is developing and redeveloping. All existing improvements and utilities shall be shown as part of the grading and street improvement submittal packages in the topography section and labeled as existing utility. In accordance with City of Garden Grove Municipal Code (9.48.050), the applicant may elect to pay the City an in-lieu fee to offset the developer's fair share of the costs of undergrounding the off-site utilities.

31. The applicant shall coordinate with City's Public Works Department (Engineering, Water Services, and Streets Divisions) and set up appointments for preconstruction inspections for all the on- and off-site improvements prior to commencement of grading operation and mobilization.

32. In accordance with the Orange County Storm Water Program manual, the applicant and/or their contractor shall provide dumpsters on-site during construction unless an Encroachment Permit is obtained for placement in street.

33. The applicant and their contractor shall be responsible for protecting all existing horizontal and vertical survey controls, monuments, ties (centerline and corner) and benchmarks located within the limits of the project. If any of the above require removal; relocation or resetting, the Contractor shall, prior to any construction work, and under the supervision of a California-licensed Land Surveyor, establish sufficient temporary ties and benchmarks to enable the points to be reset after completion of construction. Any ties, monuments and bench marks disturbed during construction shall be reset per Orange County Surveyor Standards after construction. Applicant and their contractor shall also re-set the tie monuments where curb or curb ramps are removed and replaced or new ramps are installed. The Applicant and their contractor shall be liable for, at his expense, any resurvey required due to his negligence in protecting existing ties, monuments, benchmarks or any such horizontal and vertical controls. Temporary Benchmarks shall not be used for Vertical control. Benchmarks shall be to the National Geodetic Vertical Datum (NGVD).

34. Heavy construction truck traffic and hauling trips, and any required lane closures shall occur outside peak travel periods. Peak travel periods are considered to be from 7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m.

35. Prior to grading or building permit closeout and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:

    a. Demonstrate that all structural best management practices (BMPs) described in the project WQMP have been constructed and installed in conformance with approved plans and specifications.

    b. Demonstrate that the applicant is prepared to implement and maintain all non-structural BMPs described in the Project WQMP.

    c. Demonstrate that an adequate number of copies of the approved Project WQMP are available onsite.

    d. Submit for review and approval by the City an Operations and Maintenance (O&M) Plan for all structural BMPs.

Water Services Division

36. New water service installations 2" and smaller, may be installed by the City of Garden Grove at applicant's expense. Installation shall be scheduled upon payment of applicable fees, unless otherwise noted. Fire services and larger water services 3" and larger, shall be installed by applicant's contractor per City Standards.

37. Water meters shall be located within the City right-of-way. Fire services and large water services 3" and larger, shall be installed by contractor with a Class A or C-34 License, per City water standards and inspected by approved Public Works inspection.

38. A Reduced Pressure Principle Device (RPPD) backflow prevention device shall be installed for meter protection. The landscape system shall also have RPPD device. Any carbonation dispensing equipment shall have a RPPD device. Installation shall be per City Standards and shall be tested by a certified backflow device tester immediately after installation. Cross-connection inspector shall be notified for inspection after the installation is completed. Applicant shall have RPPD device tested once a year thereafter by a certified backflow device tester and the test results to be submitted to the Public Works Department, Water Services Division. Applicant must open a water account upon installation of RPPD device.

39. It shall be the responsibility of applicant to abandon any existing private water well(s) per Orange County Health Department requirements.

Abandonment(s) shall be inspected by Orange County Health Department inspector after permits have been obtained.

40. A composite utility site plan shall be part of the water plan approval.

41. New utilities shall have a minimum 5-foot horizontal and a minimum 1-foot vertical clearance from water main and appurtenances.

42. All other utilities and appurtenances within the right-of-way shall be assessed for review with the corresponding utility companies and may be subject to be removed and/or relocated per the respective utilities' requirements.

43. Existing water services are to be abandoned at the main per City standards.

44. A master water meter for private water system shall be required for the development. A separate fire service connection serving the development's fire sprinkler system shall also be required. The separate fire service and any private fire hydrant laterals shall have an above-ground backflow device with a double-check valve assembly. The backflow device shall be tested immediately after installation and once a year thereafter by a certified backflow device tester and the results shall be submitted to the Public Works Department, Water Services Division. The backflow device shall be on private property and is the responsibility of the property owner. The above-ground assembly shall be screened from public view as required by the Planning Division.

45. Location and number of fire hydrants shall be as required by Water Services Division and the Orange County Fire Authority (OCFA).

Orange County Fire Authority

46. The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements. The applicant shall submit the plans listed below to OCFA for review. Approval shall be obtained on each plan prior to the event specified:

    a. Prior to OCFA approval of the final tract map or precise grading permit:

        i. Fire Master Plan – Service Code PR145.

    b. Prior to concealing interior construction:

        i. Fire Sprinkler System Service Codes PR400.

Building and Safety Division

47. All work shall comply with the latest edition of the California Building Standards Code (CBC) at the time of permit application.

48. The project shall comply with aging-in-place and fall-prevention per CRC R327.

49. The project shall comply with electric ready appliances and future ESS (Energy Storage System) per Energy Standards.

50. The project shall comply with all utility setback requirements.

51. A soils report and grading plans will be required to be submitted, prior to the issuance of a building permit.

52. The project shall provide underground power utility in accordance with City Ordinance 9.48.101. The project shall obtain separate design and approval from Southern California Edison (SCE) as early as possible.

Planning Services Division

53. The applicant shall submit detailed plans showing the proposed location of utilities and mechanical equipment to the Community Development Department, Planning Services Division for review and approval prior to submitting plans into the Building and Safety Division plan-check process. The project shall also be subject to the following:

    a. Above-ground utility equipment (e.g. electrical, gas, telephone, cable TV) shall not be located in the street setback, within the common areas, or any parking areas, and such equipment shall be screened by densely planted and maintained landscaped hedges or a fence or wall. Ground-mounted equipment shall not exceed the maximum allowable height for a wall, fence, or hedge.

    b. Roof-mounted mechanical equipment shall be screened by parapet walls, rooftop architectural features such as a tower equal to the height of the equipment, or low walls surrounding the equipment and shall be painted to match the color of the building materials.

    c. No exterior piping, plumbing, or mechanical ductwork shall be permitted on any exterior façade and/or be visible from any public right-of-way or adjoining property. Roof rain gutters are permitted. The rain gutters shall follow the natural architecture lines of the building.

54. All landscaping shall be consistent with the landscape requirements of Title 9 of the Municipal Code. The developer shall submit a complete landscape plan governing the entire development. The landscape irrigation plans shall include type, size, location and quantity of all plant material. The landscape plan shall include irrigation plans and staking and planting specifications. All landscape irrigation shall comply with the City's Landscape Ordinance and associated Water Efficiency Guidelines. The landscape plan is also subject to the following:

    a. A complete, permanent, automatic remote control irrigation system shall be provided for all landscaping areas shown on the plan. The sprinklers shall be of drip or micro-spray system sprinkler heads for water conservation.

    b. Forty percent (40%) of the trees on the site shall consist of minimum size twenty-four-inch (2'-0") box, and the remaining sixty percent (60%) shall be of minimum size fifteen (15) gallons. These trees shall be incorporated into the landscaped frontages of all streets. Where clinging vines are considered for covering walls, drought-tolerant species shall be used.

    c. All landscape areas, including the areas located within the public right-of-way along Lampson Avenue that abuts the subject property, are the responsibility of the applicant/property owner(s).

    d. Trees planted within ten feet (10'-0") of any public right of-way shall be planted in a root barrier shield. All landscaping along street frontages adjacent to driveways shall be of the low-height variety to ensure safe sight clearance. All trees planted on the subject property, whether for screening the project from the neighboring lots or for aesthetic or selling/marketing purposes, shall have an irrigation system installed in order to maintain the trees.

    e. All trees shall be double-staked in accordance with City standards.

    f. The landscape treatment along the street frontage, including the area designated as public right-of-way, shall incorporate the landscape area between the sidewalk and the development wall with groundcover, shrubs and bushes, and trees that highlight the project's entrance as well as enhance the exterior appearance along Lampson Avenue. The plant material for the entrance shall be the type to inhibit graffiti such as vines and dense growing shrubs and bushes, and shall be maintained.

    g. Fifty percent (50%) of all required shrubs shall be a minimum size of five (5) gallons at time of planting.

h. Live groundcover shall be planted and maintained where shrubbery is not sufficient to cover exposed soil. Mulch may be used in place of groundcover where groundcover will not grow or where groundcover will cause harm to other plants, but not more than thirty percent (30%) of the groundcover area shall have the mulch substitute.

i. Groundcover plants shall be planted at a density and spacing necessary for them to become well established and provide surface coverage within eighteen (18) months of planting.

j. The landscape plan shall incorporate and maintain, for the life of the project, means and methods to address water runoff, including Low Impact Development (LID) provisions which address water runoff. This includes, without limitation, all applicable requirements of the Water Quality Management Plan (WQMP), Drainage Area Management Plan (DAMP), Local Implementation Plan (LIP), and any other water conservation measures applicable to this type of development.

k. The irrigation system shall comply with all applicable provisions of the City's Water Conservation Ordinance, the City's Municipal Code landscape provisions, and all applicable State regulations.

l. All above-ground utilities (e.g., water backflow devices, electrical transformers, irrigation equipment) shall be shown on the landscaping plan in order to ensure proper landscape screening will be provided.

55. All recreation areas, landscaping along the interior project street and entryway, landscaped areas in all common areas, and any landscaping within the public right-of-way shall be maintained by the applicant for the life of the project.

56. All of the common recreational area, as identified on the approved site plan, shall be equipped with the list of amenities, as shown on the approved plan, and shall be subject to review by the Planning Services Division and Building and Safety Division prior to issuance of building permits for compliance with applicable standards.

a. The improvements to the recreational areas shall include, at a minimum, barbecue and dining areas.

b. Lighting in the common recreational areas shall be provided at a maximum one-foot light candle during the hours of darkness, and shall be restricted to low decorative type wall-mounted lights or ground lighting systems.

57. All lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.

58. All new block walls, and/or retaining wall(s), including existing block walls to remain, if any, shall be shown on the grading plans. Block walls shall be developed to City Standards or designed by a Registered Engineer and shall be measured from on-site finished grade. The applicant shall provide the following:

    a. Decorative masonry walls are required along the perimeter property lines, and shall be constructed to a minimum height of six feet (6'-0"), up to a maximum of seven feet (7'-0"), as measured from highest point of finished grade. Whether new or existing, the block walls shall be decorative and utilize stucco finish, slump stone, decorative CMU, or split face block. Street-facing perimeter walls shall include trailing vines, hedges planted along the base of the exterior face, or other landscaping treatments that deter graffiti.

    b. The applicant shall work with the existing property owners along the project perimeter in designing and constructing the required perimeter block walls. This requirement is to avoid having double-walls and minimize any impact that it might cause to the existing landscaping on the neighbor's side as much as possible. The perimeter block wall shall be constructed and situated entirely within the subject property. In the event that the applicant cannot obtain approval from the property owners, the applicant shall construct the new wall with a decorative cap to be placed between the new and existing walls. The Community Development Director shall be authorized to approve minor alterations to the size and/or location of the landscape planter to accommodate the placement of such walls.

59. Permitted hours and days of construction and grading shall be as follows, and all work shall comply with the noise regulations set forth in Chapter 8.47 of the City of Garden Grove Municipal Code:

    a. Monday through Friday – not before 7:00 a.m. and not after 7:00 p.m.

    b. Saturday – not before 9:00 a.m. and not after 6:00 p.m.

    c. Sunday and Federal Holidays – no construction shall occur.

60. Construction activities shall adhere to SCAQMD Rule 403 (Fugitive Dust), which includes dust minimization measures. Where feasible, construction activities shall use electricity from power poles rather than diesel or gasoline powered generators, and methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment. Also, use of solar, low emission water heaters, and low sodium parking lot lights, shall be required to ensure compliance with Title 24.

61. During construction, if paleontological or archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that fossil specimens or cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified paleontologist or archaeologist as applicable, and acceptable to the City, to evaluate and determine appropriate treatment for the specimen or resource. Work in the vicinity of the discovery shall halt until appropriate assessment and treatment of the specimen or resource is determined by the paleontologist or archeologist (work can continue elsewhere on the project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the paleontologist/archaeologist shall be implemented by the applicant at its own cost.

62. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which require the protection of active nests of all bird species prior to the removal of any on-site landscaping, including the removal of existing trees.

63. Prior to issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the name and address of the development, and the developer's name, address, and a 24-hour emergency telephone number.

64. Each residence shall be utilized as one (1) dwelling unit. No portion of any residence shall be utilized or rented as a separate dwelling unit.

65. Each apartment unit shall be provided with washer and dryer hook-ups.

66. Mailboxes shall be provided and installed by the applicant. The local postmaster shall approve the design and location.

67. Each unit within the proposed apartment building shall be provided with an air conditioning condensing unit and/or system such that there are no wall-

mounted, or window mounted units. If units are located on the roof, screening shall be provided, such that units are not visible from the public right-of-way.

68. Gas and/or propane fireplaces shall not be provided within the units, or as a part of the common open/recreational space for the development.

69. All units shall maintain within the required enclosed garage, the ability to park three (3) vehicles in each garage at all times. Unless authorized by state law, the garages shall not be converted to any other use.

70. There shall be no business activities, day car, or garage sales conducted from the garages.

71. Garages shall not be rented or leased separately from the attached dwelling units, and shall not be made unavailable to the occupants of the units. Residents shall not park or store vehicles anywhere on the site, except within the enclosed garage; however, the open parking spaces may be utilized by residents or guests for temporary parking.

72. The enclosed garage for each unit shall be equipped with an automatic roll-up type garage door.

73. Storage of boats, recreational vehicles, or commercial vehicles on the property shall be prohibited. The applicant/property owner shall ensure that this condition is complied with at all times by tenants of the units and shall include notice of this requirement in all lease agreements.

74. There shall be no parking allowed along any drive aisle, except within the designated parking areas. All curbs not designated as parking areas shall be painted red. The applicant shall post "No Parking" signs along the drive aisle.

75. All balconies shall remain open and shall not be enclosed at any time. There shall be no storage allowed in the balconies at any time. The applicant shall ensure that this condition is complied with at all times by tenants of the units and shall include notice of this requirement in all lease agreements.

76. Litter shall be removed daily from the project site, including adjacent public sidewalk and all perking areas under the control of the applicant. The areas shall be swept or cleaned, either mechanically or manually, on a weekly basis, to control debris.

77. Prior to permit issuance, the applicant shall submit a signed letter acknowledging receipt of the decision approving Site Plan No. SP-171-2026, and his/her agreement with all conditions of the approval.

78. The applicant shall, as a condition of project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, or proceeding against the City, its officers, agents, employees and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body, or City staff action concerning Site Plan No. SP-171-2026. The applicant shall pay the City's defense costs, including attorney fees and all other litigation related expenses, and shall reimburse the City for court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award, which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein.

79. In accordance with Garden Grove Municipal Code Sections 9.32.160, the rights granted pursuant to Site Plan No. SP-171-2026 shall be valid for a period of two (2) years. Unless a time extension is granted pursuant to Section 9.32.030.D.9 of the Municipal Code, the rights conferred by Site Plan No. SP-171-2026 shall become null and void if the subject development and construction necessary and incidental thereto is not commenced within two (2) years of the expiration of the appeal period, and thereafter diligently advanced until completion of the project. In the event construction of the project is commenced, but not diligently advanced until completion, the rights granted pursuant to Site Plan No. SP-171-2026 shall expire if the building permits for the project expire.

COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING STAFF REPORT

AGENDA ITEM NO.: C.2.	**SITE LOCATION:** Northeast corner of Fern Street and Garden Grove Boulevard, at 8271 Garden Grove Boulevard
HEARING DATE: May 21, 2026	**GENERAL PLAN:** RC2 (Residential/Commercial Mixed Use 2)
CASE NO.: Conditional Use Permit No. CUP-295-2026	**ZONE:** GGMU-2 (Garden Grove Boulevard Mixed Use 2)
APPLICANT: Justine Chavez	**APN:** 131-541-20
PROPERTY OWNER: Simon Lee of L.A. Pacific Plaza LLC	**CEQA DETERMINATION:** Exempt – Section 15301 – Existing Facilities

REQUEST:

A request for Conditional Use Permit approval to allow the operation of a "Tattoo, General" business in a 760-square-foot tenant space within an existing multi-tenant commercial shopping center. In conjunction with the request, the Planning Commission will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

BACKGROUND:

The subject site is approximately 6.57 acres, and is currently improved with a multi-tenant commercial shopping center with multiple commercial buildings. The center is located on the northeast corner of Fern Street and Garden Grove Boulevard. The commercial center is currently occupied by a variety of uses, including restaurants, medical offices, administrative offices, and a personal services.

The subject property has a General Plan Land Use Designation of RC2 (Residential/Commercial Mixed Use 2), and is zoned GGMU-2 (Garden Grove Boulevard Mixed Use 2). The shopping center is adjacent to R-1 (Single-Family Residential) zoned properties to the north, GGMU-2 zoned properties to the east, R-3 (Multiple-Family Residential) zoned properties in the south across Garden Grove Blvd, and residential and commercial properties across Fern Street, in the City of Stanton.

The specific tenant space under application is an approximately 760 square-foot space located on the eastern end of the multi-tenant pad building closest to the corner of Garden Grove Blvd and Fern Street. Previous uses of the tenant space include pet grooming, administrative offices, and retail sales.

In September 2024 the applicant was issued a business license to operate a facial tattoo/permanent make-up business under the name of Emerald Sky Studio. According to Title 9 of the Garden Grove Municipal Code (GGMC), a facial tattoo business is classified as "Tattoo, Facial" and is defined as an establishment used for the business of tattooing the face for cosmetic purposes (i.e., eyebrows, lips, and eyes) and does not include facial tattoos similar to body art. Section 9.18.020.030 of the GGMC lists "Tattoo, Facial" establishments as a use permitted by right within the GGMU-2 zone.

On November 18, 2025, Code Enforcement received a complaint pertaining to Emerald Sky Studio for operating as a general tattoo business. Upon investigation, Code Enforcement determined that the business was operating as a general tattoo business for body art, which requires a Conditional Use Permit within the GGMU-2 zoning code, and a Notice of Violation was issued on December 16, 2025. The applicant is now proposing a change in business operation from a facial tattoo to a general tattoo business within the subject tenant space. If approved, the Conditional Use Permit would bring the business into compliance with the requirements of the Municipal Code.

DISCUSSION:

Emerald Sky Studio, would operate as a "Tattoo, General" use, with services that include body and facial tattoos, body piercings, and permanent cosmetics. The floor plan will consist of a waiting area, tattooing areas, and a restroom, which is subject to approval of tenant improvement plans and building permits. There are no proposed changes to the exterior of the building, parking lot, or other site improvements. According to GGMC standards, no additional parking would be required to accommodate the proposed business.

The business would operate between the hours of 11:00 a.m. and 8:00 p.m., Monday through Saturday, and 12:00 p.m. and 7:00 p.m. on Sundays. In the event problems arise concerning the operation of this business, the hours of operation may be reduced by order of the Police Department.

In 2025, the City approved Amendment No. A-042-2025(B), which, in part, revised the regulations applicable to tattoo businesses. Following the effectiveness of the Amendment, GGMC Section 9.18.020.030 was amended such that tattoo businesses are no longer required to have an entrance face a principal, major, or primary arterial street. Per that section, tattoo businesses must still maintain a minimum 1,000-foot distance from any other tattoo business. Emerald Sky Studio would not be located within 1,000 feet of any such business. The next closest tattoo business is White Lotus Society (8550 Garden Grove Blvd #104), approximately 1,430 linear feet away, as measured from tenant space to tenant space. Therefore, the proposed business meets the additional regulations applicable to "Tattoo, General" uses, as established in GGMC Section 9.18.020.030. Tattoo establishments are also subject to all applicable operation regulations stipulated under Title 6 of the Municipal Code, Chapter 6.38 (Tattooing Establishment and Operation Regulations).

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

CEQA's Class 1 exemption applies to the operation, repair, maintenance, permitting, leasing, licensing, and minor alterations of existing public or private structures and facilities, with negligible or no expansion of use (CEQA Guidelines §15301). The subject request would allow the operation of a general tattoo business currently licensed as a facial tattoo business within an existing private structure (an approximately 760-square-foot commercial tenant space). No additional square footage would be added to the existing structure, and the change in use is negligible. Therefore, the proposed project is exempt from CEQA.

RECOMMENDATION:

Staff recommends that the Zoning Administrator take the following action:

1. Adopt Resolution No. 6137-26, approving Conditional Use Permit No. CUP-295-2026, subject to the recommended Conditions of Approval.

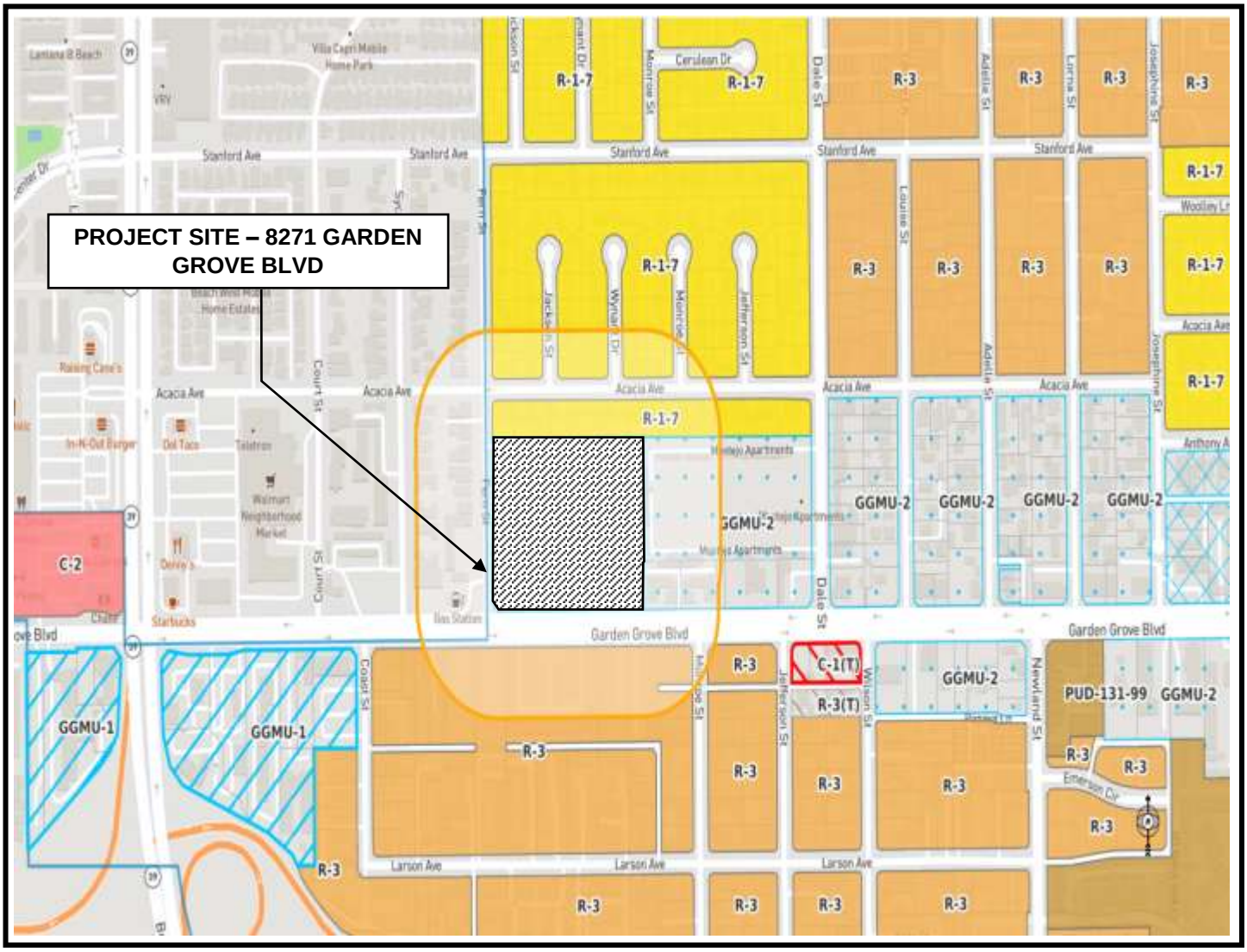
Maria Parra
Planning Services Manager

By: Zachary Hernandez
Assistant Planner

Attachment 1: Vicinity Map
Attachment 2: Plans
Attachment 3: Resolution No. 6137-26 with Exhibit "A" – Conditions of Approval

ATTACHMENT 1 - Vicinity Map

CONDITIONAL USE PERMIT NO. CUP-295-2026



LEGEND

SUBJECT SITE(S) – 8271 GARDEN GROVE BLVD.

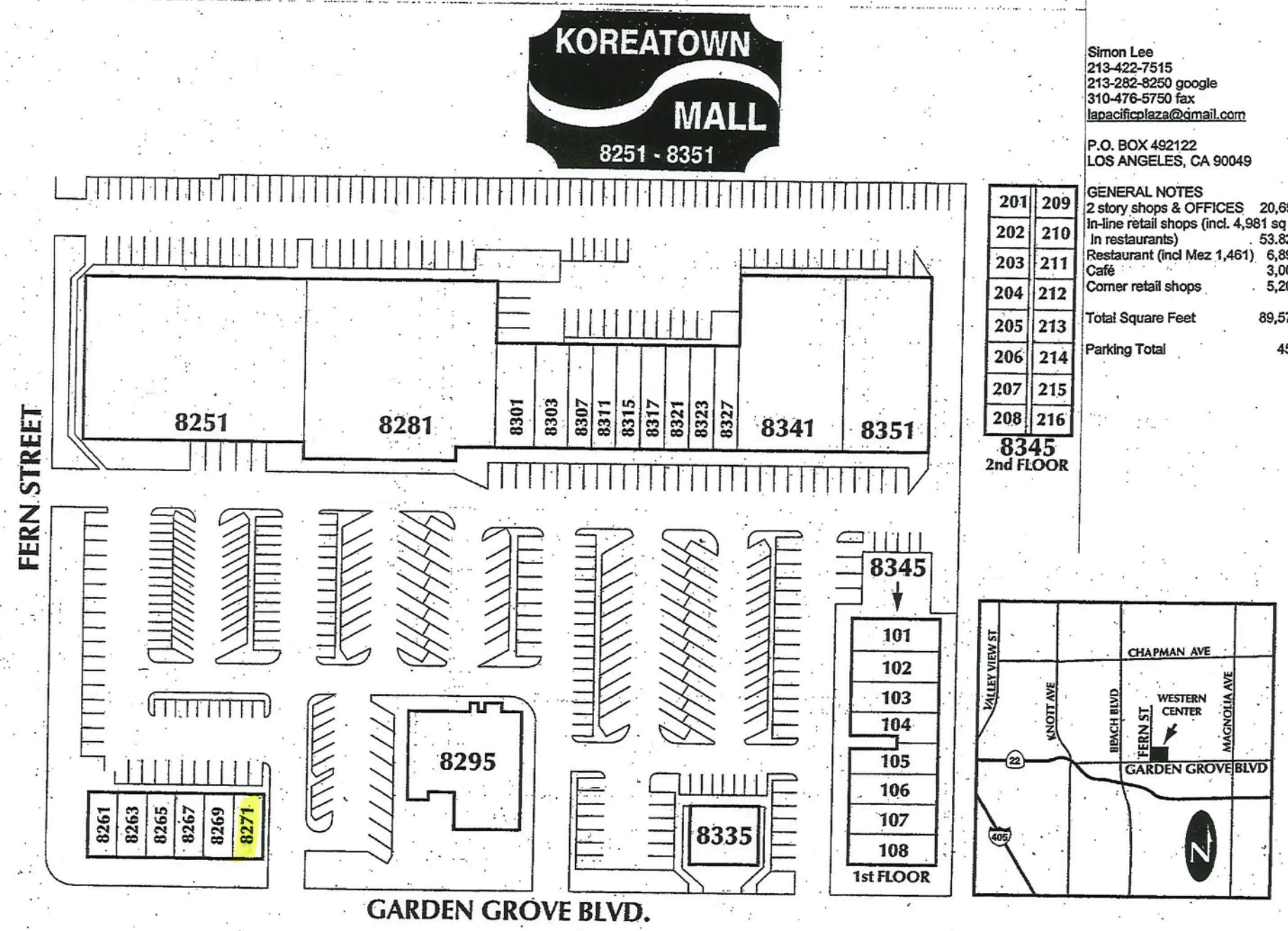
300 FOOT RADIUS

NOTES

1. SITE ADDRESSES – 8271 GARDEN GROVE BLVD.
2. ZONING: GGMU-2 (GARDEN GROVE MIXED USE 2)

CITY OF GARDEN GROVE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING SERVICES DIVISION
MAY 21, 2026

ATTACHMENT 2 - Plans



Simon Lee
213-422-7515
213-282-8250 google
310-476-5750 fax
lapacificplaza@gmail.com

P.O. BOX 492122
LOS ANGELES, CA 90049

GENERAL NOTES	
2 story shops & OFFICES	20,696
In-line retail shops (incl. 4,981 sq ft In restaurants)	53.820
Restaurant (incl Mez 1,461)	6,894
Café	3,000
Corner retail shops	5,200
Total Square Feet	89,575
Parking Total	455

CUP-295-2026

EMERALD SKY STUDIO

8271 Garden Grove Blvd. Garden Grove, CA 92844

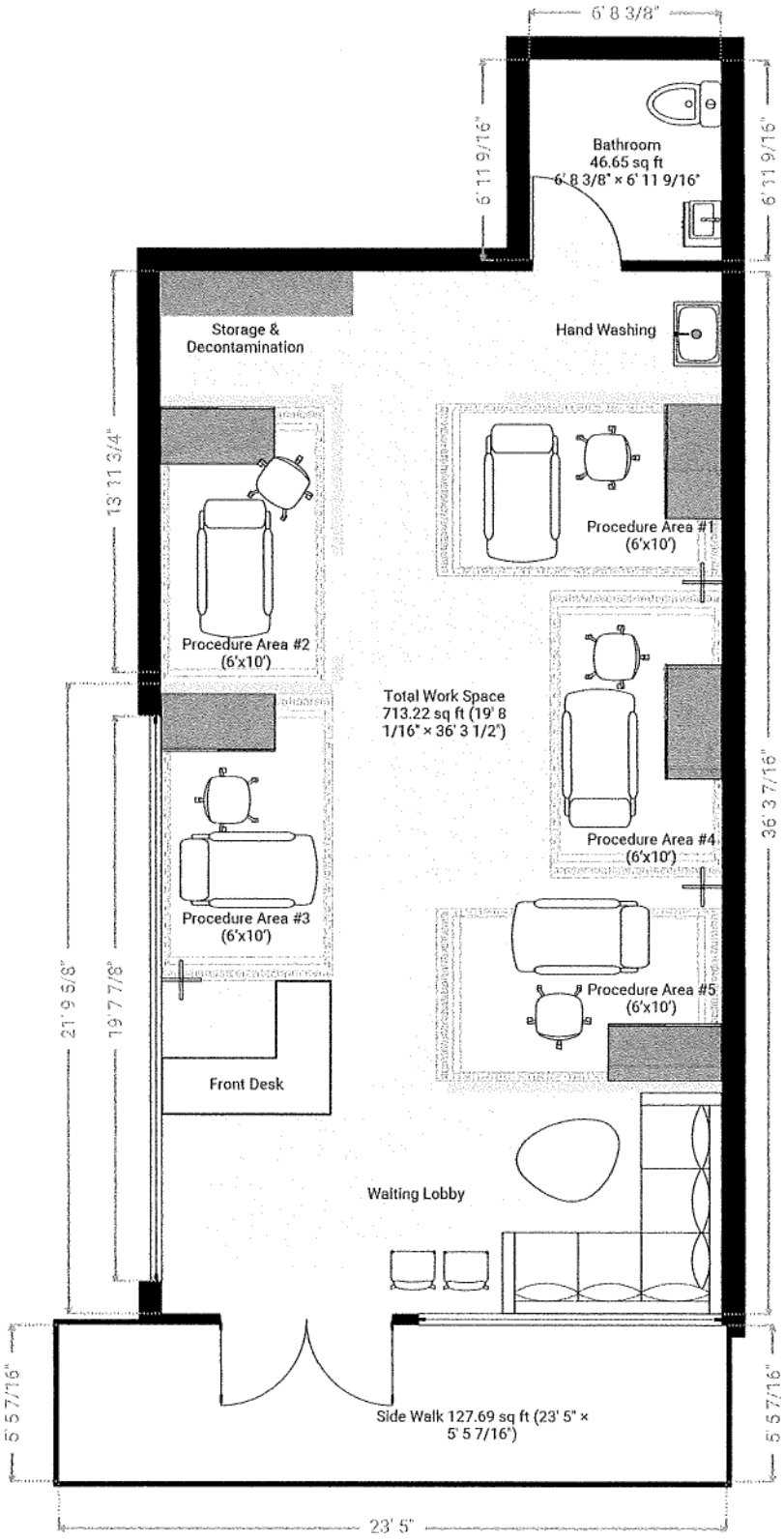
magicplan

TOTAL AREA:987.68 sq ft·WORK AREA:868.72 sq ft·FLOORS:1·ROOMS:2

SUBMITTED BYWulf Vallentine
info.emeraldsky@gmail.com | 949-414-7678

▼ Ground Floor

TOTAL AREA:987.68 sq ft·WORK AREA:868.72 sq ft·ROOMS:2



THIS FLOOR PLAN IS PROVIDED WITHOUT WARRANTY OF ANY KIND. SENSOPIA DISCLAIMSANYWARRANTY INCLUDING, WITHOUT LIMITATION, SATISFACTORY QUALITY OR ACCURACY OF DIMENSIONS.

0' 4' 8' 12'

1:78

RESOLUTION NO. 6137-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE APPROVING CONDITIONAL USE PERMIT NO. CUP-295-2026 FOR A PROPERTY LOCATED ON THE NORTHEAST CORNER OF FERN STREET AND GARDEN GROVE BOULEVARD, AT 8271 GARDEN GROVE BOULEVARD, ASSESSOR'S PARCEL NO. 131-541-20.

BE IT RESOLVED that the Planning Commission of the City of Garden Grove does hereby approve Conditional Use Permit No. CUP-295-2026, for a property located on the northeast corner of Fern Street and Garden Grove Boulevard, at 8271 Garden Grove Boulevard, Assessor's Parcel No. 131-541-20, subject to the Conditions of Approval attached hereto as Exhibit "A".

BE IT FURTHER RESOLVED in the matter of Conditional Use Permit No. CUP-295-2026, the Planning Commission of the City of Garden Grove does hereby report as follows:

1. The subject case was initiated by Justine Chavez, with the authorization of the property owner, Simon Lee of L.A. Pacific Plaza LLC.

2. The applicant is requesting Conditional Use Permit approval to allow a change in business operation from an existing "Tattoo, Facial" business to a "Tattoo, General" business in a 760-square-foot tenant space within an existing multi-tenant commercial shopping center.

3. The Planning Commission hereby determines that the proposed project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 (Existing Facilities) of the CEQA Guidelines (14 Cal. Code Regs., Section 15301) because the project consists of approval of a negligible change in use of an existing private structure.

4. The property has a General Plan Land Use Designation of RC2 (Residential/Commercial Mixed Use 2), and is zoned GGMU-2 (Garden Grove Boulevard Mixed Use 2). The subject site is an approximately 6.57-acre multi-tenant commercial shopping center.

5. Existing land use, zoning, and General Plan designation of property within the vicinity of the subject property have been reviewed.

6. Report submitted by City Staff was reviewed.

7. Pursuant to a legal notice, a public hearing was held on May 21, 2026, and all interested persons were given an opportunity to be heard.

8. The Planning Commission gave due and careful consideration to the matter during its meeting on May 21, 2026.

BE IT FURTHER RESOLVED, FOUND AND DETERMINED that the facts and reasons supporting the conclusion of the Planning Commission, as required under Municipal Code Section 9.32.030, are as follows:

FACTS

The subject site is improved with an existing multi-tenant commercial shopping center, located on the northeast corner of Fern Street and Garden Grove Boulevard. The subject property is zoned GGMU-2 (Garden Grove Boulevard Mixed Use 2) and has a General Plan Land Use Designation of RC2 (Residential/Commercial Mixed Use 2). The subject property is adjacent to R-1 (Single-Family Residential) zoned properties to the north, GGMU-2 zoned properties to the east, R-3 (Multiple-Family Residential) zoned properties in the south across Garden Grove Blvd, and residential and commercial properties across Fern Street, in the City of Stanton.

The specific tenant space under application is an approximately 760-square-foot space. The subject space is currently occupied by a facial tattoo business, Emerald Sky Studio. The applicant is now proposing to operate as a general tattoo business, within the subject tenant space.

The proposed business would operate as a "Tattoo, General" use with services that include body and facial tattoos, body piercings, and permanent cosmetics. Approval of tenant improvement plans and issuance of building permits are required for the change in use. According to Municipal Code standards, no additional parking would be required to accommodate the proposed tattoo use.

The business would operate between the hours of 11:00 a.m. and 8:00 p.m., Monday through Saturday, and 12:00 p.m. and 7:00 p.m. on Sundays. In the event problems arise concerning the operation of this business, the hours of operation may be reduced by order of the Police Department.

The proposed business would meet the additional regulations applicable to "Tattoo, General" uses, as established in Garden Grove Municipal Code Section 9.18.020.030. Tattoo establishments are also subject to all applicable operation regulations stipulated under Title 6 of the Municipal Code, Chapter 6.38 (Tattooing Establishment and Operation Regulations).

FINDINGS AND REASONS:

CONDITIONAL USE PERMIT

1. That the proposed use will be consistent with the City's adopted General Plan and redevelopment plan.

   The property has a General Plan Land Use Designation of RC2 (Residential/Commercial Mixed Use 2), and is zoned GGMU-2 (Garden Grove Boulevard Mixed Use 2). The RC2 designation is intended to provide for a mix of residential and commercial uses mostly around older underutilized, multi-tenant commercial developments. The purpose of the GGMU-2 zone is to provide for commercial and residential uses to be developed as integrated developments either on a single development site or as complementary uses within a district. The proposed use would meet the intent of the RC2 General Plan Land Use Designation and GGMU-2 zone. Further, the subject proposal would be consistent with several General Plan Goals, Policies, and Implementation Programs, including specifically:

   Policy LU-1 The City of Garden Grove is a well-planned community with sufficient land uses and intensities to meet the needs of anticipated growth and achieve the community's vision.

   The proposed use would add an additional service to the existing shopping center, and serve the anticipated needs of the community. The project would comply with the requirements of the Municipal Code for "Tattoo, General" uses. Therefore, the proposed use would contribute to its surroundings, and could help the City meet the needs of the growing community.

   Goal LU-1.4 Encourage a wide variety of retail and commercial services, such as restaurants and cultural arts/entertainment, in appropriate locations.

   The subject request for a Conditional Use Permit would allow for the establishment of a new tattoo business. This would increase the variety of services within the subject commercial center, and in the immediate neighborhood. With the subject request, the proposed use would further enhance the variety of commercial and personal services already in the area.

   Goal LU—2.1 Protect residential areas from the effect of potentially incompatible uses. Where new commercial or industrial development is allowed adjacent to residentially zoned districts, maintain standards for circulation, noise, setbacks, buffer areas, landscaping, and architecture which ensure compatibility between uses.

   To the south, across Garden Grove Boulevard, the commercial center is adjacent to multiple-family residential uses located in the R-3 zone. The proposed use would be separated from the nearest residential properties by a setback of over 120'-0". Landscaped setback areas, drive aisles, and Garden Grove Boulevard

would provide separation from the proposed tattoo use to the nearest residential units. These separations would help increase compatibility between uses.

Goal LU-2.4 Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.

The site is located within a neighborhood that has a mix of different uses and development patterns, including residential, retail, restaurant, office, and personal service uses. Tattoo uses are compatible with these adjacent uses. The proposed tattoo use would not change the existing character of the commercial center, or the surrounding neighborhood because the proposed tattoo business would be located within an existing commercial building. Furthermore, provided the conditions of approval are adhered to for the life of the project, the use would be compatible with other adjacent uses.

Goal LU-4 Uses compatible with one another.

"Tattoo, General" uses are conditionally permitted uses in the GGMU-2 zone. The proposed tattoo business would be similar to nearby businesses, including restaurants, retail, office, and other personal service uses. Additionally, the proposed tattoo use would be more than 1,000 feet from the next closest tattoo business, consistent with GGMC Section 9.18.020.030. Provided the Conditions of Approval are adhered to for the life of the project, the use would be compatible with other adjacent uses, and would be harmonious with the persons who work and live in the area.

Goal LU-5 Economically viable, vital, and attractive commercial centers throughout the City that serves the needs of the community.

The proposed tattoo business could enhance with vitality of the City's commercial shopping centers. The proposed Conditional Use Permit would allow for the establishment of a new tattoo facility. Those would increase the variety of office, retail, restaurant, and personal service uses within the subject commercial shopping center. The proposed use could enrich the community by providing a new service for residents within the immediate vicinity.

Policy LU-6.2 Encourage a mix of retail shops and services along the major corridors and in centers that better meet the community's needs.

The subject site is located on the northeast corner of Fern Street and Garden Grove Boulevard. The subject request for a Conditional Use Permit would allow for a change in business operation from an existing "Tattoo, Facial" business to a "Tattoo, General" business. With the subject request, the proposed use would further enhance the variety of commercial and personal services already in the area. By approving the subject request, the commercial facilities located along

Garden Grove Boulevard would provide a variety of commercial services to meet the community's needs.

Goal ED-2 The City must attract new businesses, while supporting and assisting those already located within Garden Grove.

The proposed Conditional Use Permit would allow for a change in business operation from an existing "Tattoo, Facial" business to a "Tattoo, General" business. The change in use would provide additional tattoo services to City residents. Should the Conditional Use Permit be approved, the City would be providing a business the opportunities they need to be successful.

Policy SAD-1.2 Provide regular opportunities for communications between the Police Department and community members.

The Garden Grove Police Department has reviewed all relevant information pertaining to the proposed Conditional Use Permit. The intent of their review is to reduce potential crime-related activities, and to promote the safe operation of the proposed use. No concerns were raised by the Police Department regarding the proposal. Therefore, the Police Department is supportive of the proposal.

2. That the requested use at the location proposed will not: adversely affect the health, peace, comfort, or welfare of the persons residing or working in the surrounding area, or unreasonably interfere with the use, enjoyment, or valuation of the property of other persons located in the vicinity of the site, or jeopardize, endanger, or otherwise constitute a menace to public health, safety, or general welfare.

   The proposed tattoo use would not adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area. Nor would the project interfere with the use, enjoyment, or valuation of the nearby properties, or constitute a menace to public health, safety, or general welfare. The proposed tattoo business would operate between the hours of 11:00 a.m. and 8:00 p.m., Monday through Saturday, and 12:00 p.m. and 7:00 p.m. on Sundays. In addition, the proposed tattoo business is not located within 1,000 feet of an existing tattoo business. The proposed Conditions of Approval would help ensure the use does not adversely affect the adjacent neighborhood. In the event problems arise concerning the operation of this business, the hours of operation may be reduced by order of the Police Department.

3. That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this title or as is otherwise required in order to integrate such use with the uses in the surrounding area.

There are no proposed alterations to the overall function of the site, with changes only proposed to the interior of the tenant space. The existing building has previously been developed as part of an integrated commercial shopping center. There have not been any issues regarding the site's landscaping, walls, parking, or other development features. According to Municipal Code standards, no additional parking would be required to accommodate to proposed tattoo business.

4. That the proposed site is adequately served: by highways or streets or sufficient width and improved as necessary to carry the kind and quantity of traffic such as to be generated, and by other public or private service facilities as required.

   The subject site is located on the northeast corner of Fern Street and Garden Grove Boulevard. The site is adequately served by driveway approaches on Garden Grove Boulevard and Fern Street. The site is also adequately serviced by the public services facilities required such as: gas, electric, water, and sewer facilities. A part of this request, only interior improvements would be made. Therefore, the site would continue to be adequately served by all existing highways, streets, and other public and private service facilities.

INCORPORATION OF FACTS AND REASONS SET FORTH IN THE STAFF REPORT

In addition to the foregoing, the Planning Commission incorporates herein by this reference, the facts and reasons set forth in the staff report.

BE IT FURTHER RESOLVED that the Planning Commission does conclude:

1. The Conditional Use Permit does possess characteristics that would indicate justification of the request in accordance with Municipal Code Section 9.32.030.

In order to fulfill the purpose and intent of the Municipal Code and thereby promote the health, safety, and general welfare, the following Conditions of Approval, attached as Exhibit "A", shall apply to Conditional Use Permit No. CUP-295-2026.

EXHIBIT "A"

Conditional Use Permit No. CUP-295-2026

8271 GARDEN GROVE BOULEVARD

CONDITIONS OF APPROVAL

General Conditions

1. The applicant and each owner of the property shall execute, and the applicant shall record against the property, a "Notice of Agreement with Conditions of Approval and Discretionary Permit Approval," as prepared by the City Attorney's Office, within thirty (30) days of approval.

2. All Conditions of Approval set forth herein shall be binding on and enforceable against each of the following, and whenever used herein, the term "applicant" shall mean and refer to each of the following: the project applicant, Justine Chavez, the current property owner, Simon Lee of L.A. Pacific Plaza LLC, the future owner(s) and tenants(s) of the property, and each of their respective successors and assigns. All conditions of approval are required to be adhered to for the life of the project, regardless of property ownership. Except for minor modifications authorized to be approved by the Community Development Director pursuant to Condition No. 4, any changes of the Conditions of Approval require approval by the appropriate City hearing body.

3. Conditional Use Permit No. CUP-295-2026 authorizes a change in business operation from an existing "Tattoo, Facial" business to a "Tattoo, General" business, as depicted on the plans submitted by the applicant and made part of the record of the May 21, 2026, Planning Commission proceedings, subject to these Conditions of Approval. Approval of this Conditional Use Permit shall not be constructed to mean any waiver of applicable and appropriate zoning and other regulations, and wherein not otherwise specific, all requirements of the City of Garden Grove Municipal Code shall apply.

4. The approved plans are an integral part of the decision approving this Conditional Use Permit. Minor modifications to the approved site plan, floor plan, and/or these Conditions of Approval may be approved by the Community Development Director, in his or her discretion. Proposed modifications to the approved project and/or Conditions of Approval that would result in the intensification of the project or create impacts that have not been previously addressed, and which are determined by the Community Development Director not to be minor in nature shall be subject to approval of new and/or amended land use entitlements by the applicable City hearing body.

5. All conditions of approval shall be implemented at the applicant's expense, except where specified in the individual condition.

Police Department

6. There shall be no gaming tables or gaming machines, as outlined in City Code Sections 8.20.010 and 8.20.050, on the premises at any time.

7. Hours of operation shall be permitted from 11:00 a.m. and 8:00 p.m., Monday through Saturday, and 12:00 p.m. and 7:00 p.m. on Sundays. In the event a particular design is taking longer to apply after the business closes to the public at 8:00 p.m., Monday through Saturday or at 7:00 p.m. on Sundays, the tattoo artists, the customer, and a single guest may remain in the business until one (1) hour after the designated closing time. No new customers may enter the business during any extended one-hour period. The hours of operation shall be applicable to the entire premises. The City of Garden Grove reserves the right to reduce hours of operation, by order of the Chief of the Police Department, in the event problems arise concerning the operation of this business.

8. In the event security-related problems occur, and at the request of the Police Department, the permittee, at its own expense, shall provide a California licensed, uniformed security guard(s) on the premises during such hours as requested by the Police Department.

9. No alcoholic beverages shall be consumed on the premises with the exception of a closed, special event that has written approval by the Chief of the Police Department, or his or her designee.

10. There shall be no enclosed booths on the premises at any time. Walls and/or partitions exceeding thirty-six (36) inches in height, which partially enclose or separate booths shall be of a clear and transparent material. No item shall be placed in the area of booths that would limit or decrease the visibility of the interior of the business from any location within the business.

11. Any violations or noncompliance with the conditions of approval may result in the issuance of an Administrative Citation of up to $1,000 pursuant to GGMC 1.22.010(a).

Building and Safety Division

12. All work shall comply with the latest edition of the California (CA) Building Standards Code (CBC) at the time of permit application.

13. The applicant shall submit Tenant Improvement plans for the change in use. The plans shall provide an accessible restroom complying CBC Chapter 11B.

Engineering Division

14. To the extent applicable, the applicant shall be subject to all applicable fees, including Traffic Mitigation Fees, duly adopted and identified in Chapter 9.44 of the Garden Grove Municipal Code. The amount of said fees shall be calculated based on the City's current fee schedule at the time of permit issuance.

Orange County Fire Authority

15. The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements, including, but not limited to, the Fire Master Plan.

Water Services Division

16. Any new water service installations two inches (0'-2") and smaller, may be installed by the City of Garden Grove at owner's/developer's expense. Installation shall be scheduled upon payment of applicable fees, unless otherwise noted. Fire services and larger water services three inches (0'-3") and larger shall be installed by the applicant's contractor per City Standards.

17. Water meters shall be located within City right-of-way or within dedicated waterline easement. Fire services and large water services three inches (0'-3") and larger, shall be installed by a contactor with a Class A or C-34 license, per City water standards, and inspected by an approved Public Works inspection.

18. A Reduced Pressure Principle Device (RPPD) backflow prevention device shall be installed for meter protection. The landscape system shall have RPPD device. Any carbonation dispensing equipment shall have a RPPD device. Installation shall be per City Standards and shall be tested by a certified backflow device tester immediately after installation. Cross-connection inspector shall be notified for inspection after the installation is completed. Owner shall have RPPD device tested once a year thereafter by a certified backflow device tester and the test results to be submitted to Public Works, Water Services Division. Property owner must open a water account upon installation of the RPPD device.

19. It shall be the responsibility of the applicant to abandon any existing private water well(s) per Orange County Health Department requirements.

Abandonment(s) shall be inspected by Orange County Health Department inspection after permits have been obtained.

20. A composite utility site plan shall be included in the building plan set, which shall be submitted to both Engineering Division and Water Services Division for review and approval.

21. There shall be no structures or utilities built on or crossing water or sewer main easements.

22. Any new or existing water valve located within a new concrete driveway or sidewalk construction shall be reconstructed per City Standard B-753.

23. If required, fire service shall have an above-ground backflow device with a double-check valve assembly. The device shall be tested immediately after installation and once a year thereafter by a certified backflow device tester and the results to be submitted to the Public Works Department, Water Services Division. The device shall be on private property, and is the responsibility of the property owner. The above-ground assembly shall be screened from public view as required by GGMC Section 9.12.040.10.G.

24. No permanent structures, trees, or deep-rooted plants shall be placed over water mains.

25. If applicable, the contractor shall abandon any existing unused sewer lateral(s) at the street right-of-way on the property owner's side. The sewer pipe shall be capped with an expansion sewer plug and encased in concrete. Only one sewer connection per lot is allowed.

26. If applicable, the property owner shall install new sewer lateral with clean-out at right-of-way line and lateral shall be connect to the existing eight-inch (0'-8") VCP sewer main on Garden Grove Boulevard. Lateral in public right-of-way shall be minimum diameter of six inches (0'-6"), extra strength VCP with wedgelock joints.

Community Development Department

27. As a result of the open nature of the proposed floor plan, persons present in the tattoo station area of the business will generally be able to observe the application of tattoos and piercings to customers of the tattoo station area. Accordingly, in those instances where the application of a tattoo and/or piercing requires or results in the exposure of body parts that would normally be considered private in nature, such as the female breasts, the pubic area, or

the buttocks, the applicant shall ensure that the customer to whom the tattoo and/or piercing is being applied to is screened from view of other non-employees present in the establishment.

28. The tattoo establishment is subject to, and will operate in compliance with, all applicable operation regulations as stipulated under Title 6 of the Municipal Code, Chapter 38 (Tattooing Establishment and Operation Regulations).

29. No outdoor storage or displays shall be submitted at any time.

30. A prominent, permanent sign stating "NO LOITERING IS ALLOWED ON OR IN FRONT OF THE PREMISIES" shall be posted in a place that is clearly visible to patrons of the licensee. The sign lettering shall be four (4) to six (6) inches high with black letters on a white background. The sign shall be displayed near or at the entrance, and shall also be visible to the public.

31. No live entertainment, i.e. dancing, karaoke, live music, sport bar or disc-jockey entertainment, etc. including amplified music, shall be permitted on the premises. There shall be no raised platform, stage or dance floor allowed on the premises at any time.

32. There shall be no amusement devices permitted on the premises at any time.

33. There shall be no uses or activities permitted of an adult-oriented nature as outlined in City Code Section 9.16.020.070.

34. There shall be no deliveries to or from the premises before 7:00 a.m. and after 10:00p.m., seven (7) days a week.

35. Litter shall be removed daily from the premises, including adjacent public sidewalks, and from all parking areas under the control of the applicant/property owner. These areas shall be swept or cleaned, either mechanically or manually on a weekly basis, to control debris.

36. All trash bins shall be kept inside trash enclosures, and gates closed at all times, except during disposal and pick-up. Trash pick-up shall be at least three (3) times per week.

37. The applicant/property owner shall abate all graffiti vandalism within the premises. The applicant/property owner shall implement best management practices to prevent and abate graffiti vandalism within the premises throughout the life of the project, including, but not limited to, timely removal of all graffiti, the use of graffiti resistant coating and surfaces, the installation

of vegetation screening of frequent graffiti sites, and the installation of signage, lighting and/or security cameras, as necessary. Graffiti shall be removed/eliminated by the applicant/property owner as soon as reasonably possible after it is discovered, but not later than 72 hours after discovery.

38. The applicant is advised that the establishment is subject to the provision of State Labor Code Section 64.04.5 (ref: State Law AB 13), which prohibits smoking inside the establishment as of January 1, 1995.

39. No roof-mounted mechanical equipment, including exhaust vents, shall be permitted unless a method of screening complementary to the architecture of the building is approved by the Community Development Department, Planning Services Division. Said screening shall block visibility of any roof-mounted mechanical equipment from view of public streets and surrounding properties.

40. No satellite dish antennas shall be installed on said premises unless, and until plans have been submitted to and approved by the Community Development, Planning Services Division. No advertising material shall be placed thereon.

41. There shall be no outdoor activities conducted on the premises without approval of a Special Event Permit or Community Event Permit.

42. Permits from the City of garden Grove shall be obtained prior to displaying any temporary advertising (i.e. banners).

43. Signs shall comply with the City of Garden Grove sign requirements. No more than 15% of the total window areas and clear doors shall bear advertising or sign of any sort. Any opaque material applied to the store front, such as window tint, shall count toward the maximum window coverage area.

44. Any modification to existing signs or the installation of new signs shall require approval by the Community Development Department, Planning Services Division prior to issuance of a building permit.

45. The applicant/property owner shall submit signed letters acknowledging receipt of the decision approving Conditional Use Permit No. CUP-295-2026, and his/her agreement with all conditions of approval within 30-days from the date of this approval.

46. A copy of the resolution approving Conditional Use Permit No. CUP-295-2026, including the conditions of approval, shall be kept on the premises at all times.

47. The applicant shall, as a condition of project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, or proceeding against the City, its officers, agents, employees and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body, or City staff action concerning Conditional Use Permit No. CUP-295-2026. The applicant shall pay the City's defense costs, including attorney fees and all other litigation related expenses, and shall reimburse the City for court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award, which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein.

48. In accordance with Garden Grove Municipal Code Section 9.32.160, the rights granted pursuant to Conditional Use Permit No. CUP-295-2026 shall be valid for a period of two (2) years. Unless a time extension is granted pursuant to Section 9.32.030.D.9 of the Municipal Code, the rights conferred by Conditional Use Permit No. CUP-295-2026 shall become null and void if the subject development and construction necessary and incidental thereto is not commenced within two (2) years of the expiration of the appeal period, and thereafter diligently advanced until completion of the project. In the event construction of the project is commenced, but not diligently advanced until completion, the rights granted pursuant to Conditional Use Permit No. CUP-295-2026 shall expire if the building permits for the project expire.

49. If deemed necessary by the Community Development Director, the Conditional Use Permit may be reviewed at any time, in order to determine if the business is operating in compliance.

COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING STAFF REPORT

AGENDA ITEM NO.: C.3.	**SITE LOCATION:** Southeast corner of Russell Avenue and Kerry Street, at 9822 Russell Avenue
HEARING DATE: May 21, 2026	**CURRENT GENERAL PLAN:** Low Density Residential (LDR) **PROPOSED GENERAL PLAN:** Low Medium Density Residential (LMR)
CASE NOS.: General Plan Amendment No. GPA-001-2026, Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, & Vesting Tentative Tract Map No. TT-19447	**CURRENT ZONE:** R-1 (Single-Family Residential) **PROPOSED ZONE:** PUD-020-2026 (R-2 – Limited Multiple Residential Base Zone)
APPLICANT: Melia Homes, Inc.	**APN:** 098-081-19
PROPERTY OWNER: Iglesia de Cristo de Restauracion	**CEQA DETERMINATION:** Mitigated Negative Declaration

REQUEST:

A request that the Planning Commission recommend City Council approval of a General Plan Amendment, Zoning Map Amendment, Planned Unit Development, and related entitlements for a proposed 26-unit multiple-family residential project on an approximately 1.8-acre site. The specific land use entitlement approvals requested include the following: (i) a General Plan Amendment to change the Land Use Designation of the subject property from LDR (Low Density Residential) to LMR (Low Medium Density Residential); (ii) a Zoning Map Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to establish standards of development to facilitate the development of the project; (iv) a Site Plan for the construction of twenty-six (26) two-story townhomes and associated site improvements; and (v) a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. Revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01 which previously allowed for the operation of an elementary school, and operation of a wireless facility, respectively, on the subject property, is also proposed. The Planning Commission will also consider a recommendation that the City Council adopt a Mitigated Negative Declaration and an associated Mitigation Monitoring and Reporting Program for the project.

BACKGROUND:

The project site is currently comprised of an approximately 78,537 square-foot (1.8-acre) parcel on the southeast corner of Kerry Street and Russell Avenue, at 9822 Russell Avenue. The site is currently developed with a church, preschool, and unmanned telecommunications facility, all of which would be demolished as a part of the subject

request. Similarly, Conditional Use Permit Nos. CUP-114-81 and CUP-554-01, which allowed the operation of the preschool and the telecommunications, respectively, would be revoked as part of this request.

The subject site has a General Plan Land Use Designation of Low Density Residential (LDR) and is zoned R-1 (Single-Family Residential). The property abuts R-1 zoned properties to the south. To the north, across Russell Avenue, the property is adjacent to R-1 and R-2 (Limited Multiple Residential) properties. To the west, across Kerry Street, the property is adjacent to properties in the R-1 zone. To the east, the property is adjacent to the Sunnyside Elementary School in the O-S (Open Space) zone.

The applicant is requesting (i) a General Plan Amendment to change the Land Use Designation of the property to Low Medium Density Residential (LMR); (ii) an Amendment to the zoning map to establish a residential PUD (PUD-020-2026) with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to facilitate the development of the project; (iv) Site Plan approval to construct twenty-six (26) two-story attached multiple-family units along with associated site improvements; (v) and a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium.

Each proposed unit would be between 1,442 square feet to 1,800 square feet, and would consist of three (3) or four (4) bedrooms, three (3) bathrooms, an attached two-car garage, and a front porch. Associated site improvements would consist of a private street, visitor parking, a common recreation area, private open space areas for each unit, and site landscaping improvements. In conjunction with the request, the applicant is requesting that the Planning Commission consider a recommendation that the City Council adopt a Mitigated Negative Declaration and an associated Mitigation Monitoring and Reporting Program for the project.

Pursuant to Amendment No. A-035-2022, Garden Grove Municipal Code Section 9.32.030 (Land Use Actions) provides that where a requested land use action also requires approval of an action by the City Council, the City Council shall be the final review authority for such land use action, and the Planning Commission shall transmit a recommendation to the City Council. Since the requested project requires City Council approval of a General Plan Amendment, Amendment, and a Planned Unit Development (PUD), the City Council is also the final decision maker for the requested Site Plan, and Tentative Tract Map requests.

NEIGHBORHOOD MEETING:

On February 10, 2026, a neighborhood meeting was held at the project site, inside the Iglesia de Cristo de Restauracion. The meeting was intended to inform property owners located within a 300-foot radius of the project site about the proposed project. Six (6) residents were present at the meeting, and raised questions and concerns regarding parking, traffic, and construction impacts.

Residents expressed concern that the Project would not provide enough off-street parking within the development, and that construction activity would result in impacts to vehicular

traffic and the availability of street parking in the neighborhood. The applicant informed the residents that the project would meet the parking requirements for the number of units being proposed. Further, the applicant explained that any off-site work would be limited to the project's street frontages, resulting in only partial prohibitions of the street parking. Lastly, the applicant also informed the residents that construction vehicle activity to-and-from the site would consider school hours, as the Sunnyside Elementary was identified as a driver for the residents' traffic complaints.

PROJECT STATISTICS:

	Provided	Proposed PUD Standards[1]
Lot Size	78,537 S.F. (1.8 acres)	43,560 S.F. (1.0 acre)
Density	14.4 units / acre	Max. 21 units / acre
Building Height	2 stories (29'-9")	Max. 3 stories (35'-0")
Private Street	25'-0" wide	25'-0" wide
Parking Total	85 spaces	3.25 spaces / unit = 84.5 ~ 85
Two-Car Garage (x26)	52 spaces	
Guest	33 spaces	
Recreation Area		
Total (Common + Private)	8,702 S.F.	300 S.F. / unit = 7,800 S.F.
Common	3,695 S.F.	
Private	2,106 S.F.	
Passive[2]	2,901 S.F.	
Building Setbacks		
Front (West)	20'-0"	20'-0"
Rear (East)	10'-0" – 15'-0"	10'-0"
Street Side (North)	11'-0"	10'-0"
Interior Side (South)	22'-6"	10'-0"
Stepback Adjacent to R-1	21'-8"	20'-0"
Unit Entry Depth	Min. 2'-1"	2'-0"

DISCUSSION:

GENERAL PLAN AMENDMENT:

The subject site currently has a General Plan Land Use Designation of Low Density Residential (LDR). The LDR Land Use Designation is intended to preserve and enhance residential areas characterized by detached, single-unit structures and accessory dwelling units, with neighborhoods that preserve residential property values, provide access to schools, parks and other community services, and provide high quality architectural design. The LDR Land Use Designation allows residential densities up to 11 units per acre. The proposed project proposes a residential density of 14.4 units per acre, which exceeds the LDR density limit.

[1] All standards presented as minimums, unless otherwise noted.
[2] A maximum of 50% of the passive open space area may count toward the overall open space provided on-site.

Therefore, to facilitate the proposed project, a General Plan Amendment is necessary to change the Land Use Designation of the project site to Low Medium Density Residential (LMR). The LMR designation is intended for the development of single-family homes, accessory dwelling units, duplexes and triplexes, condominiums, and small lot subdivisions that: provide a variety of housing types; provide access to schools, parks, and other community services; provide a high-quality architectural design that preserves privacy; provide common spaces, recreation areas and services convenient to residents; provide an excellent environment for family life; and preserve residential property values. The LMR allows for a maximum density of twenty-one (21) units per acre.

The project as proposed, would be compatible with the surrounding properties, which have both two-story, multiple-family and single-family to the north, south, and west of the project site. Therefore, the LMR Land Use Designation is appropriate for the site and would help ensure that the site is developed in harmony with the surrounding land uses.

ZONING MAP AMENDMENT:

As a part of this request, Amendment No. A-046-2026 would modify the zoning of the property from an R-1 (Single-Family Residential) to a residential Planned Unit Development (PUD-020-2026) with an R-2 (Limited Multiple Residential) base zone. The R-2 base zoning is consistent with the Low Medium Density Residential (LMR) General Plan Land Use Designation. Rezoning of the property would facilitate the development of the proposed project under the proposed PUD. The proposed PUD-020-2026 is based on the R-2 standards of the Municipal Code. The multiple-family residential developments to the north, across Russell Avenue are zoned R-2. The proposed Amendment would be a continuation of the zoning from across the street.

PLANNED UNIT DEVELOPMENT NO. PUD-020-2026:

A Planned Unit Development (PUD) is a precise plan, adopted by an ordinance which provides the means for the regulation of buildings, structures, and uses of land in order to facilitate the implementation of the General Plan. Additionally, the regulations of PUDs are intended to provide for a diversity of uses, relationships, and open spaces in an innovative plan and design, while ensuring compliance with the provisions of the Municipal Code. PUDs are governed by zoning regulations that are contained within the ordinance that ultimately adopts the PUD and the base zone, which is the zoning district for the land contained within the PUD. Except as otherwise provided by the ordinance approving the PUD, all use and development standards of the base zone continue to apply to the PUD.

As part of the proposed project, the City's Zoning Map would be amended to change the zoning of the project site to a residential Planned Unit Development (PUD-020-2026), with R-2 base zoning, to allow for and facilitate development of the project. The proposed residential PUD is intended to create a transition between the nearby single-family and multiple-family residential developments.

Planned Unit Development No. PUD-020-2026 would be the residential PUD zoning that establishes the development standards for the project. Where not otherwise specified,

the zoning standards in the R-2 base zone would apply. Development standards specified in the PUD include, but are not limited to, setbacks, parking, building heights, and open space requirements. There are three (3) development standards in which the PUD would differ from the R-2 base zoning. The PUD would allow for: (1) fences in the front setback up to three-and-a-half-feet (3'-6") tall; (2) mechanical equipment (e.g., A/C condensers) within the front setback area, as long as they are screened from view; and (3) a minimum one-foot (1'-0") separation between buildings and the private street. Collectively, the PUD standards would provide greater flexibility in design, and would allow the project to provide a transition between the other uses in the immediate vicinity.

SITE PLAN:

Site Design and Circulation

The proposed project would consist of twenty-six (26) condominium units across five (5) buildings. The buildings would be located along the western, northern, and eastern property lines, with an additional building in the center of the site. A common recreation area improved with a shade structure, seating, outdoor counter, and a flexible lawn space would be located along the rear (east) property line, between two of the residential buildings. A community garden area would be located in the southeastern corner of the site.

Garages for each unit, common recreation areas, and walkways connecting the units would face a proposed internal, two-way, twenty-five foot (25'-0") wide drive aisle. The proposed private street would serve as the only vehicular access point to the project site. The private street would create a loop, allowing entrance and exit through a single driveway on Russell Avenue. Open guest parking spaces are also provided in two parking areas accessed from the private street.

Pedestrian circulation would be provided throughout the development. The internal pathway would connect the common recreation areas, guest parking spaces, communal mailboxes, bicycle parking, the front doors for twelve (12) units, the trash enclosures, Russell Avenue, and Kerry Street. The remaining fourteen (14) units would have their front doors connect to the public sidewalk fronting Russell Avenue or Kerry Street, as applicable.

The development was designed as attached, side-by-side condominium units, which would create a townhome appearance. Each unit would feature a two-story dwelling, an attached two-car garage, and a private front porch and yard space. Each building would observe a minimum twenty-foot (20'-0") front setback from Kerry Street, and a minimum elven-foot (11'-0") street side setback from Russell Avenue. Each building would maintain a minimum fifteen-foot (15'-0") setback to the rear property line. The buildings would also observe a minimum twenty-foot (20'-0") setback to the interior side property line. As allowed by the PUD, buildings within the interior of the site would observe a minimum one-foot (1'-0") separation from the main private street to the garage, and a minimum three-foot (3'-0') separation from the private street to the habitable areas of the units. Collectively, the site design would comply with the applicable development standards of the proposed PUD and R-2 zoning designation.

Unit Design

The proposed project would consist of twenty-six (26), two-story attached condominium units across five (5) buildings. There would be three (3) unit types. Unit Plan 1 would be approximately 1,442 square feet, and would consist of three (3) bedrooms, two (2) full bathrooms, a half-bathroom, kitchen, living room, dining room, a ten (10) square-foot porch, and a 417 square-foot attached two-car garage. Unit Plan 2 would be approximately 1,652 square feet, and would consist of three (3) bedrooms, two (2) full bathrooms, a half-bathroom, a loft, kitchen, living room, dining room, a forty-two (42) square-foot porch, and a 435 square-foot attached two-car garage. Unit Plan 3 would be approximately 1,800 square feet, and would consist of four (4) bedrooms, two (2) full bathrooms, a half-bathroom, kitchen, living room, dining room, a fourteen (14) square-foot porch, and a 434 square-foot attached two-car garage.

On the ground floor, each unit would have a two-car garage, a half-bathroom, a kitchen, a living room, and dining room. On the second floor, each unit would provide the remaining bedrooms and bathrooms. Unit Plan 2 has an optional floor plan where the loft can be replaced by a fourth bedroom. Unit Plan 2 also has optional window placements, depending on if the unit is to the interior or end of the respective building.

Plan #	Units	Area	Bedrooms	Bathrooms	Garage	Porch
1	10	1,442 s.f.	3	2 + ½	417 s.f.	10 s.f.
2	10	1,652 s.f.	3 or 4	2 + ½	435 s.f.	42 s.f.
3	6	1,800 s.f.	4	2 + ½	434 s.f.	14 s.f.

Private Recreation Area

Each unit would provide a private recreation area. The private recreation areas would be located in the front of each unit, accessed via the front door. Other than the front porch, each open space would remain open and unobstructed from the ground to the sky. The project has been conditioned as such. Additionally, each open space area would be enclosed via an approximately three-and-a-half-foot (3’-6”) tall vinyl fence. The proposed PUD standard would allow for fences of this height within the front setback, along Kerry Street.

Consistent with the R-2 standards of the Municipal Code, the private recreation area would meet a minimum six-foot (6’-0”) width. The overall size of each space would vary between approximately 123 square feet for Plan 1, 117 square feet for Plan 2, and 147 square feet for Plan 3. A total of 2,106 square feet of private open space would be provided on-site. Consistent with the R-2 standards of the Municipal Code, open spaces provided in the front setback, along the Kerry Street frontage, do not count toward the overall total open space provided on-site. Therefore, while Units 13 to 20 would provide private open spaces, these would not count toward the overall recreation area provided on-site.

Common Recreation Area

The proposed development would provide approximately 6,596 square feet of common recreation area, spread throughout the site. This would exceed the minimum 3,600 square feet required by the Municipal Code. The largest common open space would be a flexible space and dining area along the eastern property line, between Units 3 and 4. The open space would be approximately 3,015 square feet. This open space area would exceed the minimum size, and would meet the minimum thirty-foot (30'-0") width requirements.

The second open space area would be located in the southeast corner of the property. This community garden space would be approximately 680 square feet.

The third and final common open space would be the passive recreation area throughout the site. This would include any walkway or landscaped area outside of the street frontages that exceeds ten feet (10'-0") in width. The Municipal Code allows for a maximum of 50% of the passive recreation areas to count toward the provided common space on-site. Therefore, out of a total of 5,801 square feet provided, only 2,901 square feet would count toward the total provided.

Amenities

Based on the lot size, and on the number of units proposed, the common open space / recreation areas would be subject to the amenity requirement list of Garden Grove Municipal Code (GGMC) Section 9.12.040.050.J. The GGMC also allows for amenities further down the list (i.e., higher quality/value amenities) to substitute for amenities listed higher up the list (i.e., lesser quality/value amenities).

The proposed project would comply with the amenity requirements of the GGMC. Based on the number of units proposed, the GGMC would require the project to include the following amenities: barbecues, a community garden, an active use area, a community clubhouse with a kitchen, a business center, and an indoor or outdoor gym. The project would provide an excess of the flexible active use areas, and communal kitchen amenities, allowing for a substitution of the barbecue, business center, and gym areas.

The clubhouse space would be provided as a covered seating and food service area in the common open space area along the eastern property line. The space would feature a wood trellis, outdoor dining tables, and an outdoor food-service counter. The counter would allow for residents to serve food and dine within the space.

The flexible outdoor active use area would be directly adjacent to the outdoor clubhouse space, with a lawn area, and perimeter landscaping. Seating, and a dog waste station would also be provided on the perimeter of the flexible active use area. The lawn area would be open and accessible for all of the residents for a variety of activities. The active use area would connect to the community garden to the south, and a passive walkway area to the west and north.

An approximately 680 square-foot community garden space would be provided at ground-level, in the southeast corner of the property. Five (5) raised planters would be provided within the garden area. A total of approximately 200 square feet of planter area would be provided.

Passive recreation areas would be provided in areas where walkways or landscaping outside of the street frontages exceed ten feet (10'-0") in width. These areas would also feature various amenities, including, but not limited to walking paths, bench seating, and landscape planters. The passive areas would also connect the other common open space areas, as well as the communal mailboxes, and bicycle parking. Collectively, the proposed project would meet or exceed all of the Municipal Code amenity requirements.

Parking

The Planned Unit Development Standards of Development propose a minimum parking ratio of 3.25 parking spaces per unit, which complies with GGMC Section 9.12.040.180. In total, a minimum of eighty-five (85) parking spaces would be required.

The project has been designed to provide two-car garages for each unit, and thirty-three (33) additional open guest parking spaces in two (2) parking lot areas within the interior of the site. Therefore, eighty-five (85) parking spaces would be provided, which would meet the minimum parking requirement under the GGMC. Both garage and guest parking spaces would be accessed via a driveway from Russell Avenue, connecting to the private street system within the property.

Perimeter Walls and Landscaping

The project would construct perimeter block walls along the eastern and southern property lines. The project would provide a six-foot (6'-0") tall decorative slump stone wall in those areas. In addition, a three-and-a-half-foot (3'-6") tall vinyl fencing would be provided between each unit, around their respective yard space.

The proposed Planned Unit Development Standards of Development for landscaping comply with GGMC Section 9.12.040.090, which requires all setback areas, and all areas not designated for walkways, parking, drive aisles, and private recreation areas, to be fully landscaped and irrigated. In addition to the landscaping in the street frontage area along Kerry Street and Russell Avenue, the project proposes landscaping in the common areas, under the control of the future Homeowners Association (HOA), using a variety of trees and plant materials. The applicant is required to provide a landscape and irrigation plan that complies with the requirements of the City's Water Efficiency Guidelines within the Municipal Code. The project has been conditioned as such.

Building Architecture

The project would feature a predominantly Spanish Revival architecture style across all of the buildings. The buildings would exhibit stucco exteriors, "S" tile roofing, arched entryways, recessed arched soffits, wrought iron pot shelves, wrought iron awnings,

decorative Spanish tile trims, decorative shutters, and Spanish-style exterior wall lighting. Three (3) buildings would feature paseos. The paseos are implemented to break the massing of the buildings into less-imposing segments, more compatible with the nearby single-family residences. The paseos would feature walkways, landscaping, and a wood trellis feature that would span across the walkway.

All buildings would be two (2) stories in height. At the highest point of the roof, the tallest building would be approximately thirty feet (29'-9") tall. This would be within the thirty-five foot (35'-0") maximum height allowed in the PUD and the R-2 zone.

Additionally, there is only one (1) unit, Unit 13, which would be directly adjacent to a neighboring single-family property. The unit was designed such that there is only one (1) window that would face toward the neighboring property's side yard, approximately twenty-two feet (21'-9") away. With the larger setback separation distance, and the proposed block wall, the unit is not anticipated to have any views into the neighboring property. As an extra precaution, screening trees would be provided in the landscape area between the window and the property line. The project has been conditioned to maintain these trees for the life of the project.

VESTING TENTATIVE TRACT MAP:

In accordance with the State Subdivision Map Act, the applicant is requesting approval of Vesting Tentative Tract Map No. TT-19447 to create a one-lot subdivision for the purpose of selling each unit as a condominium. As proposed in the Vesting Tentative Tract, the project would consist of twenty-six (26) dwelling units, and one (1) lot would consist of the common recreation and central access aisle areas. The proposed Vesting Tentative Tract Map is in conformance with the proposed PUD requirements for the site, as well as the State Subdivision Map Act.

California Environmental Quality Act (CEQA):

The proposed project was reviewed and an Initial Study and Mitigated Negative Declaration (IS/MND) was prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. and the CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq.). Based on the Initial Study and supporting technical analyses, it was determined that all potentially adverse environmental impacts can be mitigated to a level of less than significant. On this basis, a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (MMRP) have been prepared. The complete environmental document is available for review at the City's webpage at:

ggcity.org/planning/environmental-documents

The 20-day public comment period on the Mitigated Negative Declaration, compliant with the CEQA Guidelines, occurred from April 30, 2026 to May 20, 2026.

RECOMMENDATION:

Staff recommends that the Planning Commission take the following action:

1. Adopt the attached Resolution No. 6138-26 recommending that the Garden Grove City Council adopt a Mitigated Negative Declaration and an associated Mitigation Monitoring and Reporting Program for the project;

2. Adopt the attached Resolution No. 6139-26 recommending that the Garden Grove City Council: (i) approve General Plan Amendment No. GPA-001-2026, (ii) approve Zoning Amendment No. A-046-2026 to amend the City's Official Zoning Map to change the zoning of the subject property from R-1 (Single-Family Residential) to Residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, and (iii) approve residential Planned Unit Development No. PUD-020-2026 to facilitate the development of the proposed residential project; and

3. Adopt the attached Resolution No. 6140-26 recommending that the Garden Grove City Council approve Site Plan No. SP-168-2026 and Tentative Tract Map No. TT-19447, subject to the recommended Conditions of Approval.

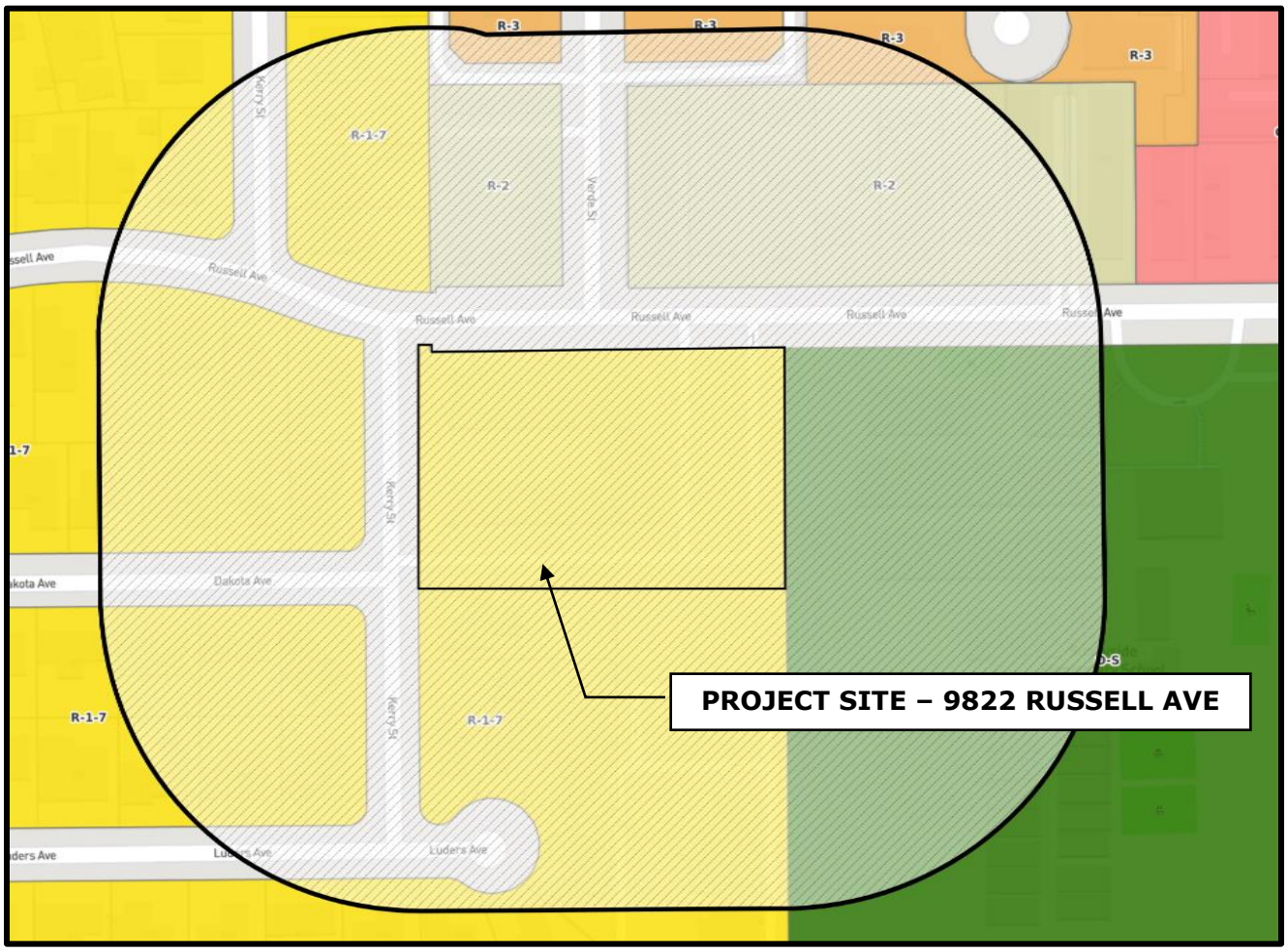
Maria Parra
Planning Services Manager

By: Priit Kaskla, AICP
Senior Planner

Attachment 1: Vicinity Map
Attachment 2: Plans & Vesting Tentative Tract Map
Attachment 3: Initial Study / Mitigated Negative Declaration
Attachment 4: Resolution No. 6138-26 with Exhibit "A" – Mitigation Monitoring and Reporting Program
Attachment 5: Resolution No. 6139-26 with Exhibit "A" – Standards of Development for Planned Unit Development No. PUD-020-2026, Exhibit "B" – Amended General Plan Land Use Map, & Exhibit "C" – Amended Zoning Map
Attachment 6: Resolution No. 6140-26 with Exhibit "A" – Mitigation Monitoring and Reporting Program with Exhibit "A" – Conditions of Approval, & Exhibit "B" – Mitigation Monitoring and Reporting Program

ATTACHMENT 1

GENERAL PLAN AMENDMENT NO. GPA-001-2026, AMENDMENT NO. A-046-2026, PLANNED UNIT DEVELOPMENT NO. PUD-020-2026, SITE PLAN NO. SP-168-2026, & TENTATIVE TRACT MAP NO. TT-19447



LEGEND

Subject Site – 9822 Russell Avenue

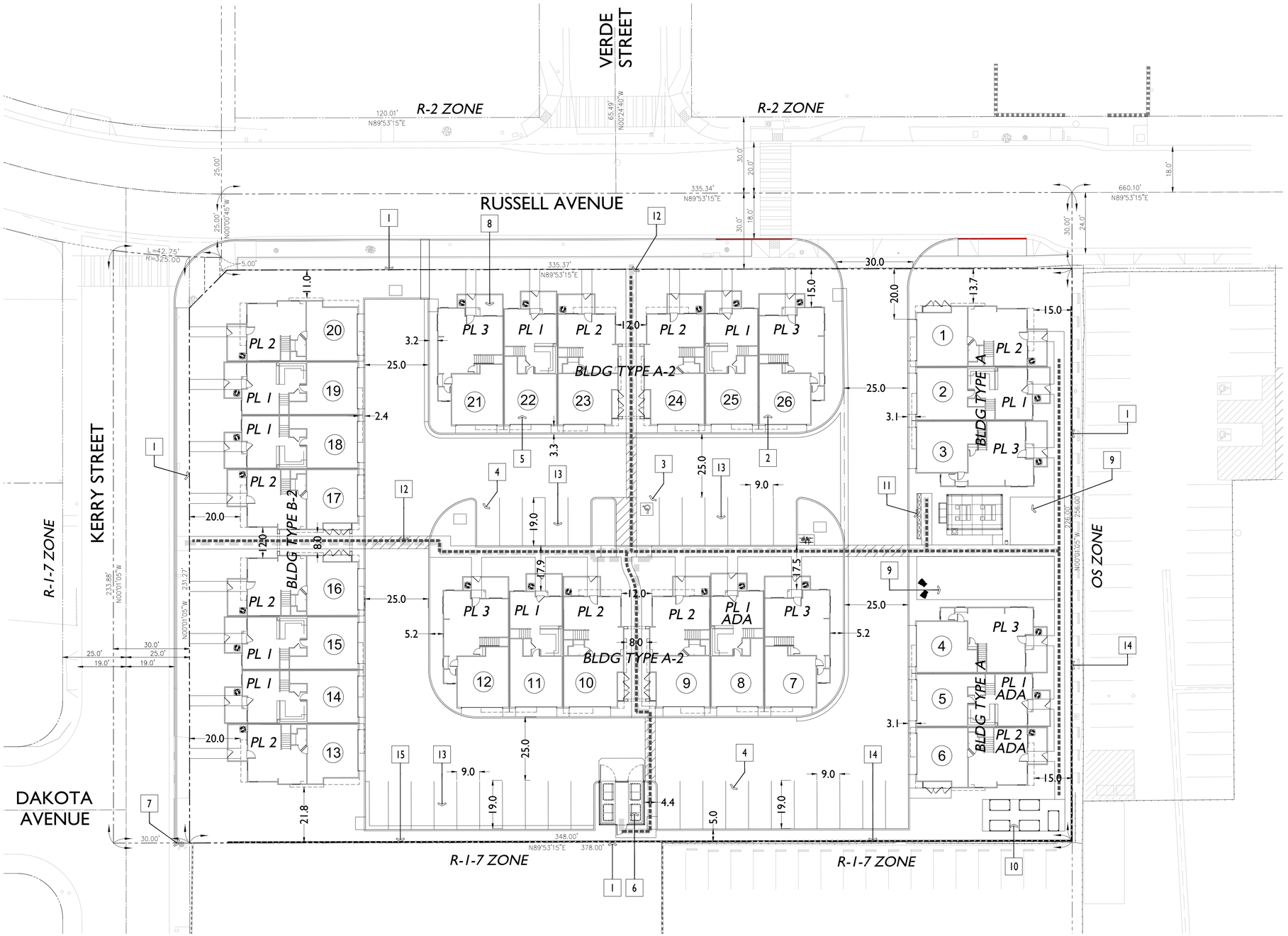
300-Foot Radius

NOTES

1. SITE ADDRESS: 9822 RUSSELL AVENUE
2. CURRENT ZONING: SINGLE-FAMILY RESIDENTIAL (R-1)
3. PROPOSED ZONING: PLANNED UNIT DEVELOPMENT NO. PUD-020-2026 WITH LIMITED MULTIPLE RESIDENTIAL (R-2) BASE ZONE

CITY OF GARDEN GROVE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING SERVICES DIVISION
MAY 2026

ATTACHMENT 2



PROJECT SUMMARY

A.P.N.	098-081-19
EXISTING G.P.	LOW DENSITY RESIDENTIAL (LDR)
EXISTING ZONE	SINGLE FAMILY RESIDENTIAL (R-1-7)
PROPOSED G.P.	LOW MEDIUM DENSITY RESIDENTIAL (LMDR)
PROPOSED ZONE	PLANNED UNIT DEVELOPMENT (PUD)

TOTAL UNITS	26 UNITS
SITE AREA	78,537 S.F. / 1.8 AC
DENSITY	14.4 DU/AC
LOT COVERAGE	43.2% (50% ALLOWED)
BUILDING HEIGHT	30'

DWELLING UNIT SUMMARY				PRIV. YD.
PL 1	10	1,442 SF	3 BD	111 S.F.
PL 2	10	1,652 SF	3BD/LOFT-OPT 4BD	104 S.F.
PL 3	6	1,800 SF	4 BD	136 S.F.

PARKING SUMMARY	
GARAGE STALLS (20' X 20', 2 CAR)	52 STALLS
GUEST STALLS (9' X 19')	33 STALLS
TOTAL PARKING PROVIDED	85 STALLS

3 & 4 BEDROOMS - 3.25 STALLS/UNIT REQUIRED
TOTAL PARKING REQUIRED 84.5 STALLS

ELECTRIC VEHICLE CHARGING SUMMARY
REQUIRED = 1 / DWELLING UNIT = 26 EV GARAGE STALLS
TOWN-HOUSES W/ ATTACHED PRIVATE GARAGES SHALL COMPLY WITH 2025 CGBSC 4.106.4.1.

LOT COVERAGE

BLDG TYPE A FOOTPRINT =	3,239 S.F. X 2 =	6,478 S.F.
BLDG TYPE A-2 FOOTPRINT =	6,478 S.F. X 2 =	12,956 S.F.
BLDG TYPE B-2 FOOTPRINT =	8,364 S.F. X 1 =	8.364 S.F.
BUILDING COVERAGE	=	27,798 S.F.
TRASH ENCLOSURE	=	312 S.F.
OPEN PARKING STALLS	=	5,795 S.F.

LOT COVERAGE = 33,905 S.F. / 78,537 S.F. = 0.432 OR 43.2%

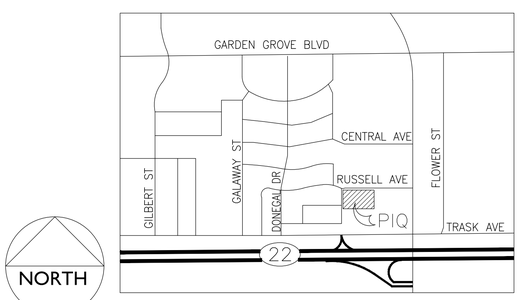
OPEN SPACE SUMMARY (SEE SHEET OS)	
COMMON AREA - ACTIVE	3,695 S.F. (142/U)
PRIVATE YARDS (EXCL. UNITS 13-20)	2,106 S.F. (6' MIN. DIM.)
PASSIVE OPEN AREA (5,802 S.F. X 50%)	2,901 S.F. (10' MIN. DIM.)
TOTAL OPEN SPACE PROVIDED	8,702 S.F. (335 S.F./UNIT)

ACCESSIBLE UNIT SUMMARY (MULTISTORY, PRIVATELY FUNDED)
REQUIRED = 10% OF MULTISTORY DWELLINGS PER CBC 1102A.3.1
26 DU X 10% = 3 REQUIRED ACCESSIBLE UNIT
PROVIDED = 3 ACCESSIBLE UNITS (UNIT NO'S. 5, 6 AND 8)

BUILDING CODE SUMMARY	
CALIFORNIA RESIDENTIAL CODE (2025 CRC)	
OCCUPANCY TYPE	R3/U
NUMBER OF STORIES	2
CONSTRUCTION TYPE	V-B
FIRE SPRINKLERS	NFPA 13D (CRC R313.1)

KEYNOTES

1. PROPERTY LINE
2. 2-STORY ROW TOWNHOME, TYP.
3. ACCESSIBLE PARKING STALL - 9' X 19' (TYP.) VAN W/ 8' WIDE STRIPING (PASSENGER SIDE)
4. STANDARD OPEN GUEST STALL - 9' X 19' (TYP.)
5. 2-CAR GARAGE (20' X 20' MIN.)
6. COVERED COMMUNITY TRASH ENCLOSURE
7. PUBLIC FIRE HYDRANT
8. PRIVATE PATIO, TYP.
9. COMMON OPEN SPACE AREA
10. COMMUNITY GARDEN AREA
11. COMMUNITY MAILBOX LOCATION
12. ADA PATH OF TRAVEL
13. WATER QUALITY AREA (INFILTRATION CHAMBERS) - SEE CIVIL PLANS
14. NEW CONCRETE BLOCK WALL - REFER TO LANDSCAPE PLANS
15. EXISTING CONCRETE BLOCK WALL TO BE REMOVED AND REPLACED



VICINITY MAP
NOT TO SCALE

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

SITE PLAN

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 20 40 60

JAN 12, 2026

SUMMA ARCHITECTURE
5256 S. Mission Road, Ste. 404
Bonsall, CA 92003
www.summarch.com p.760.724.1198

SP



OPEN SPACE SUMMARY

COMMON AREA - ACTIVE	3,695 S.F. (142/U)
PRIVATE YARDS (EXCL. UNITS 13-20)	2,106 S.F. (6' MIN. DIM.)
PASSIVE OPEN AREA (5,802 S.F. X 50%)	2,901 S.F. (10' MIN. DIM.)
TOTAL OPEN SPACE PROVIDED	8,702 S.F. (335 S.F./UNIT)

NORTH

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

OPEN SPACE PLAN

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 20 40 60

JAN 12, 2026

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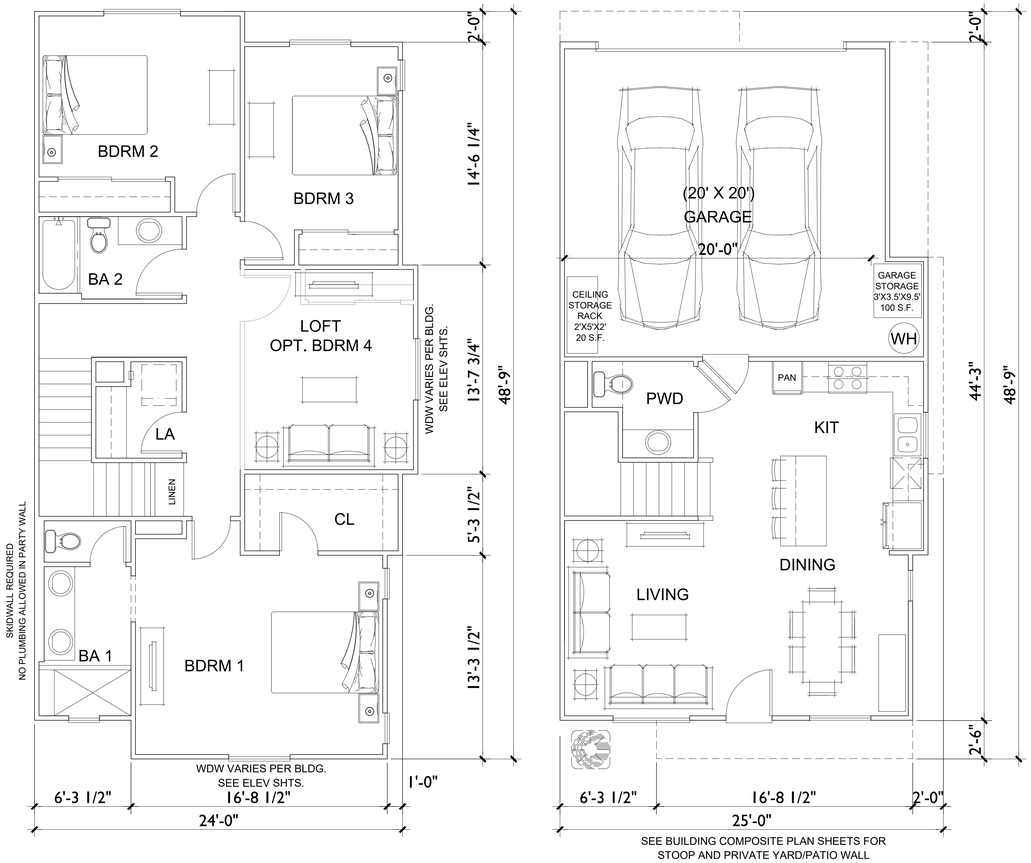
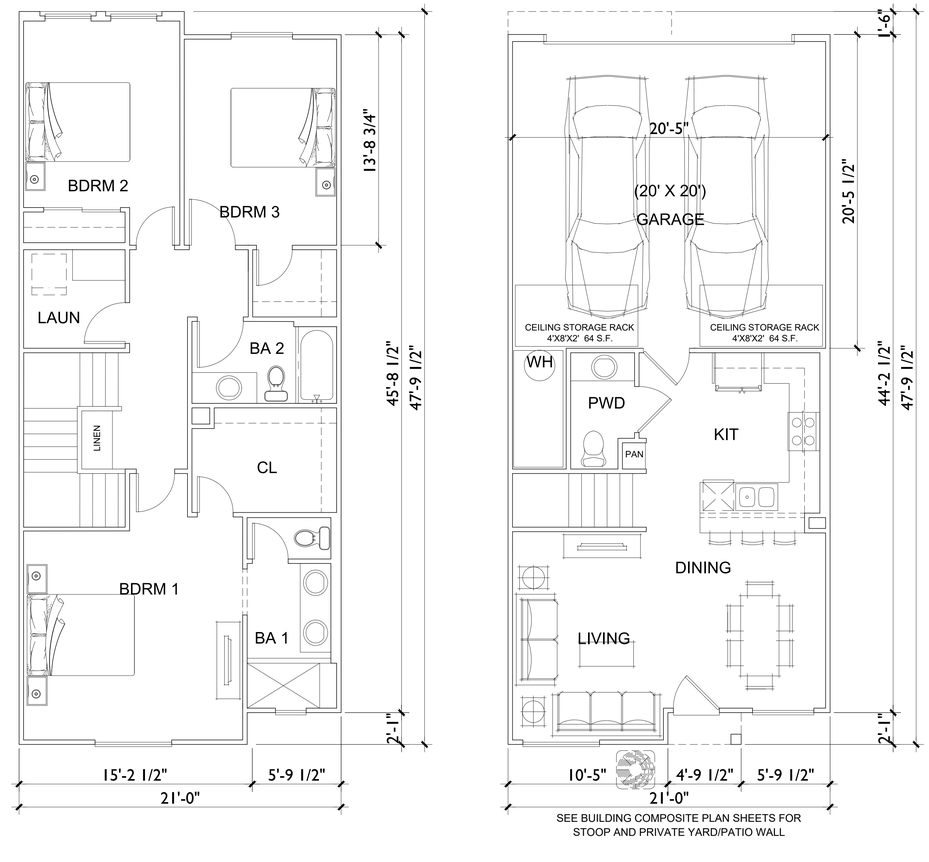
OS



Second Floor Plan

PLAN 2
Total Livable 1,652 s.f.

First Floor Plan



Second Floor Plan

PLAN 1
Total Livable 1,442 s.f.

First Floor Plan

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

UNIT PLANS 1 AND 2

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 4 8 12

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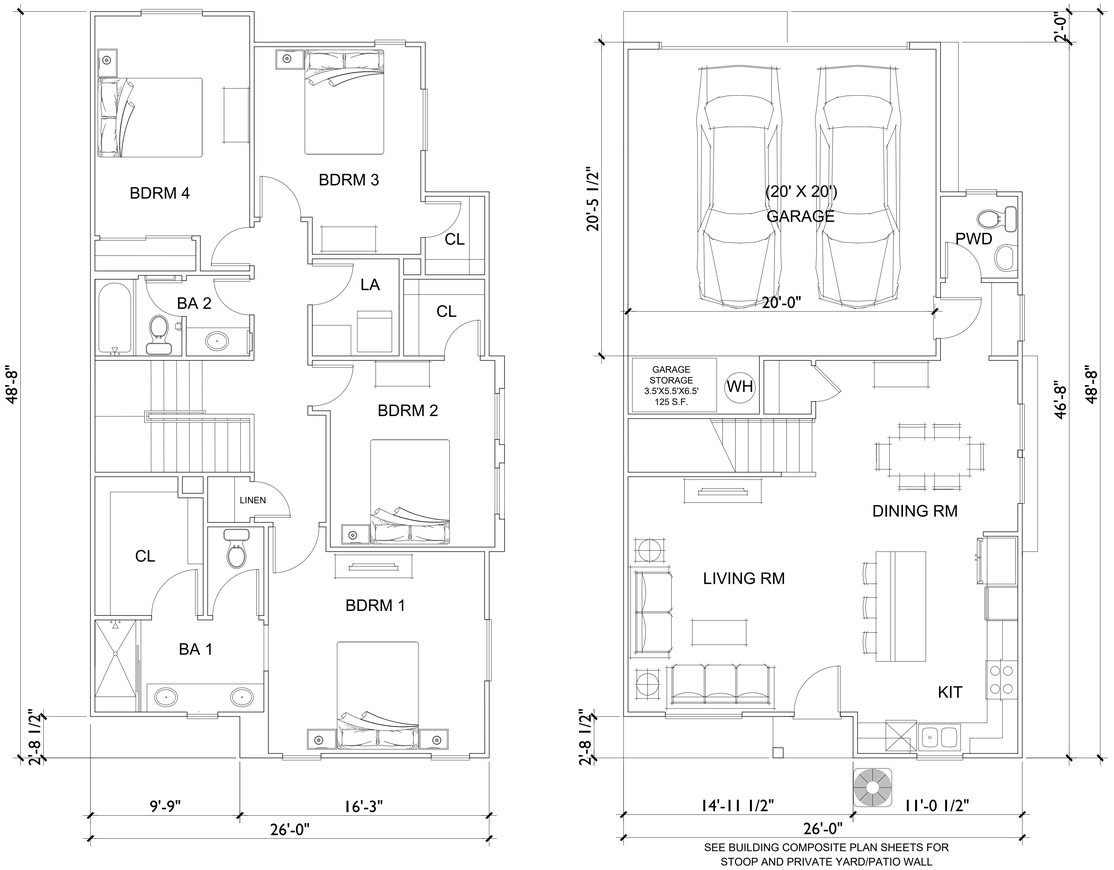
A-1



Second Floor Plan

PLAN 3
Total Livable 1,800 s.f.

First Floor Plan

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

UNIT PLAN 3

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 4 8 12

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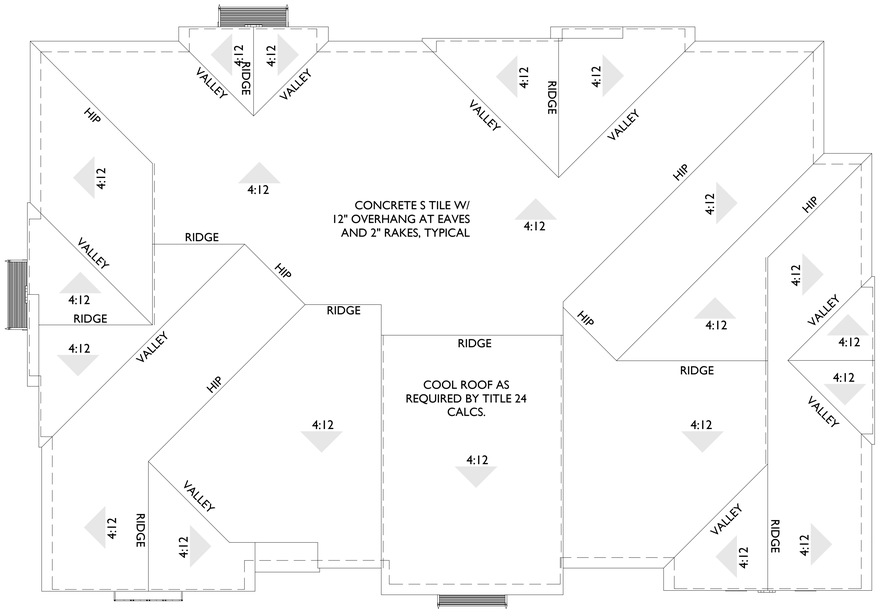
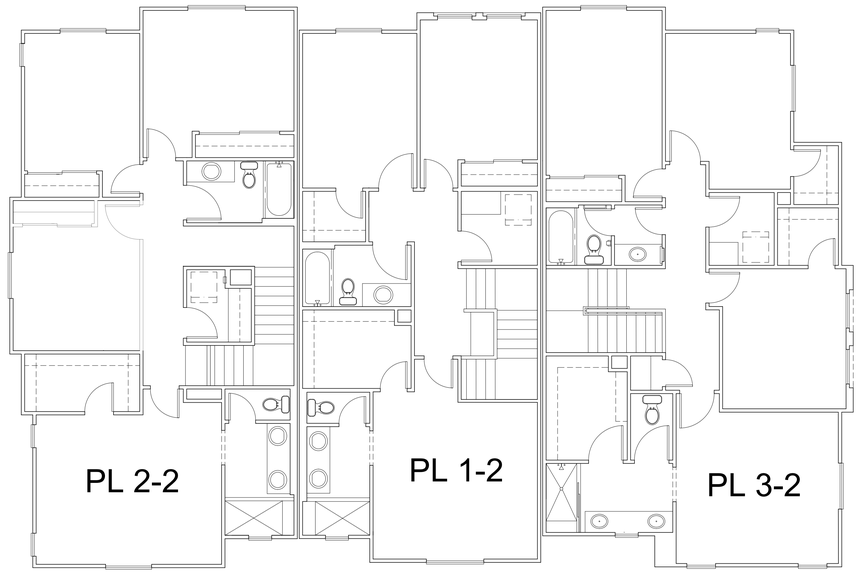
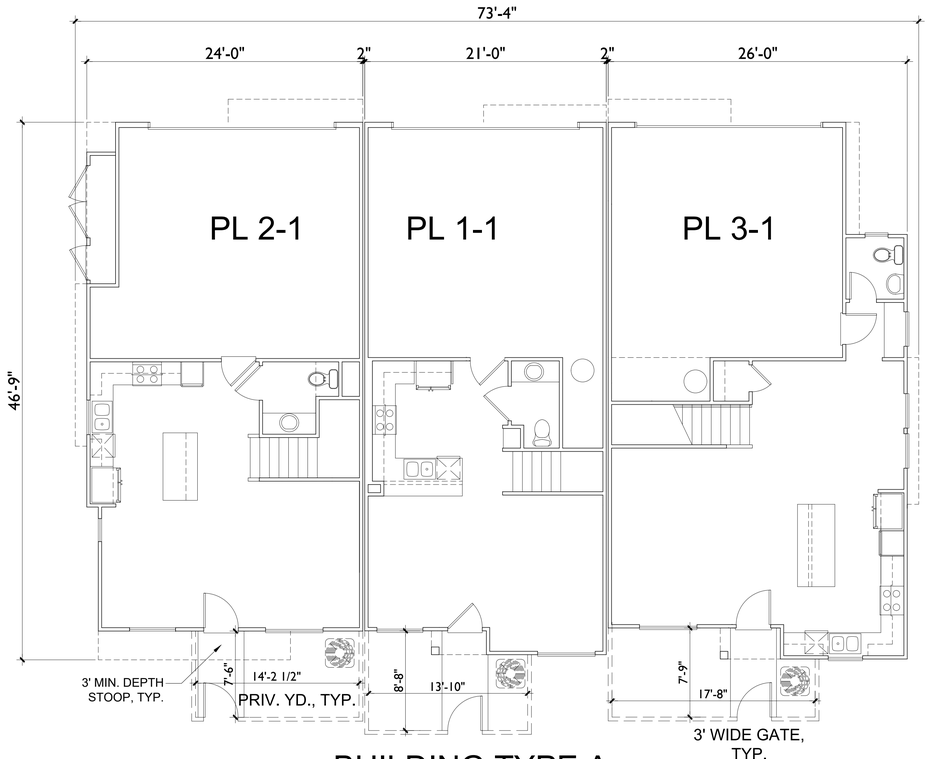
A-2



ROOF PLAN - BLDG TYPE A



SECOND FLOOR PLAN



BUILDING TYPE A
FIRST FLOOR PLAN

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

BUILDING TYPE A COMPOSITE PLANS

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9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 6 12 18

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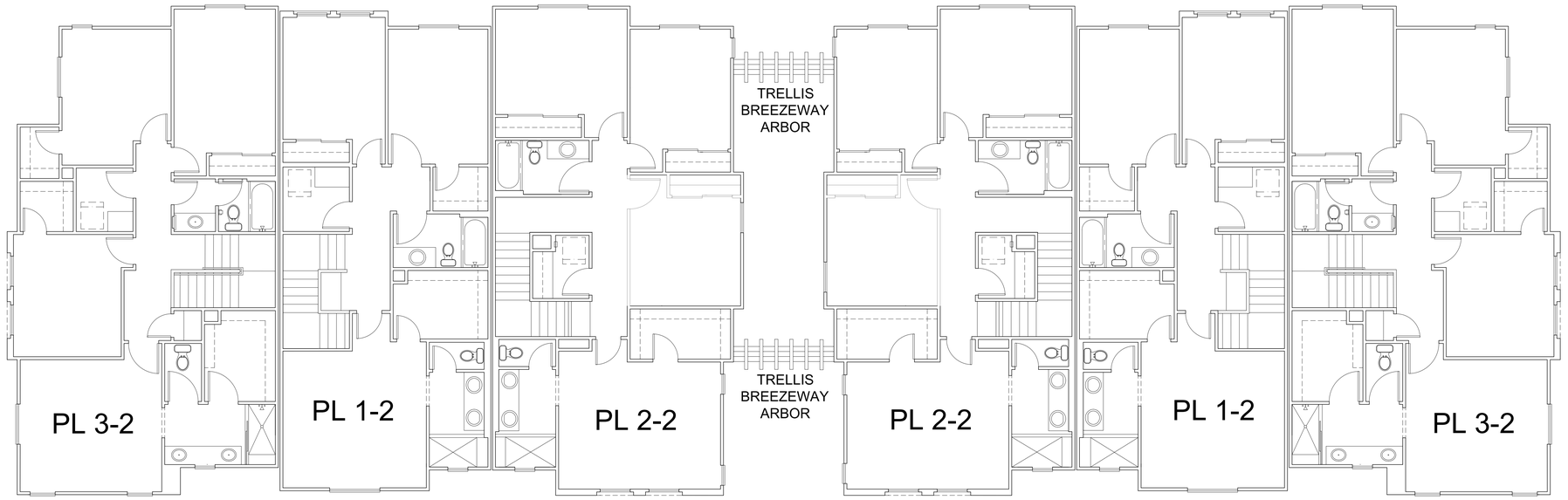
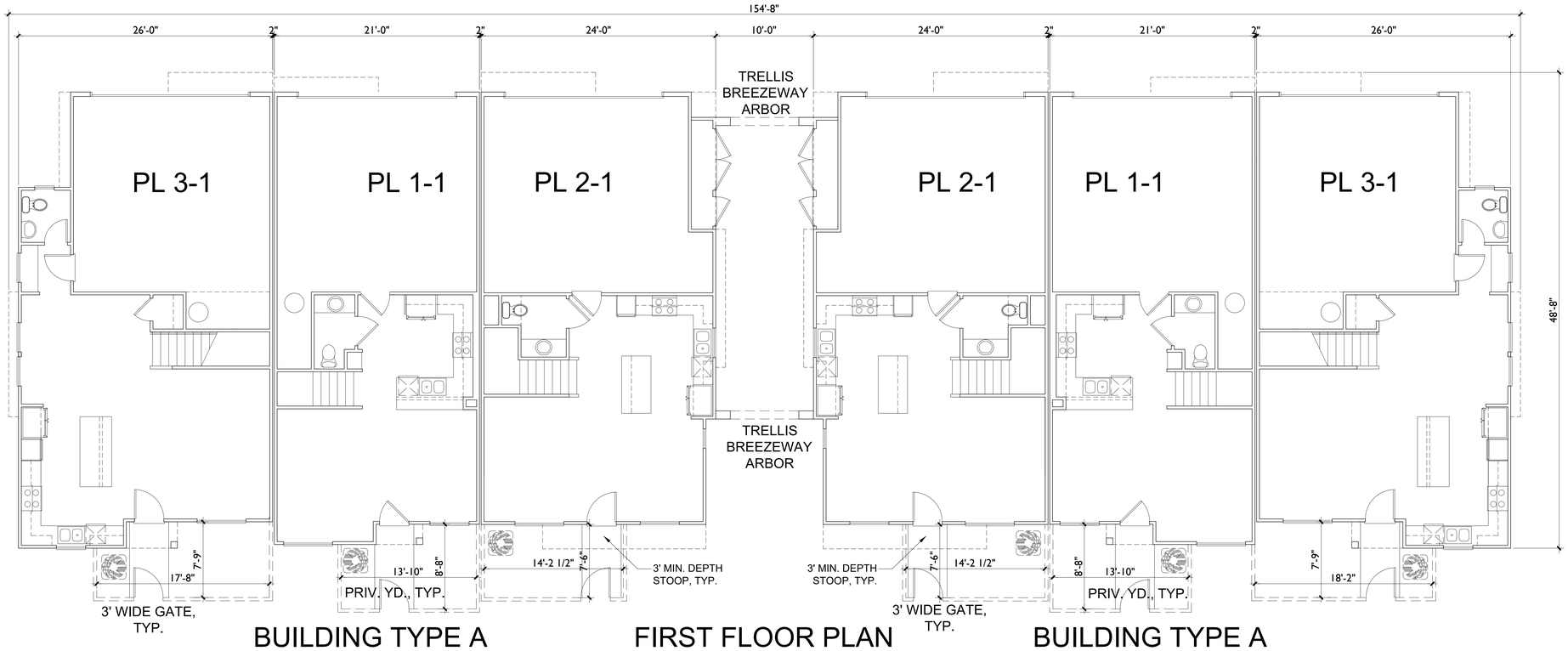


SECOND FLOOR PLAN



BUILDING TYPE A FIRST FLOOR PLAN BUILDING TYPE A

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

BUILDING TYPE A2 COMPOSITE PLANS

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

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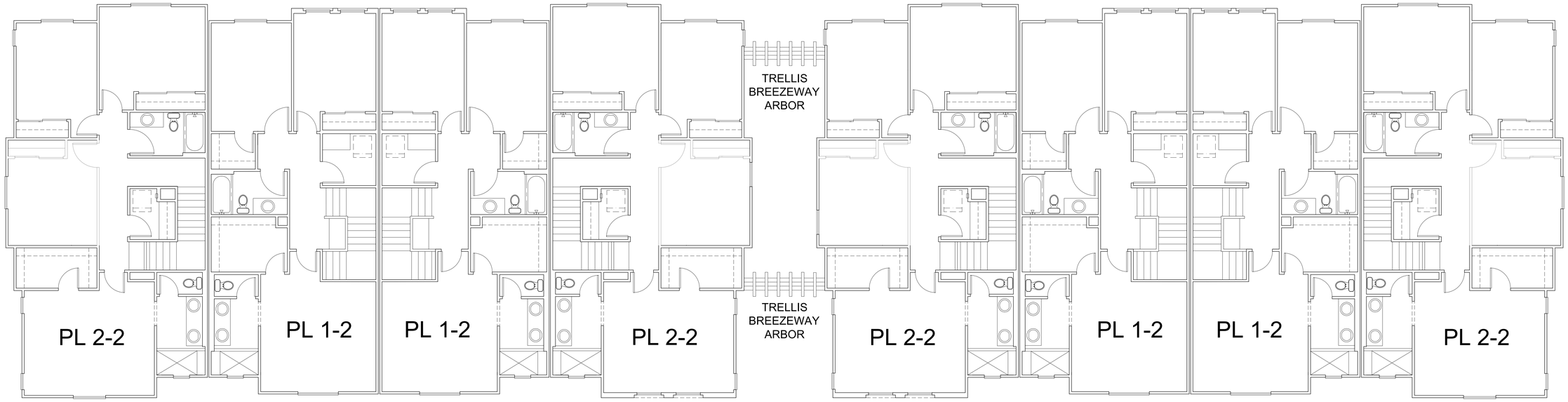
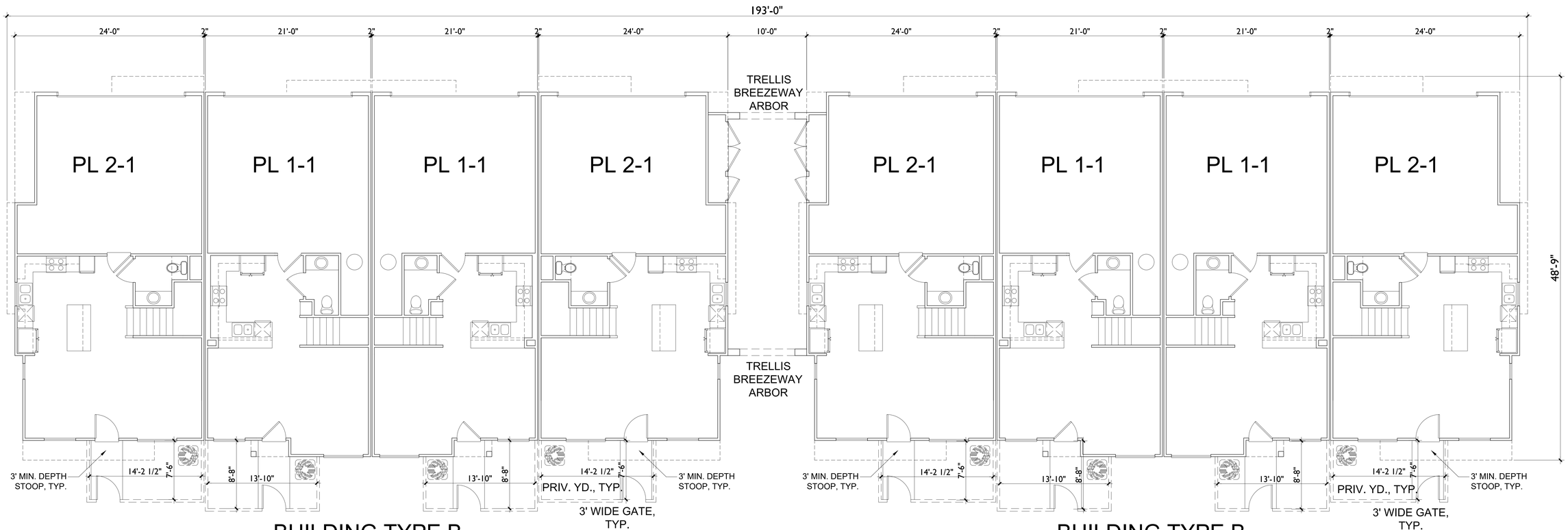


SECOND FLOOR PLAN



BUILDING TYPE B

FIRST FLOOR PLAN

BUILDING TYPE B

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

BUILDING TYPE B2 COMPOSITE PLANS

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9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

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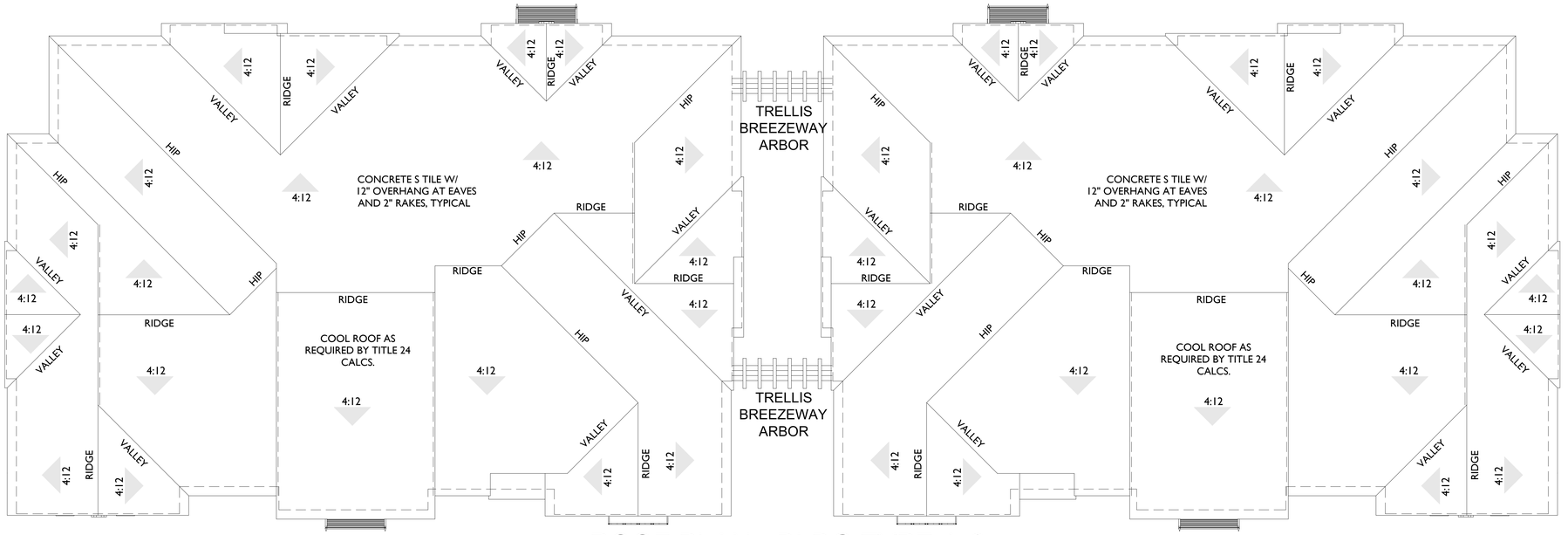
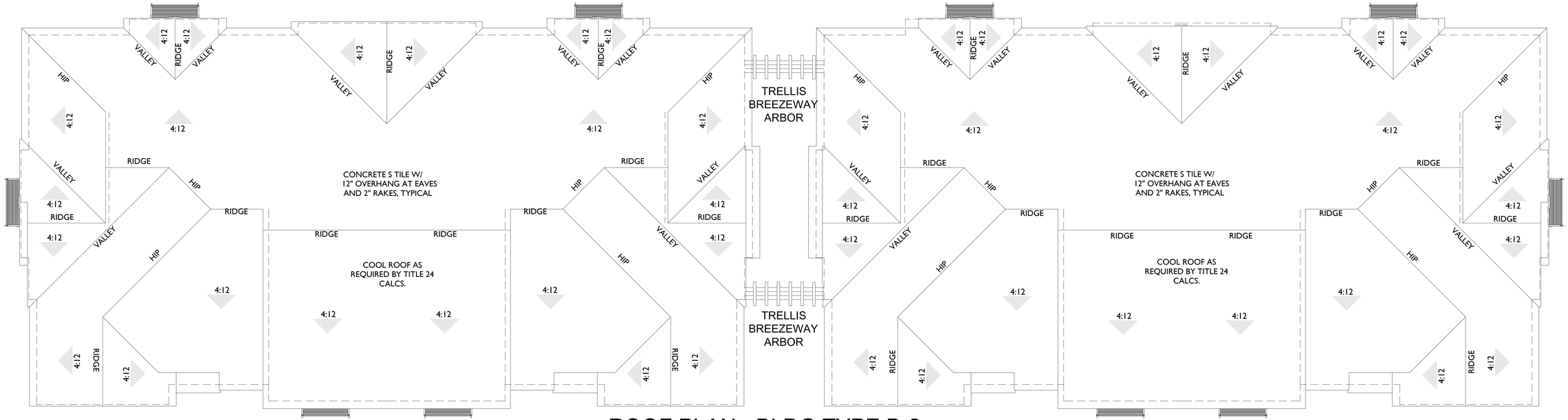


ROOF PLAN - BLDG TYPE A-2



ROOF PLAN - BLDG TYPE B-2

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

ROOF PLANS - BLDG TYPES A-2 & B-2

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9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

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JAN 12, 2025

SUMMA ARCHITECTURE
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BUILDING TYPE A - LEFT EXTERIOR ELEVATION



BUILDING TYPE A - FRONT EXTERIOR ELEVATION



BUILDING TYPE A - RIGHT EXTERIOR ELEVATION



BUILDING TYPE A - REAR EXTERIOR ELEVATION

MATERIAL SCHEDULE

1. ROOF - CONCRETE S TILE ROOFING
2. FASCIA - STUCCO OVER SHAPED FOAM CORNICE
3. WALL - EXTERIOR SAND FINISH STUCCO
4. VINYL WINDOW W/ STUCCO O/ E.P.S. TRIM
5. RECESSED VINYL WINDOW W/ ARCHED SOFFIT
6. DECORATIVE GABLE/WALL ACCENT
7. DECORATIVE SHAPED FOAM CORBEL/SILL
8. DECORATIVE METAL AWNING
9. UTILITY CLOSET
10. DECORATIVE COMPOSITE SHUTTER
11. METAL POTSHELF
12. DECORATIVE EXTERIOR LIGHT FIXTURE
13. DECORATIVE METAL GRILLE
14. STUCCO PATIO LOW WALL W/ METAL GATE
15. STUCCO CONTROL JOINT
16. DECORATIVE TILE
17. TRELLIS BREEZEWAY ARBOR



BUILDING TYPE A2 - LEFT EXTERIOR ELEVATION



BUILDING TYPE A2 - FRONT EXTERIOR ELEVATION



BUILDING TYPE A2 - RIGHT EXTERIOR ELEVATION



BUILDING TYPE A2 - REAR EXTERIOR ELEVATION

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

BUILDING TYPE A2

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

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JAN 12, 2025

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BUILDING TYPE B2 - LEFT EXTERIOR ELEVATION



BUILDING TYPE B2 - FRONT EXTERIOR ELEVATION



BUILDING TYPE B2 - RIGHT EXTERIOR ELEVATION



BUILDING TYPE B2 - REAR EXTERIOR ELEVATION

MATERIAL SCHEDULE

1. ROOF - CONCRETE S TILE ROOFING
2. FASCIA - STUCCO OVER SHAPED FOAM CORNICE
3. WALL - EXTERIOR SAND FINISH STUCCO
4. VINYL WINDOW W/ STUCCO O/ E.P.S. TRIM
5. RECESSED VINYL WINDOW W/ ARCHED SOFFIT
6. DECORATIVE GABLE/WALL ACCENT
7. DECORATIVE SHAPED FOAM CORBEL/SILL
8. DECORATIVE METAL AWNING
9. UTILITY CLOSET
10. DECORATIVE COMPOSITE SHUTTER
11. METAL POTSHELF
12. DECORATIVE EXTERIOR LIGHT FIXTURE
13. DECORATIVE METAL GRILLE
14. STUCCO PATIO LOW WALL W/ METAL GATE
15. STUCCO CONTROL JOINT
16. DECORATIVE TILE
17. TRELLIS BREEZEWAY ARBOR

GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

BUILDING TYPE B2 EXTERIOR ELEVATIONS

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 8 16 24

JAN 12, 2025

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A-8









GARDEN GROVE

9822 RUSSELL - 2 STORY TOWNHOMES

STREETSCENE PERSPECTIVES

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 8 16 24

JAN 12, 2025

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9822 RUSSELL TOWNHOMES

GARDEN GROVE, CA.

MELIA HOMES
9860 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949) 759-4367

SUMMA ARCHITECTURE
5256 S. MISSION RD. STE 404
BONSALL, CA. 92003
760.724.1198

OCTOBER 29, 2025

MANUFACTURERS:
SHERWIN WILLIAMS
EAGLE ROOFING
TALAVERA TILE
ELDORADO STONE

STUCCO:

1

IVORY LACE SW 7013

ROOF:(CAPISTRANO)



7

3522 TERRACOTTA FLASHED

TRIM/FASCIA:

2

HALF-CAFF SW 9091

ACCENT:(SHUTTER/DOOR)

3

ROOKWOOD RED SW 2802

ACCENT:(GARAGE/DOOR)

4

TERRA BRUN SW 6048

ACCENT:(METAL/DOOR)

5

DOMINO SW 6989

ACCENT TILE:



6

6" TALAVERA SPANISH TILE



BUILDING 'A' FRONT

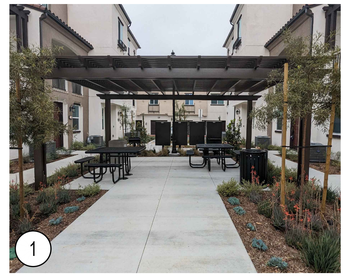


BUILDING 'A' REAR



LEGEND

1. Central community open space area with metal or wood shade structure, BBQ counter space, and table seating for small social events and group gatherings.
2. Six community cluster mailboxes, per USPS review and approval.
3. Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.
4. Proposed tree, per Planting Plan.
5. Transformer to be screened with landscape, quantity and final locations to be determined.
6. 4' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
7. Accessible parking stall and striping, per Civil plans.
8. 5 Raised community raised planter boxes within 400 Sq. Ft. DG.
9. Guest parking stall.
10. Natural colored concrete driveway, with light broom finish and tooled joints.
11. Short term bike parking (1 bike rack to accommodate 2 bike stalls).
12. Private patio / yard area, homeowner maintained.
13. Common area landscape, builder installed and HOA maintained.
14. Community dog bag station (black in color), for pet owners.
15. Property line.
16. Public street R.O.W.
17. Proposed public street sidewalk, per Civil plans.
18. Trash enclosure.
19. Bench seating.
20. 3'-0" High Monument Sign.













Schematic Landscape Plan

0 10' 20' 40'
Scale: 1" = 20'

Melia Homes

2nd City Submittal | Project No.: MH27-D
Date: January 19, 2026

L-1

MELIA HOMES

Garden Grove - Russell Ave

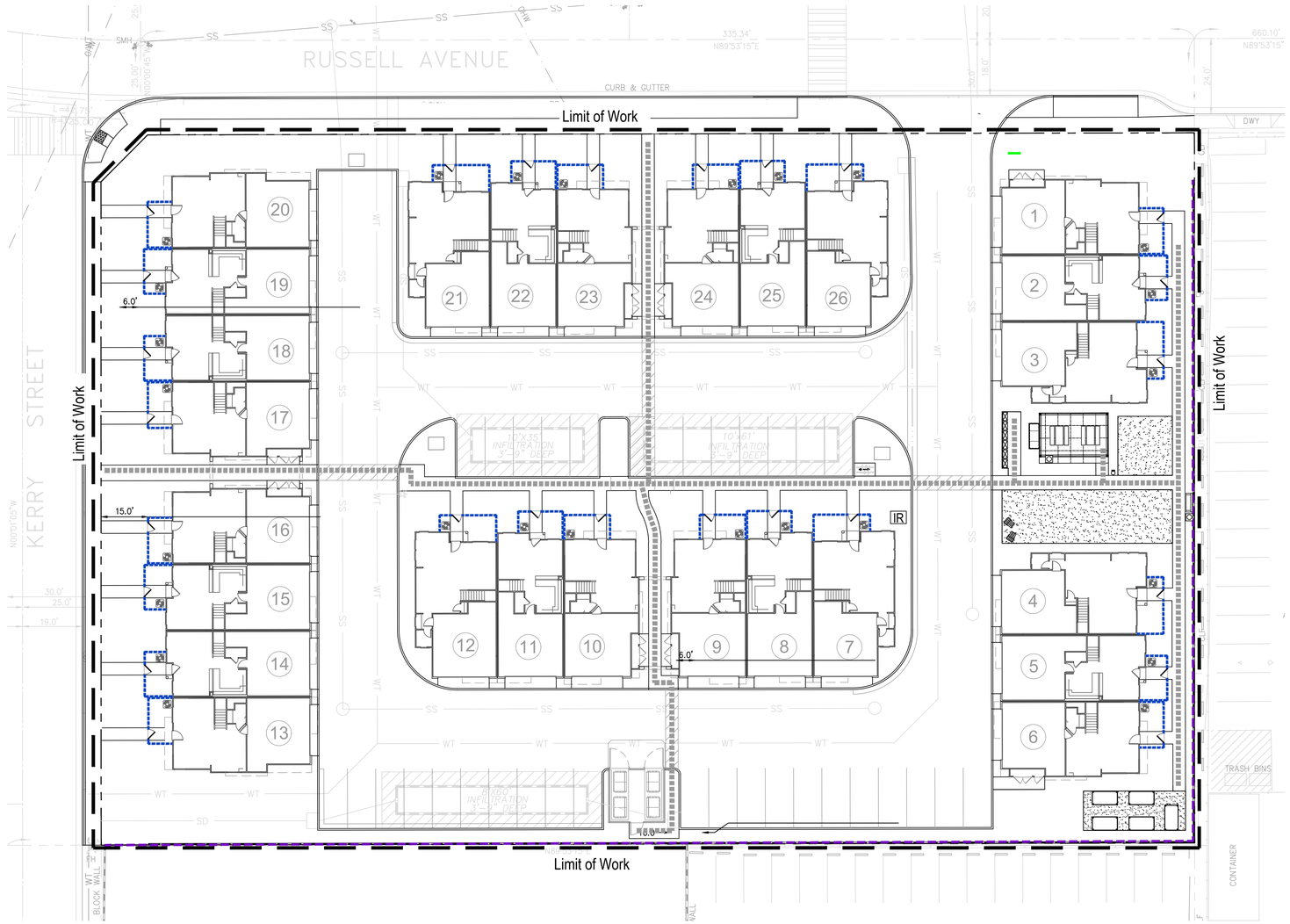
studio PAD
Landscape Architecture
23195 La Cadena Drive (Site 103)
Laguna Hills, CA 92653 (www.studio-PAD.com)

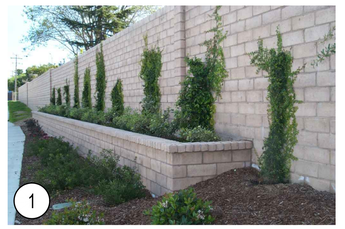
WALL LEGEND

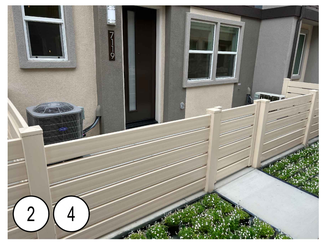
1. 6'-0" High Slump masonry wall, with cap (Tan color).
2. 3'-6" High Vinyl patio fence (Tan color).
3. 3'-0" High Monument sign, Stucco with precast cap.
4. 3'-6" High Vinyl patio gates (Tan color).

ADA Path of Travel

Concrete paving at hatched limits*









Schematic Wall and Fence Plan

0 10' 20' 40'
Scale: 1" = 20'

Melia Homes

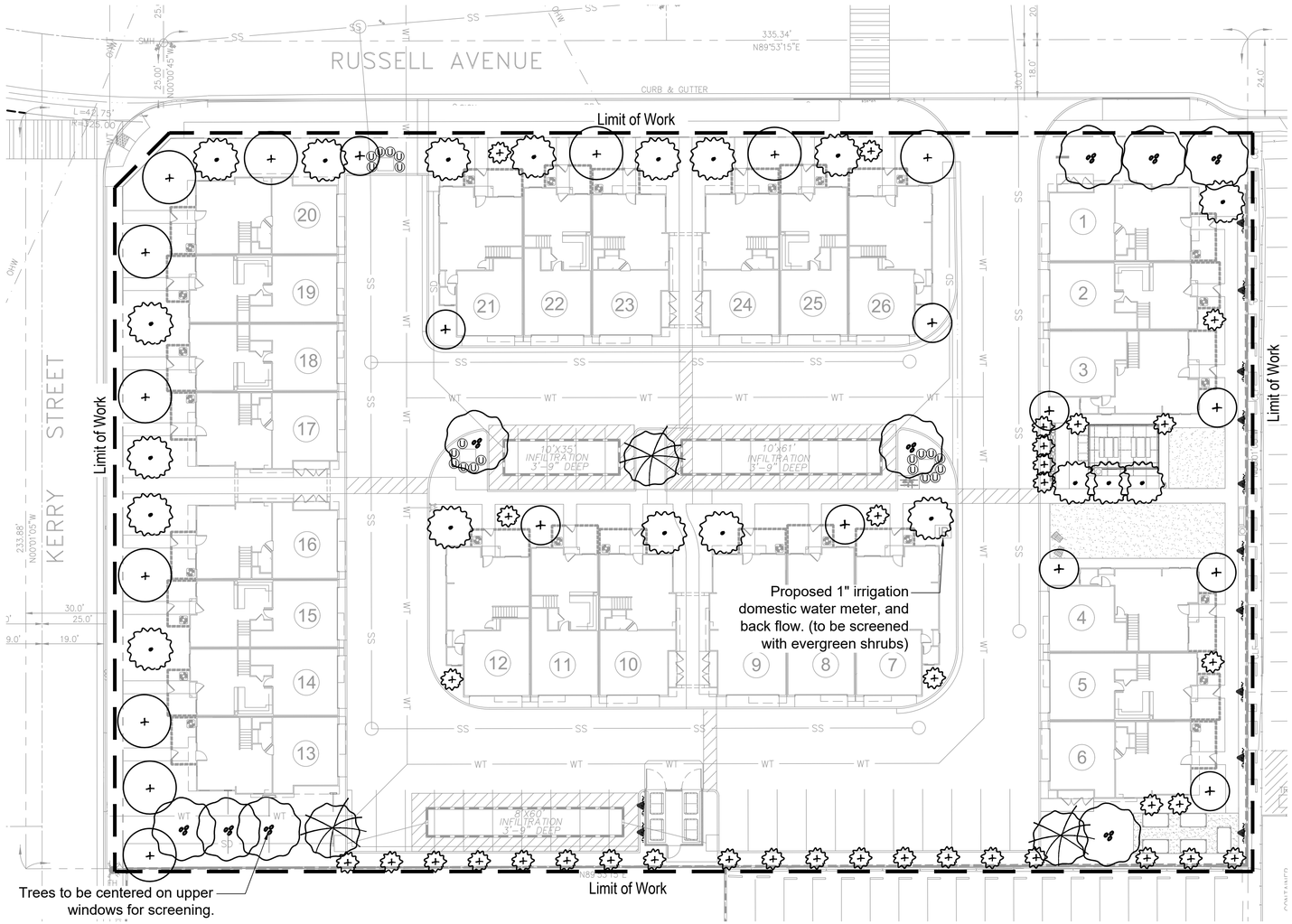
2nd City Submittal | Project No.: MH27-D
Date: January 19, 2026

L-2

MELIA HOMES

Garden Grove - Russell Ave

studio PAD Landscape Architecture
23195 La Cadena Drive (Site 103)
Laguna Hills, CA 92653 (www.studio-PAD.com)



PLANTING LEGEND

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Qty.
	TREES	Botanical Name (Common Name)				
	Focal	Magnolia grandiflora 'Little Gem (Southern Magnolia)	Single	36" Box	Mod.	3
	Screen	Podocarpus gracillior (Fern Pine)	Single	36" Box	Mod.	9
+	Flowering	Eriobotrya deflexa (Bronze Loquat)	Single	24" Box	Low	10
+	Vertical	Geijera parvilflora (Australian Willow)	Single	24" Box	Low	11
	Street	Tristania conferta (Brisbane Box)	Single	24" Box	Mod.	19
	Columnar	Cupressus sempervirens (Italian Cypress) Podocarpus henkelii (Long Leafed Yellow-wood)	Single	15 Gal.	Low	35
						Total = 87
	SHRUBS					
U	Utility Screen	Westringia fruticosa 'Wynyabbie Gem' (Coast Rosemary)	Single	15 Gal.	Low	20
	VINES					
	Vines	Bougainvillea x 'Monka' (Oo-La-La Bougainvillea)	-	15 Gal.	Low	10

SHRUBS and GROUND COVER		WUCOLS (R3)
Agave sp.	Agave	Low
Aloe sp.	Aloe	Low
Bougainvillea sp.	Bougainvillea	Low
Callistemon citrinus 'Little John'	Dwarf Bottlebrush	Low
Carex divulsa	Berkeley Sedges	Low
Carissa m. 'Green Carpet'	Dwarf Natal Plum	Low
Chamaerops humilis	Mediterranean Fan Palm	Low
Dasylirion longissimum	Mexican Grass Tree	Low
Delosperma cooperi	Trailing Ice Plant	Low
Dianella revoluta 'Little Rev'	Little Rev™ Flax Lily	Low
Hesperaloe parviflora	Red / Yellow Yucca	Very Low

SHRUBS and GROUND COVER		WUCOLS (R3)
Kalanchoe thyrsiflora	Flapjack Paddle Plant	Low
Lavandula stoechas 'Larkman Hazel'	Hazel™ Spanish Lavender	Low
Stipa (Nassella) pulchra	Purple Needlegrass	Very Low
Muhlenbergia rigens	Deer Grass	Low
Rhaphiolepis indica 'Clara"	India Hawthorn	Low
Rosmarinus o. 'Huntington Carpet'	Groundcover Rosemary	Very Low
Westringia sp.	Westringia	Low
Xylosma congestum 'Compact'	Compact Xylosma	Low
Yucca gloriosa	Spanish Dagger	Low

NOTES:
1. Irrigation (including spray and/or drip) will be provided, in the Construction Document phase, and to be installed per local California water regulations (AB1881) .
2. Transformers, back-flow preventers & other above-ground utilities to be screened with landscape as permitted per local codes & regulations.
3. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
4. The plant palette listed provides a list of plant material to select from when preparing final landscape construction documents for this project. However, substitutions may be required due to availability, soils tests, or other conditions.
5. All trees within 5' of hardscape to be installed with deep root barriers.

Schematic Planting Plan

0 10' 20' 40'
Scale: 1" = 20'

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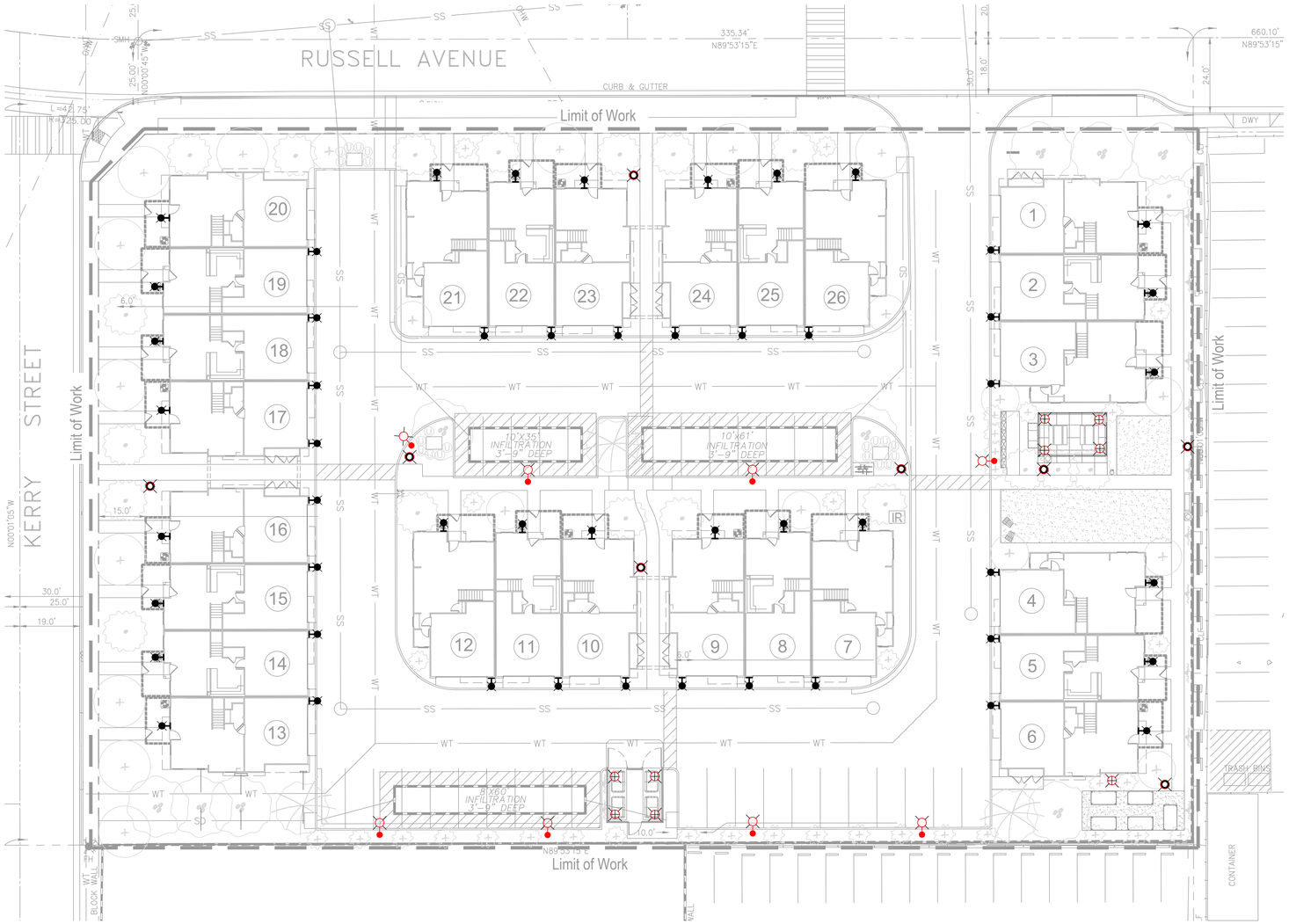

LIGHTING SCHEDULE

PHOTO	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
		SVE-3 - Pole Light Area Pole Light, HID - Direct Lighting Sales, Model San Vicente #SVE-3 Cast Aluminum, Textured Bronze, RA21 Radius, On DBC-1 Base & 10' round pole. Lamp: Per Elec. Eng., Per Elec. Eng., Per Elec. Eng. Accessories: On DBC-1 Base & 10' round pole.	8
		BDA8-HV SERIES-LED 8" W x 42"H Aluminum, Polyester powdercoat	8
 Description Product Spec Number: BAR2103Q-AB-A		BAR2103Q-AB-A 11"x12"x16" Lamp: 13Q	53
		FX Luminaire DE Down light ideal for large applications. 9.7in. H x 3.0in. Dia. Order code: DE, Aluminum Alloy, (AL) Almond, Mini J-Box for 1/2in. Thread Lamp: DE-1LED, 2W / 2.4VA, 2700K, Beamspread: Spot	9

Schematic Lighting Plan

0 10' 20' 40'
Scale: 1" = 20'

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L-4

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TENTATIVE TRACT MAP NO. 19447

FOR PLANNED CONDOMINIUM DEVELOPMENT PURPOSES

PRELIMINARY GRADING - SEE SHT. 2 FOR BOUNDARY INFORMATION

SHEET INDEX

No.	SHEET DESCRIPTION
1	TENTATIVE TRACT MAP – PRELIMINARY GRADING
2	TENTATIVE TRACT MAP – BOUNDARY INFORMATION
3	ALTA – SHEET 1
4	ALTA – SHEET 2

WATER QUALITY CALCULATIONS

FORMULAS

C = 0.75 * IMP % + 0.15
D = DESIGN CAPTURE STORM DEPTH (FIGURE III.1) = 0.77
Dremainder = D - Dhsc = 0.77 - 0 = 0.77
DCV = C * Dremainder * AREA (AC) * 43,560SF/AC * 1/12
A = DCV / Dp
INFILTRATION BASIN VOLUME (cf) = PROVIDED AREA * Dp

WQMP CALCULATIONS	AREA 1	AREA 2	AREA 3	TOTAL
AREA (sf)	20,945	31,680	25,912	**78,537**
% OF TOTAL AREA	26.7%	40.3%	33.0%	**100.0%**
AREA (ac)	0.48	0.73	0.59	**1.80**
LANDSCAPE (sf)	4,264	6,678	5,336	**16,278**
IMPERVIOUS %	79.6%	78.9%	79.4%	**79.3%**
C - RUNOFF COEFFICIENT	0.75	0.74	0.75	**0.74**
D - DESIGN STORM DEPTH	0.77	0.77	0.77	-
D-Remainder	0.77	0.77	0.77	-
DCV - DESIGN CAPTURE VOLUME (cf)	1,006	1,510	1,237	**3,753**
Dp - PONDING DEPTH (ft)	3.75	3.75	3.75	-
A - REQUIRED INFILTRATION BASIN AREA (sf)	268	403	330	-
PROVIDED INFILTRATION BASIN AREA (sf)	350	610	480	-
INFILTRATION BASIN VOLUME (cf)	1,313	2,288	1,800	-

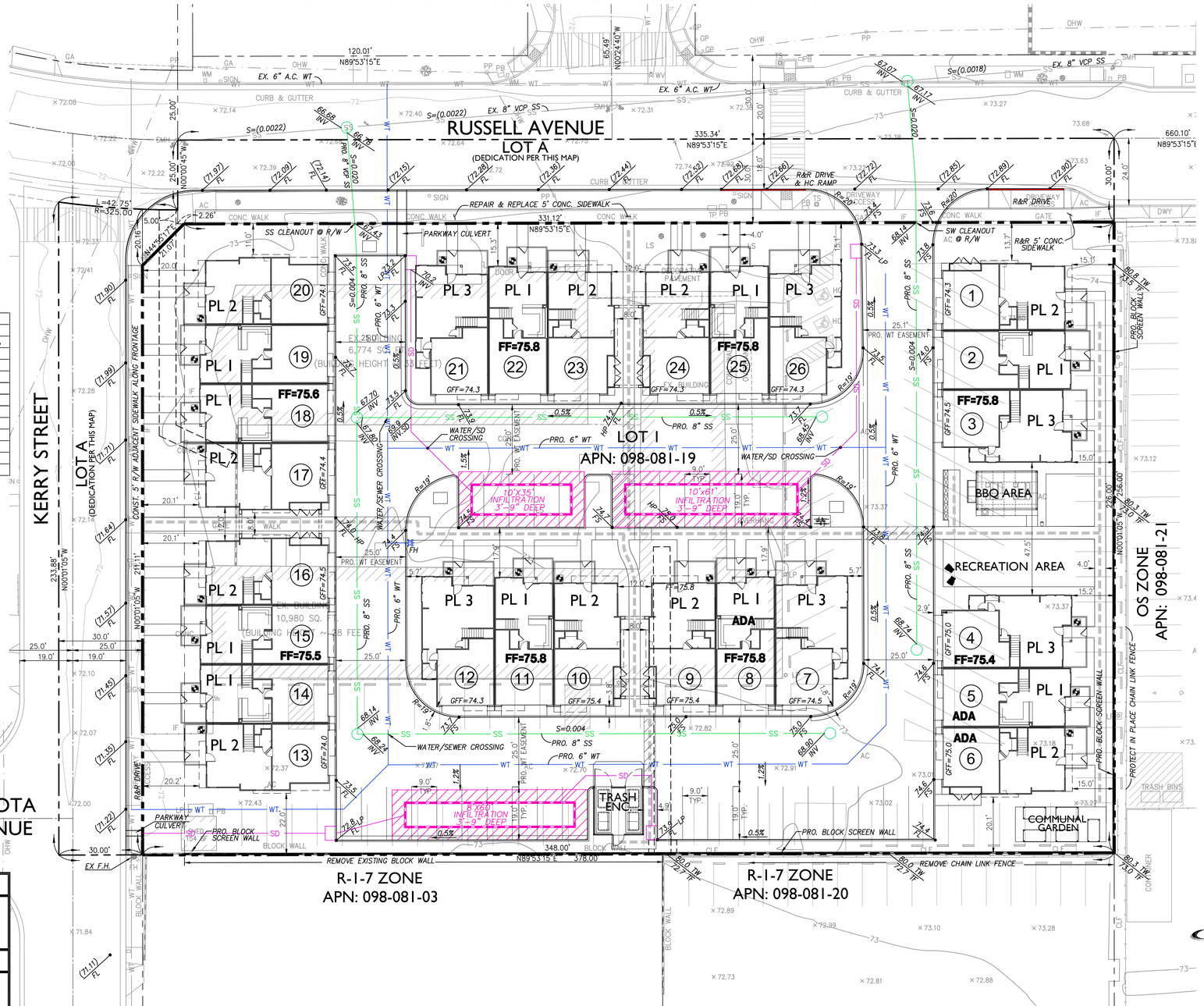
WATER QUANTITIES:

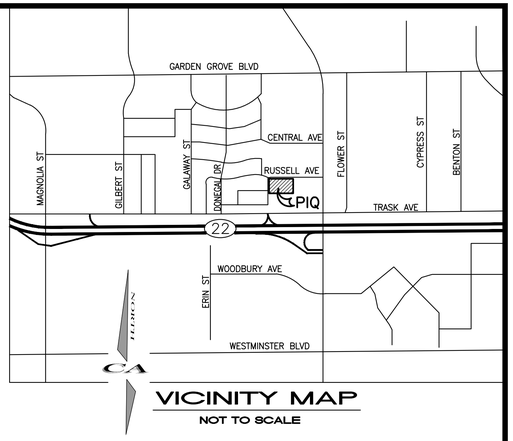
26 DOM. 1" WT. METERS
1 IRR. 1" WT. METER
1 FIRE HYDRANT

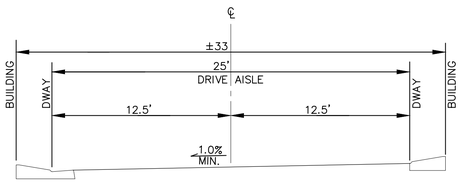
EARTHWORK ESTIMATE	QUANTITIES CUT	FILL
ROUGH GRADING	97 CY	2,344 CY
OVER-EXCAVATION WORK (AVE 2' DEEP)	3,925 CY	3,925 CY
SUBSIDENCE (0.15')	-294 CY	___CY
SHRINKAGE (11%)	-442 CY	___CY
SUBTOTAL PROJECT EARTHWORK QUANTITIES	3,286 CY	6,269 CY
BALANCE WITH SPOILS	2,984 CY	

UTILITY NOTES:

- ALL WATER IMPROVEMENTS TO BE PUBLIC.
- ALL STORM DRAIN IMPROVEMENTS TO BE PRIVATE.
- ONSITE SEWER IMPROVEMENTS TO BE PRIVATE (AFTER CLEANOUT @ R/W.)
- OFFSITE SEWER IMPROVEMENTS TO BE PUBLIC.







TYPICAL INTERIOR STREET SECTION
NO SCALE

LEGEND

PROP. LOT LINE
BOUNDARY LINE
PROP. CURB
EX. CURB
PROPOSED STORM DRAIN — SD
PROPOSED SEWER — SS
EXISTING SEWER — SS
PROPOSED WATER — WT
EXISTING WATER — WT
ELECTRIC LINES
STREET LIGHT
FIRE HYDRANT
ADA PATH
ADA ACCESSIBLE UNIT
RED CURB (PER TRAFFIC DIVISION)

GENERAL NOTES

1. EXISTING LAND USE: COMMERCIAL
2. PROPOSED LAND USE: RESIDENTIAL
3. EXISTING ZONING: "R-1" (SINGLE-FAMILY RESIDENTIAL), "R-1-7" DESIGNATION
4. PROPOSED ZONING: "PUD" (PLANNED UNIT DEVELOPMENT)
5. WATER SERVICE PROVIDED BY: GARDEN GROVE WATER DISTRICT
   13802 NEWHOPE STREET, GARDEN GROVE, CA 92843
   (714) 741-5395
6. ELECTRIC SERVICE PROVIDED BY: SOUTHERN CALIFORNIA EDISON COMPANY
   P.O. BOX 800, ROSEMEAD, CA 91770
   (800) 655-4555
7. SEWER SERVICE PROVIDED BY: CITY OF GARDEN GROVE
   13802 NEWHOPE STREET, GARDEN GROVE, CA 92843
   (714) 741-5396
8. NATURAL GAS SERVICE PROVIDED BY: THE GAS COMPANY
   P.O. BOX 3150, SAN DIMAS, CA 91773
   (800) 427-2200
9. AT&T – (800) 288-2020
10. CHARTER COMMUNICATIONS
11. EMERGENCY ACCESS SHALL BE GRANTED OVER INTERIOR STREET.
12. CURRENT A.P.N. # 098-081-19
13. CURRENT PROPERTY ADDRESS: 9822 RUSSELL AVE., GARDEN GROVE, CA 92844
14. GROSS PROJECT AREA = ±95,744 SF / ±2.20 AC
15. NET PROJECT AREA = ±78,537 SF / ±1.80 AC

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

BASIS OF BEARING

BASIS OF BEARINGS SHOWN HEREON ARE BASED UPON THE CENTERLINE OF TRASK AVENUE BEING N89°53'15"E AS SHOWN ON TRACT MAP NO. 2256, BOOK 62, PAGE 42, INCLUSIVE OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA

PROPERTY DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

THE NORTH 256 FEET OF THE EAST 378 FEET OF THAT PART OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 5 SOUTH, RANGE 10 WEST, IN THE RANCHO LAS BOLSAS, IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SAID NORTHEAST QUARTER OF SECTION 6 IS SHOWN ON A MAP OF TRACT NO. 1539, RECORDED IN BOOK 45 PAGES 29 TO 31 INCLUSIVE OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, LYING WEST OF THE EAST 10 ACRES OF SAID SOUTH HALF

EXCEPT THAT PORTION THEREOF LYING WITHIN THE LAND DESCRIBED IN DEED TO GEORGE M. THOMAS AND NAOMI RUTH THOMAS, HUSBAND AND WIFE AS JOINT TENANTS RECORDED JANUARY 6, 1953 IN BOOK 2432 PAGE 164, OFFICIAL RECORDS

APN: 098-081-19

REVISIONS	BY	DATE

PREPARED BY:
CA ENGINEERING, INC.
Planning • Engineering • Surveying
4101 BIRCH ST., STE. 140
NEWPORT BEACH, CA 92660
949-724-9480 949-724-9484 FAX

OWNER:
MELIA HOMES INC.
9860 Irvine Center Drive
Irvine, CA 92618
Contact: Mr. Chad Brown
(949) 759-4367

ARCHITECT:
SUMMA ARCHITECTURE
5256 S. MISSION ROAD STE. 404
BONSALL, CA. 92003
760.724.1198

ADDRESS:
9822 Russell Avenue
Garden Grove, CA 92844
A.P.N. 098-081-19

STATEMENT OF OWNERSHIP

I HEREBY CERTIFY THAT THIS MAP WAS PREPARED UNDER MY SUPERVISION AND THAT THE OWNERS OF RECORD HAVE KNOWLEDGE OF AND CONSENTS TO THE FILING OF THIS MAP.

Jan 15 2026
FRED CORNWELL RCE 45591 DATE

REGISTERED PROFESSIONAL ENGINEER FRED CORNWELL No. 45591 CIVIL STATE OF CALIFORNIA

Jan 15 2026
JOB NO. 491-22
SHEET NO. 1 OF 4 SHTS.

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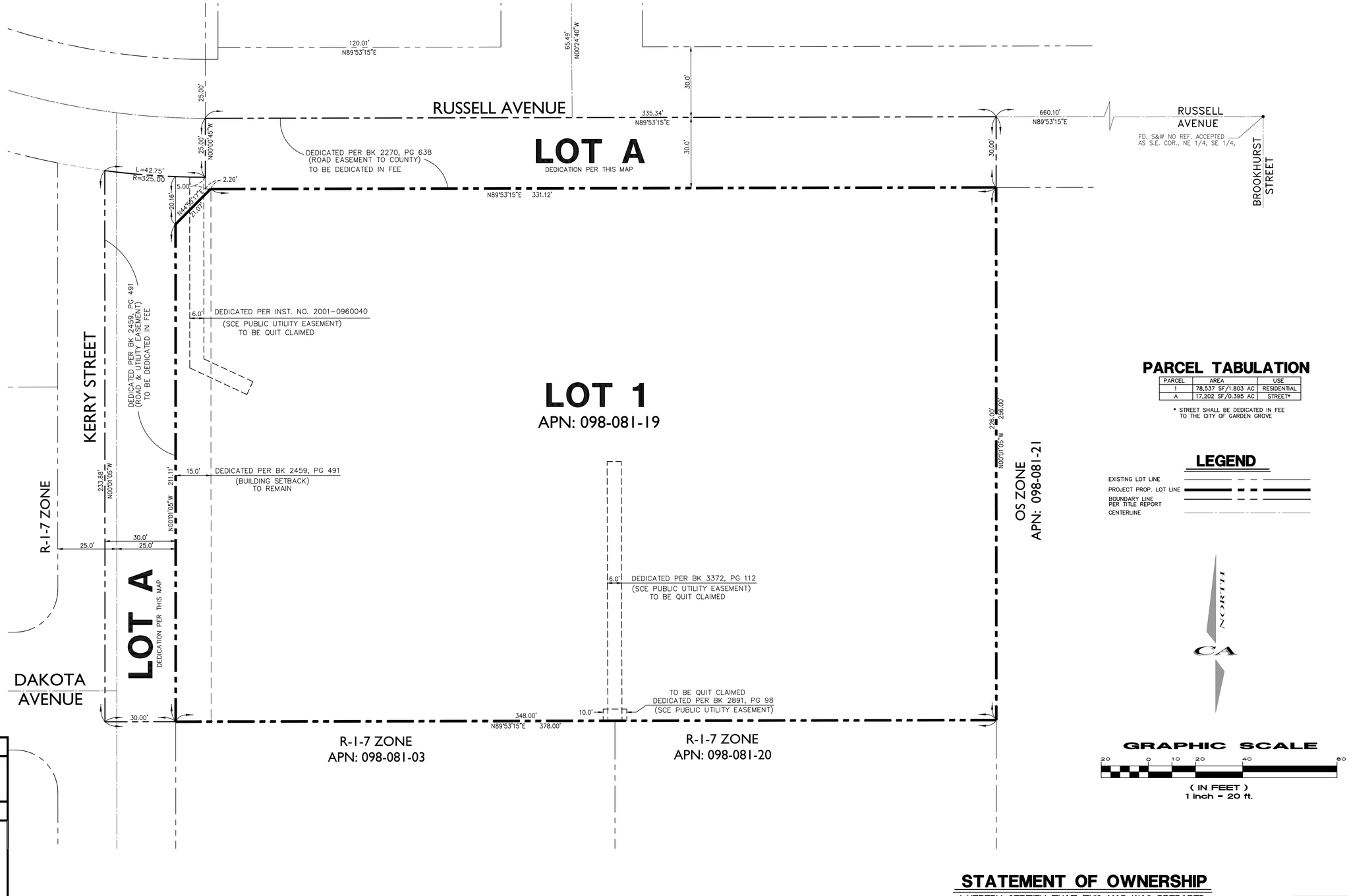
Plotted on: 15 Jan 2026 – 11:13am by cward

TENTATIVE TRACT MAP NO. 19447

FOR PLANNED CONDOMINIUM DEVELOPMENT PURPOSES

BOUNDARY INFORMATION



PARCEL TABULATION

PARCEL	AREA	USE
1	78,537 SF/1.803 AC	RESIDENTIAL
A	17,202 SF/0.395 AC	STREET*

* STREET SHALL BE DEDICATED IN FEE TO THE CITY OF GARDEN GROVE

LEGEND

EXISTING LOT LINE

PROJECT PROP. LOT LINE

BOUNDARY LINE PER TITLE REPORT

CENTERLINE

NORTH

CA

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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FRED CORNWELL RCE 45591 — DATE: Jan 15 2026

REGISTERED PROFESSIONAL ENGINEER FRED CORNWELL No. 45591 CIVIL STATE OF CALIFORNIA

Jan 15 2026

JOB NO. 491-22

SHEET NO. 2 OF 4 SHTS.

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Plotted on: 15 Jan 2026 – 11:10am by cwood

A.L.T.A. / N.S.P.S. LAND TITLE SURVEY

CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

THE NORTH 256 FEET OF THE EAST 378 FEET OF THAT PART OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 5 SOUTH, RANGE 10 WEST, IN THE RANCHO LAS BOLSAS, IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SAID NORTHEAST QUARTER OF SECTION 6 IS SHOWN ON A MAP OF TRACT NO. 1539, RECORDED IN BOOK 45 PAGES 29 TO 31 INCLUSIVE OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, LYING WEST OF THE EAST 10 ACRES OF SAID SOUTH HALF

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APN: 098-081-19

GENERAL NOTES

1. THE LAND AREA OF THE SUBJECT PROPERTY IS 2.198 ACRES, OR 95,744 SQUARE FEET, AS DESCRIBED IN THE LEGAL DESCRIPTION.
2. TITLE SEARCH – THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CORNWELL AND ASSOC., INC. OR KENT COOPER TO DETERMINE OWNERSHIP OF THIS PROPERTY OR TO VERIFY THE DESCRIPTIONS PROVIDED. THE COMPATIBILITY OF THESE DESCRIPTIONS WITH THAT OF ADJACENT PROPERTIES; NOR EASEMENTS, RIGHTS-OF-WAY OR TITLE OF RECORD. CORNWELL, AND ASSOC., INC. RELIED UPON PRELIMINARY TITLE REPORT ORDER NO. LT2255300448 PREPARED BY LAWYERS TITLE COMPANY DATED JULY 9, 2025.
3. OCCUPATION LINES, ENCROACHMENTS AND RECOVERED SURVEY MONUMENTS ARE SHOWN AS FOUND DURING A FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING JUNE 2025.
4. PARCEL AREA SHOWN IS DETERMINED BASED UPON FIELD MEASUREMENTS MADE DURING A FIELD SURVEY PERFORMED IN JUNE 2025.
5. THE TOTAL OF ALL BUILDING AREAS (BASED UPON EXTERIOR FOOTPRINT OF BUILDING ON GROUND SURFACE, NOT INTERIOR FLOOR SPACE) IS 17,908 SQUARE FEET.
6. THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
7. THERE IS NO VISIBLE EVIDENCE OR PRIOR KNOWLEDGE OF CEMETERIES WITHIN 100 FEET OF THE PROPERTY.
8. THERE IS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL OR WETLANDS.
9. THIS IS NOT AN ILLEGAL SUBDIVISION OF LAND.
10. THERE ARE 118 REGULAR & 2 HANDICAP PARKING STALLS ON THE SUBJECT PROPERTY.
11. THERE ARE PARTY WALLS ON THE PROPERTY
12. THE PROPERTY IS CONTIGUOUS AND FORMS A MATHEMATICALLY ENCLOSED FIGURE.
13. THERE ARE NO PROPOSED CHANGES ON STREET RIGHT OF WAY LINES. THERE IS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.
14. THE SUBJECT PROPERTY IS THE SAME AS PROPERTY DESCRIBED IN SCHEDULE A IN THAT CERTAIN TITLE COMMITMENT ORDER NO. LT2255300448 PREPARED BY LAWYERS TITLE COMPANY DATED JULY 9, 2025
15. THE SUBJECT PROPERTY HAS DIRECT VEHICULAR & PEDESTRIAN ACCESS TO RUSSELL AVENUE, A DEDICATED PUBLIC STREET. THE SUBJECT PROPERTY HAS DIRECT VEHICULAR & INDIRECT PEDESTRIAN ACCESS TO KERRY STREET, A DEDICATED PUBLIC STREET.

FLOOD ZONE

THE PROPERTY SHOWN HEREON IS LOCATED ON FIRM (FLOOD INSURANCE RATE MAP) COMMUNITY PANEL NUMBER 06059C0138J, EFFECTIVE DATE BEING DECEMBER 03, 2009 AND THE FLOOD ZONE DESIGNATION AFFECTING SAID PROPERTY IS:

"X" – AREA OF MINIMAL FLOOD HAZARD.

ZONING NOTES

THE PROPERTY IS ZONED "R-1" (SINGLE-FAMILY RESIDENTIAL), "R-1-7" DESIGNATION

THE R-1 ZONE IS INTENDED TO PROVIDE FOR THE ESTABLISHMENT AND PROMOTION OF SINGLE-FAMILY DETACHED RESIDENCES ON INDIVIDUAL LOTS AND COMPATIBLE ASSOCIATED ACTIVITIES.

1. BUILDING SET-BACK LINES
   - A. FRONT: 20 FEET
   - B. INTERIOR SIDE: 5 FEET
   - C. STREET SIDE: 10 FEET
   - C. REAR: 20% OF LOT DEPTH NOT TO EXCEED 25 FT.
     (MAIN STRUCTURES -SEE DIAGRAMS FOR R-1 REQUIRED REAR YARDS)
     5 FT. (DETACHED ACCESSORY STRUCTURES)
2. LOT REQUIREMENTS:
   - A. MINIMUM LOT AREA: 7,000 SQUARE FEET
3. BUILDING HEIGHT:
   - A. MAIN STRUCTURE: 35 FEET
   - B. ACCESSORY STRUCTURE: 17 FEET
4. BUILDING DENSITY:
   - A. LOT COVERAGE: 50%
5. PARKING:
   - A. SINGLE-FAMILY HOME
     - 1-4 SLEEPING ROOMS: 2 SPACES IN AN ENCLOSED GARAGE PLUS 2 OPEN SPACES
     - 5-7 SLEEPING ROOMS: 3 SPACES IN AN ENCLOSED GARAGE PLUS 3 OPEN SPACES
     - OVER 7 SLEEPING ROOMS: 4 SPACES IN AN ENCLOSED GARAGE PLUS 4 OPEN SPACES

TITLE REPORT EXCEPTIONS

EASEMENTS ARE PLOTTED HEREON WITH REFERENCE TO SCHEDULE B EXCEPTION NUMBER.

EXAMPLE: (7) = SCHEDULE B EXCEPTION NUMBER PLOTTED HEREON.

EXCEPTION 7 CANNOT BE PLOTTED

1. PROPERTY TAXES, WHICH ARE A LIEN NOT YET DUE AND PAYABLE, INCLUDING ANY ASSESSMENTS COLLECTED WITH TAXES TO BE LEVIED FOR THE FISCAL YEAR 2025-2026.
2. ANY LIENS OR OTHER ASSESSMENTS, BONDS, OR SPECIAL DISTRICT LIENS INCLUDING WITHOUT LIMITATION, COMMUNITY FACILITY DISTRICTS, THAT ARISE BY REASON OF ANY LOCAL, CITY, MUNICIPAL OR COUNTY PROJECT OR SPECIAL DISTRICT.
3. THE LIEN OF SUPPLEMENTAL OR ESCAPED ASSESSMENTS OF PROPERTY TAXES, IF ANY, MADE PURSUANT TO THE PROVISIONS OF CHAPTER 3.5 (COMMENCING WITH SECTION 75) OR PART 2, CHAPTER 3, ARTICLES 3 AND 4, RESPECTIVELY, OF THE REVENUE AND TAXATION CODE OF THE STATE OF CALIFORNIA AS A RESULT OF THE TRANSFER OF TITLE TO THE VESTEE NAMED IN SCHEDULE A OR AS A RESULT OF CHANGES IN OWNERSHIP OR NEW CONSTRUCTION OCCURRING PRIOR TO DATE OF POLICY.
4. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORDS.
5. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

   GRANTED TO: COUNTY OF ORANGE
   PURPOSE: ROAD
   RECORDING DATE: JANUARY 4, 1952
   RECORDING NO.: BOOK 2270, PAGE 638, OF OFFICIAL RECORDS
   AFFECTS: THAT PORTION OF SAID LAND AS DESCRIBED THEREIN
6. INTENTIONALLY DELETED
7. INTENTIONALLY DELETED
8. COVENANTS, CONDITIONS AND RESTRICTIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON AGE, RACE, COLOR, RELIGION, SEX, GENDER, GENDER IDENTITY, GENDER EXPRESSION, SEXUAL ORIENTATION, MARITAL STATUS, NATIONAL ORIGIN, ANCESTRY, FAMILIAL STATUS, SOURCE OF INCOME, DISABILITY, VETERAN OR MILITARY STATUS, GENETIC INFORMATION, MEDICAL CONDITION, CITIZENSHIP, PRIMARY LANGUAGE, AND IMMIGRATION STATUS, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT

   RECORDING NO.: BOOK 2459, PAGE 491, OF OFFICIAL RECORDS

   SAID COVENANTS, CONDITIONS AND RESTRICTIONS PROVIDE THAT A VIOLATION THEREOF SHALL NOT DEFEAT THE LIEN OF ANY MORTGAGE OR DEED OF TRUST MADE IN GOOD FAITH AND FOR VALUE.
9. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

   GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
   PURPOSE: PUBLIC UTILITIES
   RECORDING DATE: DECEMBER 7, 1954
   RECORDING NO.: BOOK 2891, PAGE 98, OF OFFICIAL RECORDS
   AFFECTS: THAT PORTION OF SAID LAND AS DESCRIBED THEREIN
10. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

    GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
    PURPOSE: PUBLIC UTILITIES
    RECORDING DATE: JANUARY 26, 1956
    RECORDING NO.: BOOK 3372, PAGE 112, OF OFFICIAL RECORDS
    AFFECTS: THAT PORTION OF SAID LAND AS DESCRIBED THEREIN
11. INTENTIONALLY DELETED
12. INTENTIONALLY DELETED
13. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT

    ENTITLED: AGREEMENT WITH CONDITIONS OF AND DISCRETIONARY PERMIT APPROVAL
    RECORDING DATE: OCTOBER 16, 2001
    RECORDING NO.: 01-0072837, OF OFFICIAL RECORDS

    REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
14. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

    GRANTED TO: SOUTHERN CALIFOMIA EDISON COMPANY
    PURPOSE: PUBLIC UTILITIES
    RECORDING DATE: DECEMBER 31, 2001
    RECORDING NO.: 2001-0960040, OF OFFICIAL RECORDS
    AFFECTS: THAT PORTION OF SAID LAND AS DESCRIBED THEREIN
15. INTENTIONALLY DELETED
16. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE AMOUNT SHOWN BELOW,

    AMOUNT: $1,725,000.00
    DATED: SEPTEMBER 8, 2022
    TRUSTOR/GRANTOR IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    TRUSTEE: WESTERN FIDELITY ASSOCIATES, LLC DBA WESTERN FIDELITY TRUSTEES
    BENEFICIARY: CORONA CAPITAL GROUP, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY
    LOAN NO.: CCG-100124
    RECORDING DATE: SEPTEMBER 27, 2022
    RECORDING NO.: 2022000318346, OF OFFICIAL RECORDS

    THIS COMPANY WILL REQUIRE THAT THE ORIGINAL NOTE, THE ORIGINAL DEED OF TRUST AND A PROPERLY EXECUTED REQUEST FOR FULL RECONVEYANCE TOGETHER WITH APPROPRIATE DOCUMENTATION (I.E., COPY OF TRUST, PARTNERSHIP AGREEMENT OR CORPORATE RESOLUTION) BE IN THIS OFFICE PRIOR TO THE CLOSE OF THIS TRANSACTION IF THE ABOVE-MENTIONED ITEM IS TO BE PAID THROUGH THIS TRANSACTION OR DELETED FROM A POLICY OF TITLE INSURANCE.

    ANY DEMANDS SUBMITTED TO US FOR PAYOFF MUST BE SIGNED BY ALL BENEFICIARIES AS SHOWN ON SAID DEED OF TRUST, AND/OR ANY ASSIGNMENTS THERETO. IN THE EVENT SAID DEMAND IS SUBMITTED BY AN AGENT OF THE BENEFICIARY(S), WE WILL REQUIRE THE WRITTEN APPROVAL OF THE DEMAND BY THE BENEFICIARY(S). SERVICING AGREEMENTS DO NOT CONSTITUTE APPROVAL FOR THE PURPOSES OF THIS REQUIREMENT.

    IF NO AMOUNTS REMAIN DUE UNDER THE OBLIGATION A ZERO BALANCE DEMAND WILL BE REQUIRED ALONG WITH THE RECONVEYANCE DOCUMENTS.

    IN ADDITION, WE REQUIRE THE WRITTEN APPROVAL OF SAID DEMAND BY THE TRUSTOR(S) ON SAID DEED OF TRUST OR THE CURRENT OWNERS IF APPLICABLE.
17. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NONDISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA CORPORATION
    LESSEE: HAN SA RANG
    RECORDING DATE: SEPTEMBER 27, 2022
    RECORDING NO.: 2022000318347, OF OFFICIAL RECORDS

    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED SEPTEMBER 27, 2022 AT RECORDING NO. 2022000318347, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: SEPTEMBER 27, 2022
    RECORDING NO.: 2022000318346, OF OFFICIAL RECORDS
18. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA CORPORATION
    LESSEE: ORANGEFIELD CHILD DEVELOPMENT CENTER & LEARNING CENTER
    RECORDING DATE: SEPTEMBER 27, 2022
    RECORDING NO.: 2022000318348, OF OFFICIAL RECORDS

TITLE REPORT EXCEPTIONS (CONT.)

THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

AN AGREEMENT RECORDED SEPTEMBER 27, 2022 AT RECORDING NO. 2022000318348, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

ENTITLED: DEED OF TRUST
RECORDING DATE: SEPTEMBER 27, 2022
RECORDING NO.: 2022000318346, OF OFFICIAL RECORDS

19. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    LESSEE: T-MOBILE WEST LLC, A DELAWARE LIMITED LIABILITY COMPANY
    RECORDING DATE: NOVEMBER 2, 2022
    RECORDING NO.: 2022000352894, OF OFFICIAL RECORDS

    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED NOVEMBER 2, 2022 AT RECORDING NO. 2022000352894, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: SEPTEMBER 27, 2022
    RECORDING NO.: 2022000318346, OF OFFICIAL RECORDS
20. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE AMOUNT SHOWN BELOW,

    AMOUNT: $2,150,000.00
    LESSEE: NOVEMBER 7, 2024
    TRUSTOR/GRANTOR IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    TRUSTEE: WESTERN FIDELITY ASSOCIATES, LLC DBA WESTERN FIDELITY TRUSTEES
    BENEFICIARY: CORONA CAPITAL GROUP, LLC
    LOAN NO.: 110792844
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302984, OF OFFICIAL RECORDS

    THIS COMPANY WILL REQUIRE THAT THE ORIGINAL NOTE, THE ORIGINAL DEED OF TRUST AND A PROPERLY EXECUTED REQUEST FOR FULL RECONVEYANCE TOGETHER WITH APPROPRIATE DOCUMENTATION (I.E., COPY OF TRUST, PARTNERSHIP AGREEMENT OR CORPORATE RESOLUTION) BE IN THIS OFFICE PRIOR TO THE CLOSE OF THIS TRANSACTION IF THE ABOVE-MENTIONED ITEM IS TO BE PAID THROUGH THIS TRANSACTION OR DELETED FROM A POLICY OF TITLE INSURANCE.

    ANY DEMANDS SUBMITTED TO US FOR PAYOFF MUST BE SIGNED BY ALL BENEFICIARIES AS SHOWN ON SAID DEED OF TRUST, AND/OR ANY ASSIGNMENTS THERETO. IN THE EVENT SAID DEMAND IS SUBMITTED BY AN AGENT OF THE BENEFICIARY(S), WE WILL REQUIRE THE WRITTEN APPROVAL OF THE DEMAND BY THE BENEFICIARY(S). SERVICING AGREEMENTS DO NOT CONSTITUTE APPROVAL FOR THE PURPOSES OF THIS REQUIREMENT.

    IF NO AMOUNTS REMAIN DUE UNDER THE OBLIGATION A ZERO BALANCE DEMAND WILL BE REQUIRED ALONG WITH THE RECONVEYANCE DOCUMENTS.

    IN ADDITION, WE REQUIRE THE WRITTEN APPROVAL OF SAID DEMAND BY THE TRUSTOR(S) ON SAID DEED OF TRUST OR THE CURRENT OWNERS IF APPLICABLE.
21. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    LESSEE: MARIA J. UNZUETA
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302985, OF OFFICIAL RECORDS

    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED NOVEMBER 19, 2024 AT RECORDING NO. 2024000302985, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302984, OF OFFICIAL RECORDS
22. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    LESSEE: ORANGEFIELD CHILD DEVELOPMENT CENTER & LEARNING CENTER
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302986, OF OFFICIAL RECORDS

    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED NOVEMBER 19, 2024 AT RECORDING NO. 2024000302986, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302984, OF OFFICIAL RECORDS
23. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    LESSEE: GARDEN GROVE HYUNDAI
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302987, OF OFFICIAL RECORDS

    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED NOVEMBER 19, 2024 AT RECORDING NO. 2024000302987, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302984, OF OFFICIAL RECORDS
24. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT

    ENTITLED: SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT
    LESSOR: IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION
    LESSEE: HAN SA RANG
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302988, OF OFFICIAL RECORDS

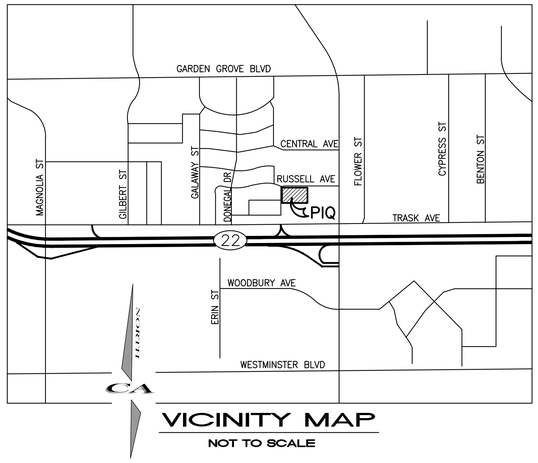
    THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN.

    AN AGREEMENT RECORDED NOVEMBER 19, 2024 AT RECORDING NO. 2024000302988, OF OFFICIAL RECORDS WHICH STATES THAT SAID LEASE HAS BEEN MADE SUBORDINATE TO THE DOCUMENT

    ENTITLED: DEED OF TRUST
    RECORDING DATE: NOVEMBER 19, 2024
    RECORDING NO.: 2024000302984, OF OFFICIAL RECORDS
25. MATTERS WHICH MAY BE DISCLOSED BY AN INSPECTION AND/OR BY A CORRECT ALTA/ACSM LAND TITLE SURVEY OF SAID LAND THAT IS SATISFACTORY TO THE COMPANY, AND/OR BY INQUIRY OF THE PARTIES IN POSSESSION THEREOF.
26. ANY RIGHTS OF THE PARTIES IN POSSESSION OF A PORTION OF, OR ALL OF, SAID LAND, WHICH RIGHTS ARE NOT DISCLOSED BY THE PUBLIC RECORDS.

    THE COMPANY WILL REQUIRE, FOR REVIEW, A FULL AND COMPLETE COPY OF ANY UNRECORDED AGREEMENT, CONTRACT, LICENSE AND/OR LEASE, TOGETHER WITH ALL SUPPLEMENTS, ASSIGNMENTS AND AMENDMENTS THERETO, BEFORE ISSUING ANY POLICY OF TITLE INSURANCE WITHOUT EXCEPTING THIS ITEM FROM COVERAGE.

    THE COMPANY RESERVES THE RIGHT TO EXCEPT ADDITIONAL ITEMS AND/OR MAKE ADDITIONAL REQUIREMENTS AFTER REVIEWING SAID DOCUMENTS.
27. ANY EASEMENTS NOT DISCLOSED BY THE PUBLIC RECORDS AS TO MATTERS AFFECTING TITLE TO REAL PROPERTY, WHETHER OR NOT SAID EASEMENTS ARE VISIBLE AND APPARENT
28. DISCREPANCIES, CONFLICTS IN BOUNDARY LINES, SHORTAGE IN AREA, ENCROACHMENTS, OR ANY OTHER MATTERS WHICH A CORRECT SURVEY WOULD DISCLOSE AND WHICH ARE NOT SHOWN BY THE PUBLIC RECORDS.



VICINITY MAP
NOT TO SCALE

ENCROACHMENT TABLE

#	ENCROACHMENT	DISTANCE FROM PROPERTY LINE	LOCATION
1	SIDEWALK	CROSSES PROPERTY LINE	NORTHERLY PROPERTY LINE
2	OVERHEAD WIRE	CROSSES PROPERTY LINE	NORTHERLY PROPERTY LINE
3	CHAIN-LINK FENCE	CROSSES PROPERTY LINE	SOUTHEAST CORNER
4	BLOCK WALL	CROSSES PROPERTY LINE	SOUTHERLY PROPERTY LINE
5	BLOCK WALL	ON PROPERTY LINE	SOUTHERLY PROPERTY LINE

UTILITY NOTE

UTILITIES ON SITE ARE SHOWN PER A FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING JUNE 2025. THIS SURVEY DOES NOT CONSTITUTE A COMPLETE "AS-CONSTRUCTED" SURVEY OF ALL UTILITIES. ALL ABOVE GROUND VISIBLE OR REASON- AB/O DISCOVERABLE IMPROVEMENTS, WITHIN 5 FEET OF THE PROPERTY LINES, ARE SHOWN HEREON.

SURVEYOR'S NOTES

BASIS OF BEARINGS – BEARINGS SHOWN HEREON ARE BASED UPON THE CENTERLINE OF TRASK AVENUE BEING N89°53'15"E AS SHOWN ON TRACT MAP NO. 2256, BOOK 62, PAGE 42, INCLUSIVE OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA

● – FOUND SURVEY MONUMENT AS NOTED

POLICY OF PREPARER

AS A MATTER OF POLICY, ONLY OFFICIAL RELEASED COPIES OF THIS SURVEY HAVE A "WET" SIGNATURE ALONG WITH THE RELEASE/REVISION DATE(S) SHOWN. ANY MODIFICATIONS, UPDATES, OR REVISIONS WITH THEIR EFFECTIVE RELEASE DATES WILL BE SHOWN THEREON. ANY PARTIES REQUIRING INFORMATION WHICH MAY BE DERIVED FROM THIS SURVEY AFTER THE INITIAL RELEASE DATE ARE ADVISED TO CONTACT THE OFFICE OF THE PREPARER TO INQUIRE ON THE PRESENT STATUS OF THE SURVEY AND IF LATER VERSIONS HAVE BEEN RELEASED. COPIES OF THIS SURVEY LACKING THE HEREIN ABOVE MENTIONED SIGNATURE ARE TO BE CONSIDERED NOT OFFICIALLY RELEASED VERSIONS OF THIS SURVEY.

SURVEYORS CERTIFICATE

TO: (A) IGLESIA DE CRISTO DE RESTAURACION, A CALIFORNIA NONPROFIT CORPORATION; (B) MELIA HOMES; (C) LAWYERS TITLE COMPANY; AND EACH OF THEIR SUCCESSORS AND/OR ASSIGNS.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1 (EXISTING MONUMENTS ONLY), 2, 3, 4, 5, 6, 7(A), 7(B)(1), 7(C), 8, 9, 10, 11, 14, 16, 17, 18, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 18TH, 2025.

DATE OF MAP: 07/17/25

KENT COOPER
PROFESSIONAL LAND SURVEYOR NO. 9322

LICENSED LAND SURVEYOR
KENT COOPER
NO. 9322
STATE OF CALIFORNIA

PREPARED BY:	DATE	BY	REVISION	APP'D
CA ENGINEERING, INC. Planning • Engineering • Surveying 4101 BIRCH STREET, STE. 140 NEWPORT BEACH, CA 92660 949-724-9480 949-724-9484 FAX				

PREPARED FOR:
Melia Homes
8951 RESEARCH DRIVE, SUITE 100
IRVINE, CA 92618
CONTACT: CHAD BROWN
(949) 759-4367

PROPERTY ADDRESS:
9822 RUSSELL AVENUE
GARDEN GROVE, CA 92844

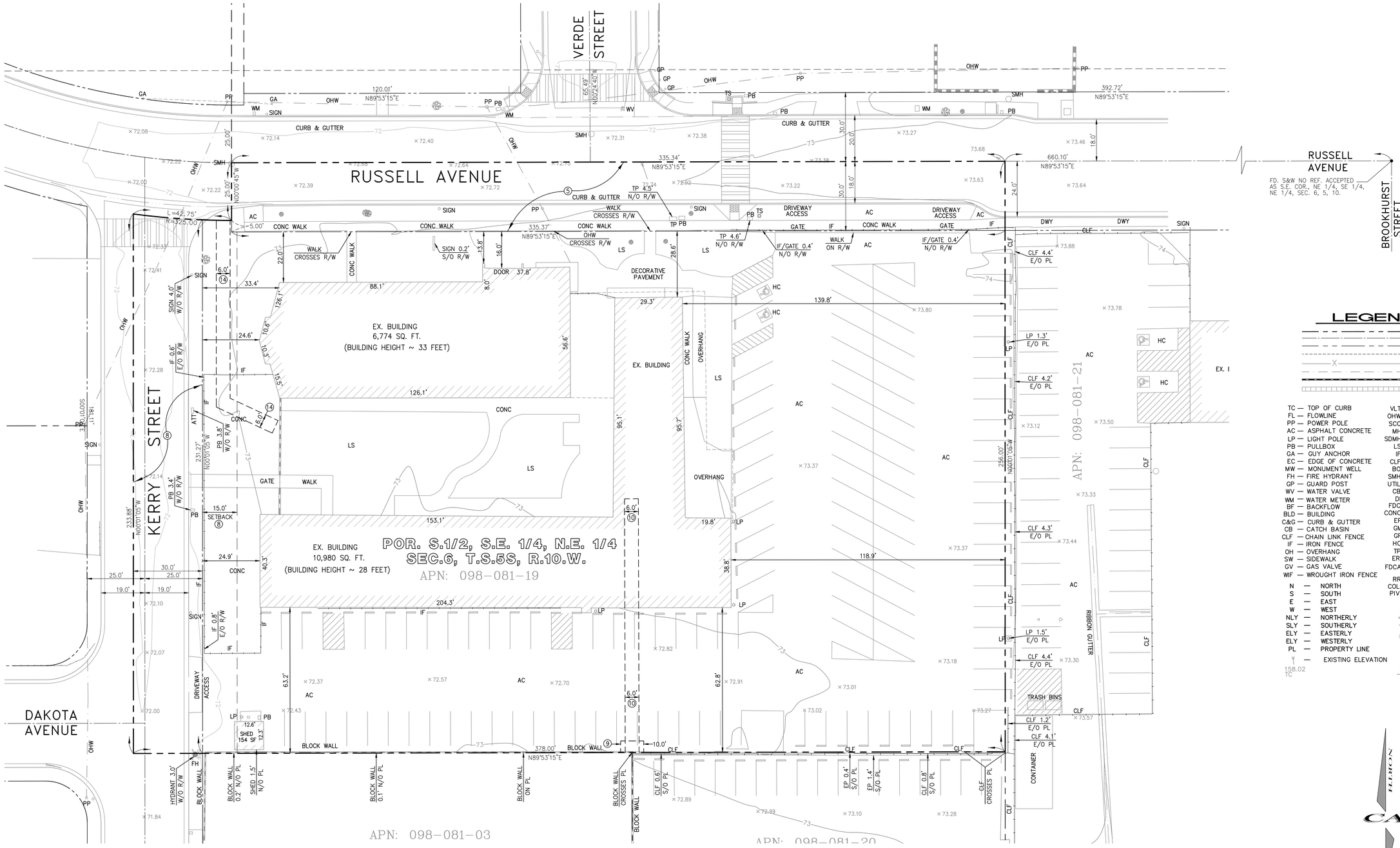
PTR NUMBER
LAWYERS TITLE COMPANY
NO. LT2255300448

JOB NO. 491-22

Sht. 3 of 4

A.L.T.A. / N.S.P.S. LAND TITLE SURVEY

CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA



LEGEND

- BOUNDARY
- CENTER LINE
- PROPERTY LINE
- EASEMENT
- EX. FENCE
- EX. OVERHEAD POWERLINE
- EX. WALL
- EX. RAILROAD

TC — TOP OF CURB
FL — FLOWLINE
PP — POWER POLE
AC — ASPHALT CONCRETE
LP — LIGHT POLE
PB — PULLBOX
GA — GUY ANCHOR
EC — EDGE OF CONCRETE
MW — MONUMENT WELL
FH — FIRE HYDRANT
GP — GUARD POST
WV — WATER VALVE
WM — WATER METER
BF — BACKFLOW
BLD — BUILDING
C&G — CURB & GUTTER
CB — CATCH BASIN
CLF — CHAIN LINK FENCE
IF — IRON FENCE
OH — OVERHANG
SW — SIDEWALK
GV — GAS VALVE
WIF — WROUGHT IRON FENCE

N — NORTH
S — SOUTH
E — EAST
W — WEST
NLY — NORTHERLY
SLY — SOUTHERLY
ELY — EASTERLY
ELY — WESTERLY
PL — PROPERTY LINE
EXISTING ELEVATION

VLT — VAULT
OHW — OVERHEAD WIRE
SCO — SEWER CLEANOUT
MH — MANHOLE
SDMH — STORM DRAIN MANHOLE
LS — LANDSCAPE
IF — IRON FENCE
CLF — CHAIN LINK FENCE
BO — BLOWOFF
SMH — SEWER MANHOLE
UTIL — UTILITY
CB — CATCH BASIN
DI — DRAIN INLET
FDC — FIRE DEPT. CONNECTION
CONC — CONCRETE
EP — EDGE OF PAVEMENT
GM — GAS METER
GP — GUARD POST
HC — HANDICAPPED PARKING
TP — TRANSFORMER PAD
ER — ELECTRIC RISER
FDCA — FIRE DOUBLE DETECTOR ASSEMBY
RR — RAILROAD
COL — COLUMN
PIV — POST INDICATOR VALVE

WATER VALVE
FIRE HYDRANT
TREE
LIGHT POLE
PULL BOX
SIGN

NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PREPARED BY:	DATE	BY	REVISION	APP'D
CA ENGINEERING, INC. Planning • Engineering • Surveying 4101 BIRCH STREET, STE. 140 NEWPORT BEACH, CA 92660 949-724-9480 949-724-9484 FAX				

PREPARED FOR:	PROPERTY ADDRESS:	JOB NO.
Melia Homes 8951 RESEARCH DRIVE, SUITE 100 IRVINE, CA 92618 CONTACT: CHAD BROWN (949) 759-4367	9822 RUSSELL AVENUE GARDEN GROVE, CA 92844	491-22
	PTR NUMBER LAWYERS TITLE COMPANY NO. LT2255300448	Sht. 4 of 4

ATTACHMENT 3

9822 RUSSELL AVENUE TOWNHOME PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Lead Agency:

City of Garden Grove
Community Development Department
11222 Acacia Parkway
Garden Grove, CA 92840

Project Contact:

Priit Kaskla, AICP, Senior Planner
priitk@ggcity.org
714-741-5303

CEQA Consultant:

RE Consulting
renee@renvconsulting.com

April 2026

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Acronym List

ADA	Americans with Disabilities Act
ADT	Average Daily Trips
AQMP	Air Quality Management Plan
AB	Assembly Bill
AFY	Acre-Feet Yearly
APN	Assessor Parcel Number
BMPs	Best Management Practices
CAA	Clean Air Act
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of Garden Grove
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CMU	Concrete Masonry Unit
CO	Carbon Monoxide
CRHR	California Register of Historical Resources
CY	Cubic Yards
DAMP	Drainage Area Management Plan
dBA	A-weighted decibel
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FTA	Federal Transit Administration
GGMC	Garden Grove Municipal Code
GGUSD	Garden Grove Unified School District
GPCD	Gallons per day per capita
GHG	Greenhouse Gas
HVAC	Heating, Ventilation and Air Conditioning

IS/MND	Initial Study/ Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
kBTU	thousand British thermal units
kWh	kilowatt-hour
LCFS	Low Carbon Fuel Standard
LID	Low Impact Development
LOS	Level of Service
LST	Local Significance Thresholds
MBTA	Migratory Bird Treaty Act
MG	Million Gallons
mgd	million gallons per day
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MTCO2e	metric tons carbon dioxide equivalent
NPDES	National Pollutant Discharge Elimination System
NAHC	Native American Heritage Commission
NOx	Nitrous Oxides
OCSD	Orange County Sanitation District
OCFA	Orange County Fire Authority
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
OPR	Governor's Office of Planning and Research
PM	Particulate Matter
PPV	peak particle velocity
PRC	Public Resources Code
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SLF	Sacred Lands File
SOx	Oxides of Sulfur
SR	State Route
SRA	Source Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
VdB	velocity in decibels
VMT	Vehicle Miles Traveled
TIA	Traffic Impact Analysis
TTM	Tentative Tract Map
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
UWMP	Urban Water Management Plan
WDRs	Waste Discharge Requirements
WQMP	Water Quality Management Plan

1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.)
- California Code of Regulations, Title 14, Division 6, Chapter 3 (CEQA Guidelines, Sections 15000 et seq.).

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed redevelopment of the Project site with 26 residential townhomes. As required by CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of Garden Grove (City), in consultation with other jurisdictional agencies, to determine if a Negative Declaration, Mitigated Negative Declaration (MND), Environmental Impact Report (EIR), or other type of CEQA compliance document is required for the Project.

This Initial Study informs City decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the Project. A "significant effect" or "significant impact" on the environment means *"a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project."* (CEQA Guidelines Section15382). Given the project's scope and level of detail, combined with technical analyses and current information about the site and environs, the City's intent is to adhere to the following CEQA principles:

- Provide meaningful early evaluation of site planning constraints, service and infrastructure requirements, and other local and regional environmental considerations. (Public Resources Code Section 21003.1).
- Encourage the applicant to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. (CEQA Guidelines Section 15004[b][3]).
- Specify mitigation measures for reasonably foreseeable significant environmental effects and commit the City and applicant to future measures containing performance standards to ensure their adequacy when detailed development plans and applications are submitted. (CEQA Guidelines Section15126.4).

Existing Regulations that Reduce Potential Impacts
Throughout the impact analysis in this Initial Study, reference is made to requirements that are applied to all development on the basis of federal, state, or local law, which effectively reduce the potential for environmental impacts to occur. Where applicable, these existing regulations are listed to show their effect in reducing potential environmental impacts. Where the application of these measures does not reduce an impact to below a level of significance, a project-specific mitigation measure is introduced.

1.2 DOCUMENT ORGANIZATION

This Initial Study includes the flowing sections:

Section 1.0 Introduction
Provides information about CEQA and its requirements for environmental review and explains that an Initial Study was prepared by the City to evaluate the Project's potential to impact the physical environment, and to determine if mitigation is required to reduce potential impacts to a less than significant level.

Section 2.0 Project Setting
Provides information about the Project's location, a description of existing site uses, and identifies the existing General Plan and zoning designations.

Section 3.0 Project Description
Includes a description of the Project's physical features, along with construction and operational activities.

Section 4.0 Environmental Checklist
Includes the Environmental Checklist and evaluates the Project's potential to result in significant adverse effects to the physical environment and identifies if mitigation is required to reduce potential impacts to a less than significant level.

Section 5.0 Document Preparers
Includes a list of persons that prepared this Initial Study/Mitigated Negative Declaration (IS/MND).

2 PROJECT SETTING

2.1 PROJECT LOCATION

The Project site is located at 9822 Russell Avenue, City of Garden Grove, in the central portion of the City, as shown in Figure 1, *Project Location*. The site is approximately 0.12 miles north of State Route 22 (SR-22) and one block west of Brookhurst Street, both of which provide regional access to the site. Local access to the site is provided by Brookhurst Street and Russell Avenue. Direct access to the site is provided by Russell Avenue to the north and Kerry Street to the west, as shown in Figure 2, *Aerial View*.

The Project site is identified as Assessor Parcel Number (APN): 098-081-19; and is located within the U.S. Geologic Survey (USGS) Anaheim 7.5 Minute Series Topographic Quadrangle, and within Section 5, Township 5 South, Range 10.

2.2 EXISTING PROJECT SITE LAND USES

The 1.81-acre Project site is currently developed with a church, preschool and daycare facility, a wireless communications facility, a parking lot, and landscaping areas. The church structure is located adjacent to Russel Avenue and is approximately 33 feet in height and topped with a church steeple and cross. The other two buildings (a one-story and a two-story) include a preschool, daycare, and office areas, and are connected by covered breezeway. The maximum height of the two-story preschool/office building is 28 feet. The exterior play area for the preschool is located along Kerry Street. Existing driveways are located along both Russell Avenue and Kerry Street, which provide direct access to parking areas to the south and east of the existing buildings.

The church sanctuary consists of 7,700 square feet, the office and meeting rooms used by the church total 7,892 square feet, and the preschool/daycare is 2,875 square feet, which totals 18,467 square feet of existing building space on the site. The existing preschool/daycare facility (Orangefield Child Development Center) is for children ages 2 to 6 years and has a licensed capacity for 60 students[1]. In addition to serving onsite uses, the existing parking lot is used by the adjacent Garden Grove Hyundai dealership for employee parking under a lease agreement with the existing property owner, which is not a permitted use.

Existing General Plan Land Use Designations. The Project site has General Plan Land Use designation of Low Density Residential (LDR), as shown in Figure 4, *Existing General Plan Land Use Designations*. The General Plan states that the Low Density Residential land use designation is characterized by detached, single-unit structures and accessory dwelling units, and allows up to 11 dwelling units per acre.

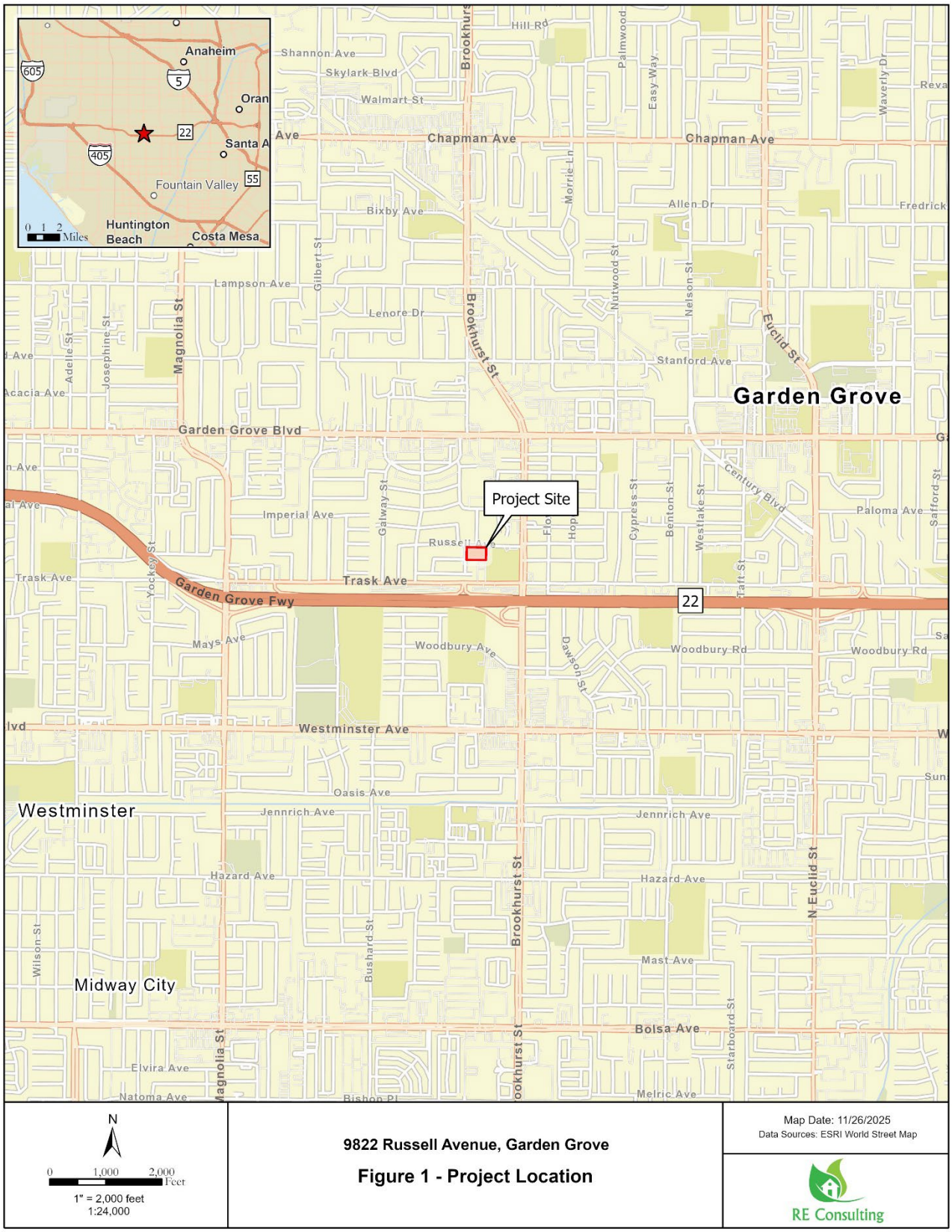
Existing Zoning Designations. The site is zoned Single-Family Residential (R-1), as shown in Figure 5, *Existing Zoning Designations*. Section 9.08.020.020 of the Garden Grove Municipal Code (GGMC) states that the R-1 zone is intended to provide for the establishment and promotion of single-family detached residences on individual lots and compatible associated activities. GGMC Section 9.08.020.020 details that churches, child daycare centers, religious schools, educational institutions are permitted within the R-1 zone with a Conditional Use Permit (CUP).

[1] CA Department of Social Services Facility Detail. Accessed: https://www.ccld.dss.ca.gov/carefacilitysearch/FacDetail/304371054

2.3 SURROUNDING LAND USES

The Project site is located within a developed and urban area and is adjacent to roadways, residential, school, and church uses as described below:

- **North:** Russell Avenue is adjacent to the north of the site followed by multi-family residential uses that have a General Plan land use of Low Medium Residential (LMR) and zoning designation of R-2 (Limited Multiple Residential).
- **East:** The Sunnyside Elementary School is adjacent to the east of the site on land that has a General Plan land use of Civic/Institutional (CI) and zoning designation of Open Space (O-S).
- **South:** Single-family residences and a church are located adjacent to the south, on land that has a General Plan land use of Low Density Residential (LDR) and zoning designation of Single-Family Residential (R-1).
- **West:** Kerry Street is adjacent to the west of the site followed by single-family residences on land that has a General Plan land use of Low Density Residential (LDR) and zoning designation of Single-Family Residential (R-1).



9822 Russell Avenue, Garden Grove

Figure 1 - Project Location


Verde St
Kerry St
Project Site
Russell Ave
Cross County Christian Church
Kerry St
Kerry St
N
0 50 100 Feet
1" = 100 feet
1:1,200
9822 Russell Avenue, Garden Grove
Figure 2 - Project Site Aerial
Map Date: 11/30/2025
Data Sources: ESRI World Imagery
RE Consulting



View of the Project Site from Russell Ave Facing Southwest



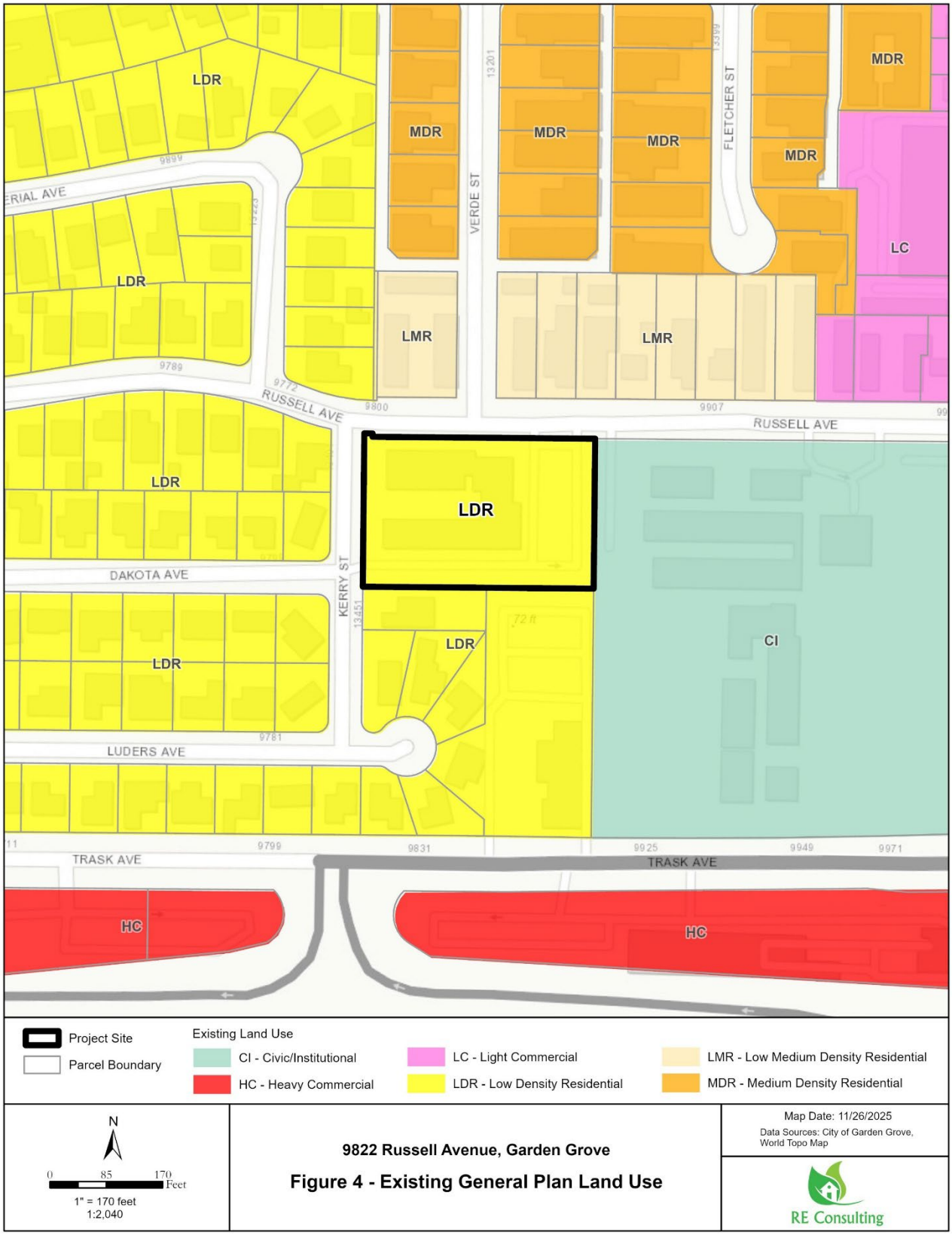
View of the Project Site from Kerry St Facing Southeast

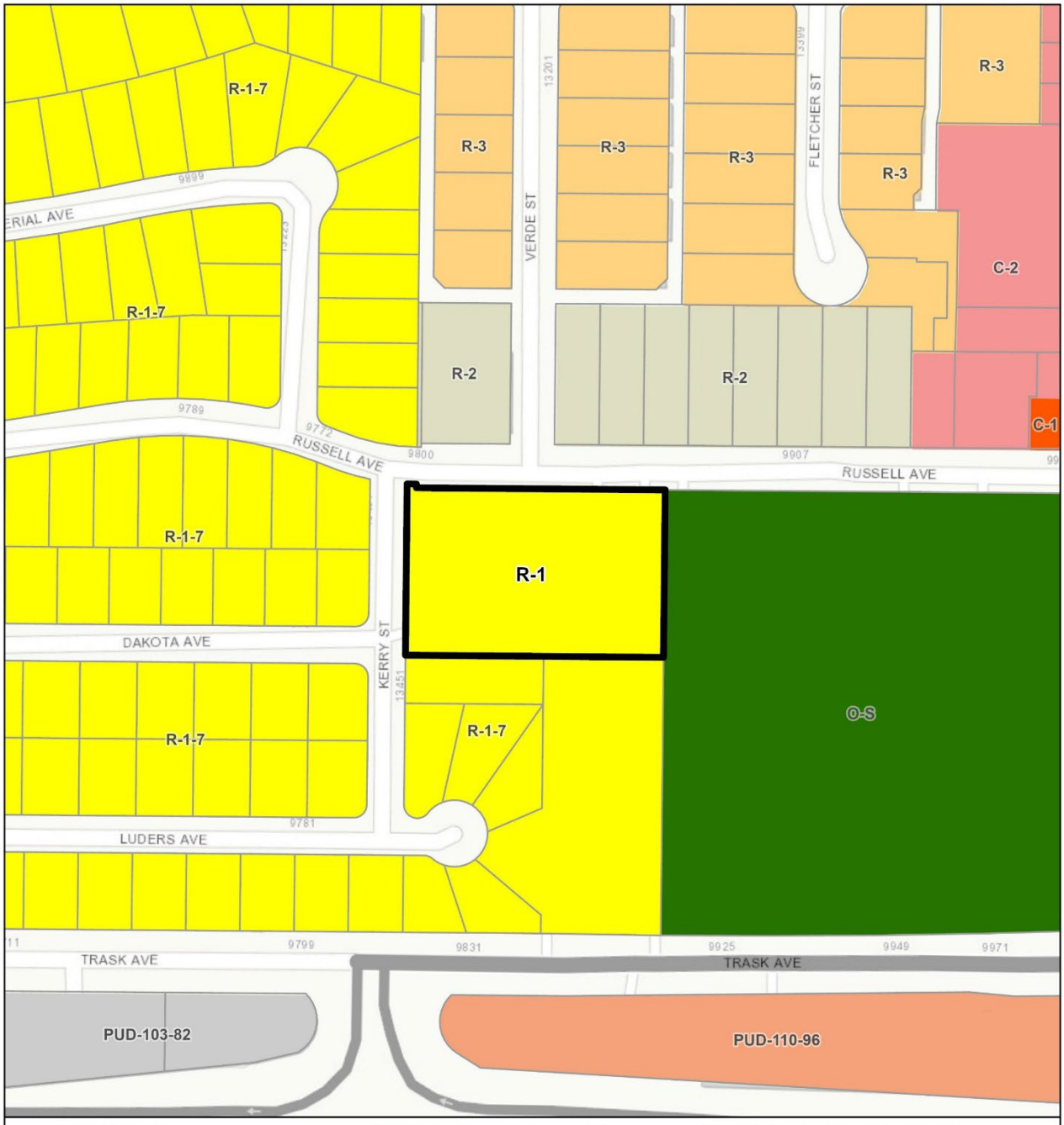
9822 Russell Avenue, Garden Grove

Figure 3 - Views of the Project Site

Map Date: 11/26/2025
Data Sources: Google Maps

RE Consulting


LDR
MDR
MDR
MDR
MDR
MDR
LC
LMR
LMR
LDR
LDR
LDR
LDR
CI
HC
HC
VERDE ST
FLETCHER ST
KERRY ST
RUSSELL AVE
RUSSELL AVE
DAKOTA AVE
LUDERS AVE
TRASK AVE
TRASK AVE
13201
13399
13451
9772
9800
9907
9789
9781
9799
9831
9925
9949
9971
72 ft
Project Site
Parcel Boundary
Existing Land Use
CI - Civic/Institutional
HC - Heavy Commercial
LC - Light Commercial
LDR - Low Density Residential
LMR - Low Medium Density Residential
MDR - Medium Density Residential
N
0 85 170 Feet
1" = 170 feet
1:2,040
9822 Russell Avenue, Garden Grove
Figure 4 - Existing General Plan Land Use
Map Date: 11/26/2025
Data Sources: City of Garden Grove, World Topo Map
RE Consulting


R-1-7
R-3
R-2
C-2
C-1
R-1
O-S
VERDE ST
FLETCHER ST
RUSSELL AVE
DAKOTA AVE
KERRY ST
LUDERS AVE
TRASK AVE
PUD-103-82
PUD-110-96
Project Site
Parcel Boundary
Existing Zoning
C-1 - Neighborhood Commercial Zone
C-2 - Community Commercial Zone
O-S - Open Space Zone
PUD-103-82 - Planned Unit Development
PUD-110-96 - Planned Unit Development
R-1-7 - Single-Family Residential Zone
R-2 - Limited Multiple Residential Zone
R-3 - Multiple-Family Residential Zone
N
0 85 170 Feet
1" = 170 feet
1:2,040
9822 Russell Avenue, Garden Grove
Figure 5 - Existing Zoning Designation
Map Date: 11/26/2025
Data Sources: City of Garden Grove, World Topo Map
RE Consulting

3 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The applicant for the Project is requesting approval from the City of Garden Grove to demolish the existing church, preschool, wireless facility, and daycare facility buildings and improvements on the Project site and construct 26 two-story townhome residences, open space/recreation, and parking. Each residential unit would range in size from approximately 1,442 square feet to 1,800 square feet, have three or four bedrooms, and two-car garages. The 26 residences on the 1.81-acre site would result in a density of 14.4 dwelling units per acre. The Project would include parking, open space, ornamental landscaping, and associated infrastructure.

The Project requests the approval of a General Plan Amendment to change the land use from LDR to Low Medium Density Residential (LMR), which allows residential densities between 11 and 21 dwelling units per acre. The Project also includes a zone change to change the site zoning from R-1 to Planned Unit Development (PUD) with an R-2 (Limited Multiple Residential) base zoning designation used as the base guiding standards. The Project includes approval of a Site Plan and a Vesting Tentative Tract Map (TTM) for condominium purposes. Additionally, the existing CUPs for the wireless facility (CUP-554-01) and for the preschool (CUP-114-81) would be revoked.

3.2 PROJECT FEATURES

Residential Summary and Architecture
The Project would redevelop the 1.81-acre site to provide 26 two-story residential townhomes, as shown in Figure 6, *Conceptual Site Plan*. The two-story residential buildings would have a maximum height of 29 feet 9-inches. The Project would result in a density of 14.4 dwelling units per acre. The Project proposes three different floor plans that range in size from 1,442 square foot three-bedroom units to 1,800 square foot 4-bedroom units, as shown in Table 1. Each of the residences would have a two-car garage that would comply with the California Green Building Standards Code (CALGreen) and include EV charging infrastructure for new residences with attached private garages. Also, each residence would have a ground-level patio that would be delineated by a three-foot six-inch high vinyl fencing.

Table 1: Residential Unit Summary

Unit Type	Number of Units	Number of Stories	Number of Bedrooms	Number of Bathrooms	Square Footage
Plan 1	10	2	3	2.5	1,442
Plan 2	10	2	3 + loft	2.5	1,652
Plan 3	6	2	4	2.5	1,800

The townhome structures would be setback a minimum of 20 feet from the Kerry Street right-of-way, 11 feet from the 5-foot-wide sidewalk along Russell Avenue along building sides, and 15 feet from building frontages facing Russell Avenue. In addition, building structures would be a minimum of 20 feet from the single-family residences to the south, and a minimum of 15 feet from the eastern property line.

The residential structures would have articulated exterior designs of Spanish architectural style with recessed windows with shutters, Spanish tiled pitched roofs with multiple roof lines, gable accents, decorative metal

window awning and arbor trellis covered walkways, finished stuccos, Spanish tile accents, and other decorative architectural features (shown in Figures 7 through 9).

Parking and Circulation
In addition to two-car garages for each residence, the Project would include 33 open parking spaces, for a total of 85 onsite parking spaces. Circulation would be provided by a 30-foot-wide driveway on Russell that would lead to a 25-foot-wide interior drive isle that would provide access to parking and circle the site. Sidewalks providing ADA path of travel would be provided throughout the site and would connect to existing sidewalks along Russell Avenue and a new sidewalk along Kerry Street that would be installed by the Project. The Project also includes bicycle rack for short-term bike parking.

Open Space Recreation
The Project includes a 3,695 square foot central active open space recreation area with shade structures, BBQs with buffet countertop, picnic seating, community garden with raised planter boxes, open turf, bench seating, shade trees. The Project also includes 2,901 square feet of passive open space area and 2,106 square feet of private yards.

Landscaping
The proposed Project includes approximately 16,278 square feet (20.7% of the site) of landscaping that would include ornamental trees, shrubs, and ground covers, as shown in Figure 10, *Conceptual Landscape Plan*. New exterior lighting onsite would be provided to accent the landscaping, light signage, light walkways, light driveways, and for security. The new lighting would be focused on the Project site, shielded from offsite areas, and would be compliant with the City's lighting regulations.

Walls
The Project would install six-foot-high CMU walls along the south and east site boundaries. In addition, the front patio area of each residence would be delineated by a three-foot six-inch high vinyl fencing while providing ADA path of travel through the site, as shown in Figure 11, *Wall Plan*.

Infrastructure
Water and Sewer
The Project applicant would install new onsite water and sewer lines, which connect to the existing 6-inch diameter water main located in Russell Avenue and the existing 8-inch sewer main located within Russell Avenue to the north of the Project site.

Drainage
The Project would install a new onsite drainage system to accommodate the proposed site plan. Stormwater runoff would be captured by catch basins that would route runoff to biofiltration treatment devices prior to infiltration into site soils.

Energy
The proposed Project would not utilize natural gas and would install new onsite electrical infrastructure that would connect to the existing offsite electrical lines. The proposed Project would meet the CALGreen energy efficiency standards in effect during permitting of the Project, which are included in the GGMC as Section 18.04.010.

3.3 PROJECT CONSTRUCTION

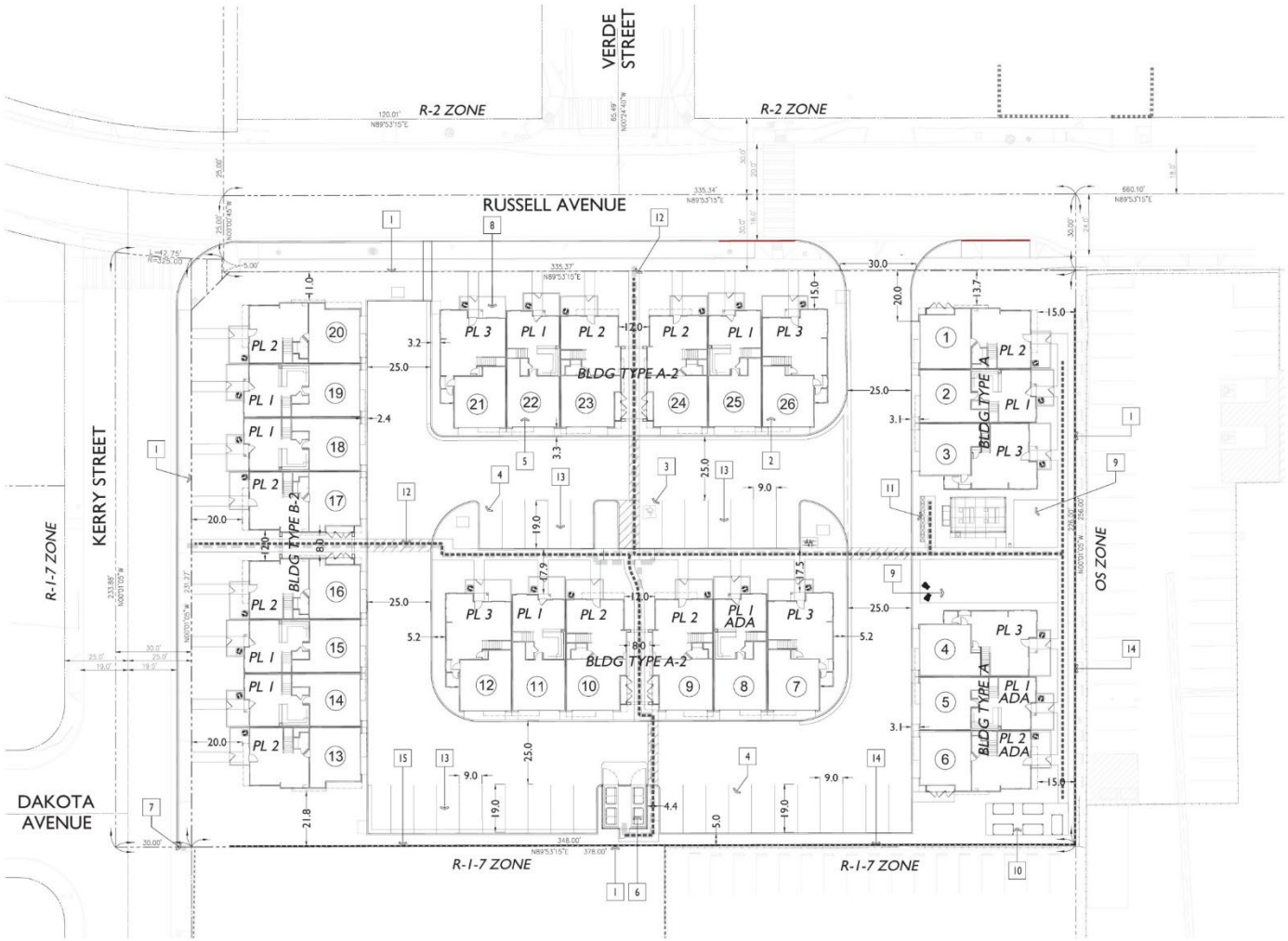
Construction activities for the Project would occur over approximately 11 months in the following stages: (1) demolition including removal of existing structures/asphalt/pavement; (2) site preparation; which includes clearing any remaining infrastructure, utilities, and trenching for the new utilities/services; (3) grading and excavation; (4) building construction; (5) paving; and (6) application of architectural coatings.

As part of site grading, the upper two feet or one foot below footings of soil would be removed and recompacted pursuant to California Building Code (CBC) requirements to provide a dense fill mat for structural support. Approximately 3,286 cubic yards (cy) of cut and 6,269 cy of fill material would be required for Project grading. The earthwork would balance onsite using approximately 2,984 cy of spoils from utility infrastructure trenching, and no import or export of soil would be required.

Consistent with the requirements of GGMC Chapter 8.47, the City's construction permitting limits construction activities to the hours between 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. No construction work would be permitted on Sundays or federal holidays. The construction schedule listed in Table 3 is from California Emissions Estimator Model (CalEEMod) assumptions (Appendix A) and provides the modeling estimate of the working days per phase and construction and equipment, which is used for analysis purposes.

Table 2: Construction Schedule

Construction Phase	Working Days	Equipment
Demolition	20	Concrete/Industrial Saws, Rubber Tired Dozers, Tractors/Loaders/Back hoes
Site Preparation	2	Rubber Tired Dozers, Tractors/Loaders/Back hoes, Crawler Tractors, Graders, Trenchers, Dumpers/Tenders, Excavators, Skid Steer Loaders, Plate Compactors
Grading	4	Graders, Rubber Tired Dozers, Tractors/Loaders/Back hoes, Crawler Tractors
Building Construction	200	Cranes, Forklifts, Generator Sets, Tractors/Loaders/Backhoes, Welders
Paving	10	Pavers, Paving Equipment, Rollers, Cement and Mortar Mixers, Tractors/Loaders/Backhoes
Architectural Coating	15	Air Compressors



N

Not to Scale

9822 Russell Avenue, Garden Grove

Figure 6 - Conceptual Site Plan

Map Date: 1/26/2026
Data Sources: SUMMA Architecture, 1/12/2026

RE Consulting



BUILDING TYPE A - LEFT EXTERIOR ELEVATION



BUILDING TYPE A - FRONT EXTERIOR ELEVATION



BUILDING TYPE A - RIGHT EXTERIOR ELEVATION



BUILDING TYPE A - REAR EXTERIOR ELEVATION

MATERIAL SCHEDULE

1. ROOF - CONCRETE S TILE ROOFING
2. FASCIA - STUCCO OVER SHAPED FOAM CORNICE
3. WALL - EXTERIOR SAND FINISH STUCCO
4. VINYL WINDOW W/ STUCCO O/ E.P.S. TRIM
5. RECESSED VINYL WINDOW W/ ARCHED SOFFIT
6. DECORATIVE GABLE/WALL ACCENT
7. DECORATIVE SHAPED FOAM CORBEL/SILL
8. DECORATIVE METAL AWNING
9. UTILITY CLOSET
10. DECORATIVE COMPOSITE SHUTTER
11. METAL POTSHELF
12. DECORATIVE EXTERIOR LIGHT FIXTURE
13. DECORATIVE METAL GRILLE
14. STUCCO PATIO LOW WALL W/ METAL GATE
15. STUCCO CONTROL JOINT
16. DECORATIVE TILE
17. TRELLIS BREEZEWAY ARBOR



BUILDING TYPE A2 - LEFT EXTERIOR ELEVATION



BUILDING TYPE A2 - FRONT EXTERIOR ELEVATION



BUILDING TYPE A2 - RIGHT EXTERIOR ELEVATION



BUILDING TYPE A2 - REAR EXTERIOR ELEVATION

9822 Russell Avenue, Garden Grove

Figure 7 - Elevations (Building Type A2)

Map Date: 1/26/2026
Data Sources: SUMMA Architecture, 1/12/2026

RE Consulting



BUILDING TYPE B2 - LEFT EXTERIOR ELEVATION



BUILDING TYPE B2 - FRONT EXTERIOR ELEVATION



BUILDING TYPE B2 - RIGHT EXTERIOR ELEVATION



BUILDING TYPE B2 - REAR EXTERIOR ELEVATION

MATERIAL SCHEDULE

1. ROOF - CONCRETE S TILE ROOFING
2. FASCIA - STUCCO OVER SHAPED FOAM CORNICE
3. WALL - EXTERIOR SAND FINISH STUCCO
4. VINYL WINDOW W/ STUCCO O/ E.P.S. TRIM
5. RECESSED VINYL WINDOW W/ ARCHED SOFFIT
6. DECORATIVE GABLE/WALL ACCENT
7. DECORATIVE SHAPED FOAM CORBEL/SILL
8. DECORATIVE METAL AWNING
9. UTILITY CLOSET
10. DECORATIVE COMPOSITE SHUTTER
11. METAL POTSHELF
12. DECORATIVE EXTERIOR LIGHT FIXTURE
13. DECORATIVE METAL GRILLE
14. STUCCO PATIO LOW WALL W/ METAL GATE
15. STUCCO CONTROL JOINT
16. DECORATIVE TILE
17. TRELLIS BREEZEWAY ARBOR

N

Not to Scale

9822 Russell Avenue, Garden Grove

Figure 8 - Elevations (Building Type B2)

Map Date: 1/26/2026
Data Sources: SUMMA Architecture, 1/12/2026

RE Consulting









N

Not to Scale

9822 Russell Avenue, Garden Grove

Figure 9 - Project Renderings

Map Date: 1/26/2026
Data Sources: SUMMA Architecture, 1/12/2026

RE Consulting



LEGEND

1. Central community open space area with metal or wood shade structure, BBQ counter space, and table seating for small social events and group gatherings.
2. Six community cluster mailboxes, per USPS review and approval.
3. Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.
4. Proposed tree, per Planting Plan.
5. Transformer to be screened with landscape, quantity and final locations to be determined.
6. 4' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
7. Accessible parking stall and striping, per Civil plans.
8. 5 Raised community raised planter boxes within 400 Sq. Ft. DG.
9. Guest parking stall.
10. Natural colored concrete driveway, with light broom finish and tooled joints.
11. Short term bike parking (1 bike rack to accommodate 2 bike stalls).
12. Private patio / yard area, homeowner maintained.
13. Common area landscape, builder installed and HOA maintained.
14. Community dog bag station (black in color), for pet owners.
15. Property line.
16. Public street R.O.W.
17. Proposed public street sidewalk, per Civil plans.
18. Trash enclosure.
19. Bench seating.
20. 3'-0" High Monument Sign.













N

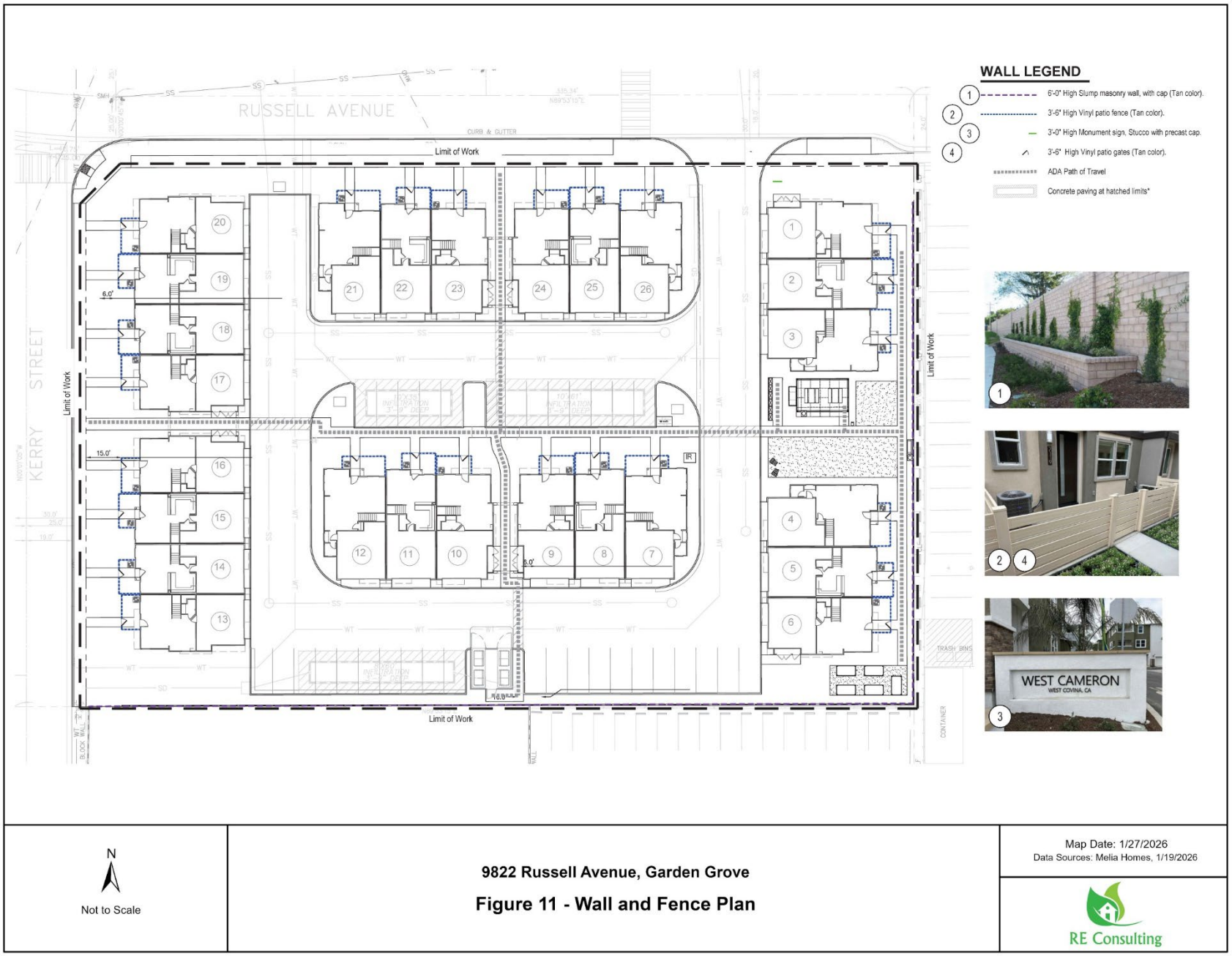
Not to Scale

9822 Russell Avenue, Garden Grove

Figure 10 - Conceptual Landscaping Plan

Map Date: 1/26/2026
Data Sources: Melia Homes, 1/19/2026

RE Consulting


RUSSELL AVENUE
KERRY STREET
Limit of Work
Limit of Work
Limit of Work
CURB & GUTTER
6.0'
15.0'
6.0'
TRASH BINS
CONTAINER
WEST CAMERON
WEST COVINA, CA
WALL LEGEND
1 6'-0" High Slump masonry wall, with cap (Tan color).
2 3'-6" High Vinyl patio fence (Tan color).
3 3'-0" High Monument sign, Stucco with precast cap.
4 3'-6" High Vinyl patio gates (Tan color).
ADA Path of Travel
Concrete paving at hatched limits*
N
Not to Scale
9822 Russell Avenue, Garden Grove
Figure 11 - Wall and Fence Plan
Map Date: 1/27/2026
Data Sources: Melia Homes, 1/19/2026
RE Consulting

3.4 GENERAL PLAN LAND USE AND ZONING

The Project includes a General Plan Amendment to change the land use designation of the site from Low Density Residential (LDR) to Low Medium Density Residential (LMR), as shown in Figure 12, *Proposed General Plan Land Use Designation*. The LMR land use allows a residential density ranging from 11 to 21 dwelling units per acre. The General Plan Land Use Element states that the LMR designation is intended for the development of single-family homes, accessory dwelling units, duplexes, triplexes, condominiums, and small lot subdivisions that:

- Provide a variety of housing types
- Provide access to schools, parks and other community services
- Provide a high-quality architectural design that preserves privacy
- Provide common spaces, recreation areas and services convenient to residents
- Provide an excellent environment for family life
- Preserve residential property values.

The Project also includes a zoning designation amendment to change the zoning of the site from Single-Family Residential (R-1) to Planned Unit Development (PUD) (Figure 13, *Proposed Zoning Designation*) with a general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards. The General Plan Land Use Element states that the PUD is a precise plan, adopted by ordinance that provides the means for the regulation of buildings, structures, and uses of land to facilitate the implementation of the General Plan. It is a way to create site-specific zoning requirements for a site. The PUD is intended to provide for a diversity of uses, relationships, and open spaces in an innovative land plan and design, while ensuring compliance with the provisions of the GGMC.

In addition, the Project includes a land subdivision through a Tentative Tract Map (TTM- 19447) to subdivide the Project site for sale purposes of the 26 townhomes, and approval of a Site Plan.

3.5 DISCRETIONARY APPROVALS

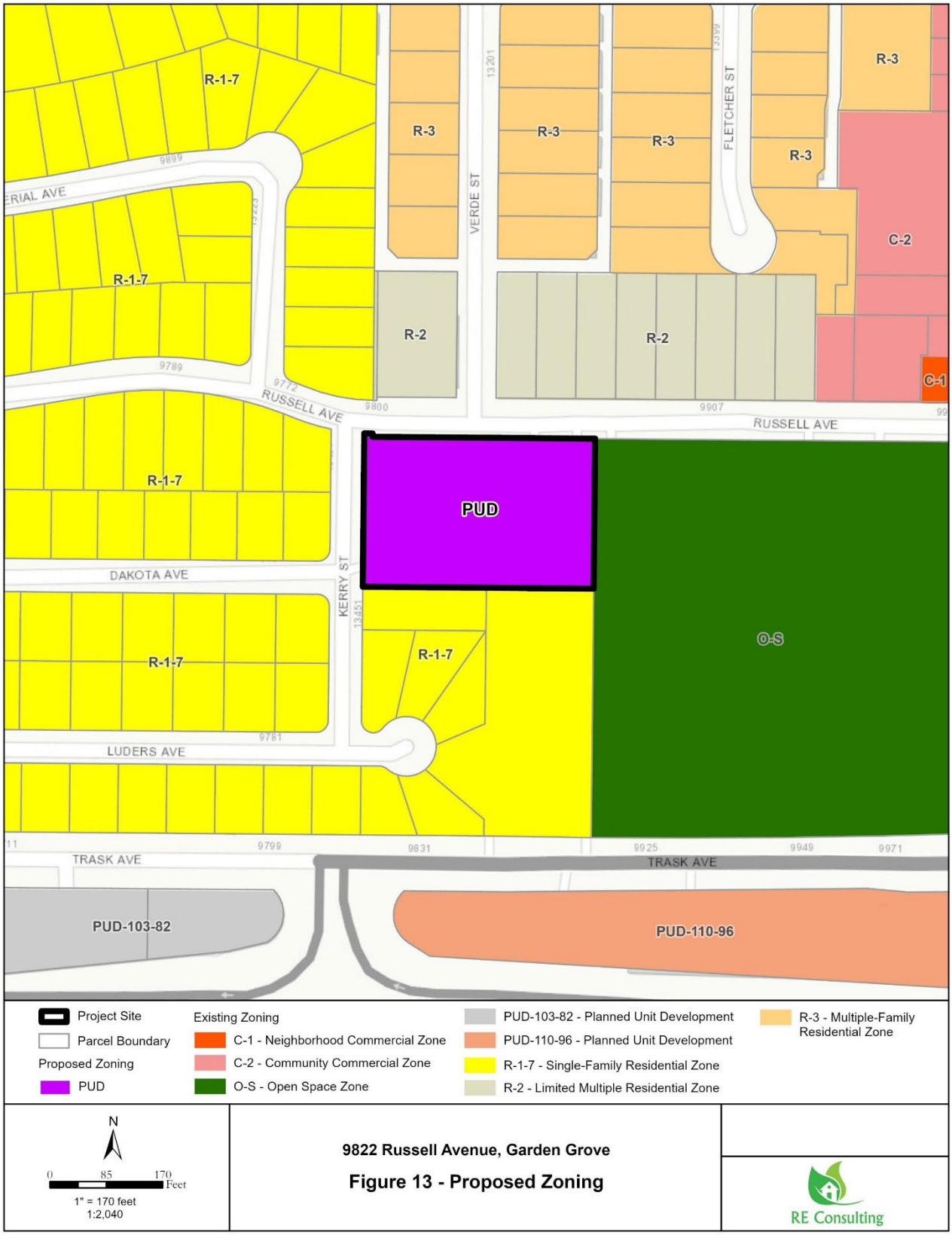
The following discretionary approvals from the City, as Lead Agency, are anticipated to be necessary for implementation of the Project:

- Adoption of a Mitigated Negative Declaration (MND) and associated Mitigation Monitoring and Reporting Program (MMRP)
- Approval of a General Plan Amendment to change the land use designation of the site from LDR to LMR
- Approval of an Amendment to the zoning of the site from R-1 to R-2
- Approval of a PUD
- Approval of a Tentative Tract Map (TTM-19447)
- Approval of a Site Plan, and

- Revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01

Ministerial approvals and permits necessary to execute the Project, including but not limited to, demolition permit, grading permit, building permit, etc.


LDR
MDR
MDR
MDR
MDR
MDR
LC
LMR
LMR
LDR
LDR
MDR
LDR
LDR
CI
HC
HC
VERDE ST
FLETCHER ST
RUSSELL AVE
RUSSELL AVE
DAKOTA AVE
KERRY ST
LUDERS AVE
TRASK AVE
TRASK AVE
Project Site
Parcel Boundary
Existing Land Use
CI - Civic/Institutional
HC - Heavy Commercial
LC - Light Commercial
LDR - Low Density Residential
LMR - Low Medium Density Residential
MDR - Medium Density Residential
N
0 85 170 Feet
1" = 170 feet
1:2,040
9822 Russell Avenue, Garden Grove
Figure 12 - Proposed General Plan Land Use
Map Date: 11/30/2025
Data Sources: City of Garden Grove, World Topo Map
RE Consulting


R-1-7
R-3
VERDE ST
FLETCHER ST
C-2
R-2
C-1
RUSSELL AVE
PUD
O-S
DAKOTA AVE
KERRY ST
LUDERS AVE
TRASK AVE
PUD-103-82
PUD-110-96
Project Site
Parcel Boundary
Proposed Zoning
PUD
Existing Zoning
C-1 - Neighborhood Commercial Zone
C-2 - Community Commercial Zone
O-S - Open Space Zone
PUD-103-82 - Planned Unit Development
PUD-110-96 - Planned Unit Development
R-1-7 - Single-Family Residential Zone
R-2 - Limited Multiple Residential Zone
R-3 - Multiple-Family Residential Zone
N
0 85 170 Feet
1" = 170 feet
1:2,040
9822 Russell Avenue, Garden Grove
Figure 13 - Proposed Zoning
RE Consulting

4 ENVIRONMENTAL CHECKLIST FORM

This section includes the completed environmental checklist form that is used to assist in evaluating the potential environmental impacts of the Project. The checklist form identifies potential Project effects as follows: 1) Potentially Significant Impact; 2) Less Than Significant with Mitigation Incorporated; 3) Less Than Significant Impact; and, 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5 (Environmental Evaluation). Included in the discussion for each topic are standard condition/regulations and mitigation measures, if necessary, that are recommended for implementation as part of the Project.

4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (X) would be potentially affected by this Project, involving at least one impact that is a "Less Than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

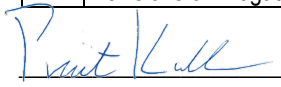
Environmental Factors Potentially Affected

☐	Aesthetics	☐	Agriculture and Forest Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

4.2 DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐	I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



May 1, 2026

Signature Date

Priit Kaskla, AICP

Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify:

(a) the significance criteria or threshold used to evaluate each question; and

(b) the mitigation measure identified, if any, to reduce the impact to less than significant.

4.3 ENVIRONMENTAL CHECKLIST QUESTIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether a project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

The City's General Plan does not identify any scenic vistas within the City and the Project site and surrounding areas are urbanized, have generally flat topography, and do not contain any sensitive scenic vistas. As described in Section 2.3, *Surrounding Land Uses*, the Project site is located within a completely urban and developed area. Specifically, Russell Avenue is adjacent to the north of the site followed by multi-family residential uses. The Sunnyside Elementary School parking area followed by the school buildings is adjacent to the east of the site. Single-family residences and a church are located adjacent to the south. Kerry Street is adjacent to the west of the site followed by single-family residences. There are also no public parks located on, or adjacent to, the Project site, and the portion of the school adjacent to the east of the site consists of a parking lot and classroom buildings. Due to the limited topography and developed land uses in the Project area, views are limited to roadway corridors, which generally shows parked cars, some sidewalks, landscaping surrounding generally residential land uses, and utility poles with powerlines.

The proposed two-story townhomes would be 29 feet 9-inches in height and would be set back a minimum of 11 feet from the 5-foot-wide sidewalk for a minimum of a 16-foot setback from the Russell Avenue right-of-way, and 26 feet from the Kerry Street right-of-way. Although the two-story buildings would be one story higher than the nearby one-story residences and school structures, there are existing two-story structures on the Project site and adjacent parcels, and views along the road corridors would continue to be of parked cars, urban landscaped development, and residential, school, and church surrounding land uses. The proposed buildings would not project into the street corridor, and corridor views would not be hindered. Although the buildings would be higher than the existing one-story structures on and adjacent to the site, it would be consistent with the existing two-story buildings that also exist on and adjacent to the site and there are no scenic vistas that would be blocked by the proposed residential structures. As there are no identified scenic vistas within the vicinity of the site and views of the development around the Project site would remain the same, the Project would not result in an adverse effect on a scenic vista. No mitigation measures are required.

b) Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The California Department of Transportation's (Caltrans) Landscape Architecture Program administers the Scenic Highway Program contained in the Streets and Highways Code, Sections 260–263. State Highways are classified as either Officially Listed or Eligible. There are no officially designated state scenic highways in the City of Garden Grove or in vicinity of the Project (Caltrans 2026). The closest state-designated scenic highway is a portion of State Route 91 (SR-91), which is located approximately 15 miles from the Project site. Therefore, due to the Project distance to a state scenic highway, the proposed Project does not have the potential to damage resources within a state-designated scenic highway. No mitigation measures are required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Project site is surrounded by developed areas that consist of roadways, school, church, and residences that include one and two-story buildings. As shown in Figure 3, the Project site contains one and two-story church, preschool/daycare, and office buildings, surface parking lot, and limited ornamental landscaping. The existing buildings are older wood framed stucco buildings with veneer brick, signage, and rectangular aluminum framed windows. The church building has a shingled pitched roof that extends from the first-floor roofline to the two-story high peak. The two other buildings have similar pitched shingled roofs, but with a reduced angle of pitch. The site is landscaped with lawn, limited ornamental shrubs, and trees adjacent to buildings and along the street frontages. There are no significant visual features or scenic resources within the Project site or surrounding area.

Construction

Construction of the Project would change the visual quality of the Project area with construction activities and equipment during the temporary (approximate 11 month) construction period. During this time, the appearance of the Project site would be altered by the removal of existing structures, equipment, paving, and landscaping. Construction activities (i.e. site preparation, grading, and the staging of construction equipment and materials) would be publicly visible to pedestrians and motorists along Kerry Street and Russell Avenue. However,

construction-related activities, materials, waste, and staging would be obscured from public view to the extent possible by installing temporary construction fencing along the street frontages of the Project site. Given the temporary nature of construction activities and the use of construction fencing to reduce potential impacts, visual impacts resulting from construction activities would be less than significant. No mitigation measures are required.

Operation

The Project would alter the existing views of the site by removing the existing church, preschool, daycare, office, wireless facility, and parking uses and redeveloping the site with two-story townhomes, landscaping, open space areas, and drive isles. As detailed in the Project Description and shown in Figures 7 through 9, the residential structures would have Spanish architectural style with recessed windows with shutters, Spanish tiled pitched roofs with multiple roof lines, gable accents, decorative metal window awning and arbor trellis covered walkways, finished stuccos, Spanish tile accents, and other decorative architectural features. The Project would provide a consistent landscaping theme throughout the site that includes ornamental trees, shrubs, and ground covers.

The proposed two-story townhomes would have a maximum height of 29 feet 9-inches, which would be lower than the existing church building roof of 33 feet in height (not including the steeple and cross) and slightly higher than the two-story preschool/office building that is approximately 28 feet in height. Similar to the proposed onsite uses, the existing residential structures within the Project vicinity are both one and two-stories in height. The proposed residential structures would have varying roof heights, slanted roofs, building and window recesses and projections, and other architectural features that would reduce the visual scale of the proposed structures. Additionally, the proposed residences would be set back a minimum of 11 feet from the 5-foot-wide sidewalk for a minimum of a 16-foot setback from the Russell Avenue right-of-way, and 26 feet from the Kerry Street right-of-way. Both the Kerry Street and Russell Avenue frontages of the site would be landscaped with trees, shrubs, and groundcovers, as shown in Figure 10, *Conceptual Landscape Plan*. The setbacks, landscaping, and perimeter walls would provide a visual buffer between the streets and the two-story townhomes. Given the existing visual character of the Project site and the proposed Spanish decorative architecture, development of the Project would alter, but not degrade the existing visual character or quality of the Project site and its surroundings.

General Plan. The Project site currently has a General Plan land use designation of Low Density Residential (LDR), as shown previously in Figure 4, *Existing General Plan Land Use Designations*. The General Plan describes that the LDR land use is characterized by detached, single-unit structures and accessory dwelling units, and allows up to 11 dwelling units per acre.

The proposed Project includes a General Plan Amendment to change the land use designation of the site to Low Medium Density Residential (LMR) that allows a residential density between 11 and 21 dwelling units per acre. Consistent with the proposed LMR designation, the Project would develop the 1.81-acre Project site with 26 residential townhomes, which would result in a density of 14.4 dwelling units per acre and be within the allowable LMR residential density. Therefore, the Project would be consistent with the density allowable under the proposed General Plan land use designations, and no conflict would occur.

Zoning. The site is zoned Single-Family Residential (R-1), as shown previously in Figure 5, *Existing Zoning Designations*. Section 9.08.020.020 of the GGMC states that the R-1 zone is intended to provide for single-family detached residences on individual lots and compatible associated activities. Section 9.08.020.020 of the

GGMC details that churches, child daycare centers, religious schools, educational institutions are permitted within the R-1 zone with a Conditional Use Permit (CUP).

The proposed Project includes a zoning designation amendment to change the zoning of the site from Single-Family Residential (R-1) to Planned Unit Development (PUD) with a general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards, which implements the LMR General Plan land use designation. The Project would redevelop the aged church, daycare, and preschool site to provide new residences. As shown in Table AES-1, the proposed Project would meet the PUD zoning standards that are based on the R-2 zone. The Project's structures would have varying roof heights, slanted roofs with decorative tile, building and window recesses and projections, and other architectural features that would provide visual scale and character to the proposed two-story structures. Therefore, the proposed Project would result in a less than significant impact related to scenic quality.

Table AES-1: Development Standards for the PUD Based on the R-2 Residential Zone

Standard	PUD / R-2 Zone Standard	Proposed Project
Maximum Density	21.0 units/acre	14.4 units/acre
Front Setback	20 feet to 1st and 2nd floor; 25 feet to 3rd floor	16-foot setback from the Russell Avenue right-of-way 26 feet from the Kerry Street right-of-way
Street Side Setback	10 feet to 1st and 2nd floor; 15 feet to 3rd floor	11 feet
Maximum Height	30 feet	29 feet 9 inches
Maximum Stories	2 stories	2 stories
Maximum Lot coverage	50 percent	43.2 percent

Overall, the proposed Project would be consistent with development standards required by the LMR General Plan land use designation and PUD zone with the R-2 (Limited Multiple Residential) base guiding standards and would not conflict with applicable regulation related to scenic quality. Hence, the proposed Project would not degrade the visual character of the Project site and surrounding area; and impacts would be less than significant. No mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. The Project site is located within a developed urban area. Existing sources of light in the vicinity of the Project site includes: street lights, parking lot lighting, building illumination, security lighting, landscape lighting, and lighting from building interiors that pass-through windows. The exterior lighting on the Project site includes exterior building mounted lighting, parking lot lighting, and lighting at building entrances.

Construction

Although construction activities would occur primarily during daylight hours, construction activities could extend into the evening hours, as permitted by the GGMC Chapter 8.47, Noise Control, construction activities are allowed between 7:00 a.m. and 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. Thus, during standard time, after daylight saving ends, construction could occur after the sun sets. However, any construction-related illumination would be used for safety and security purposes and would be shielded and directed toward work activity areas and to prevent light encroachment into adjacent residential areas. In addition, construction may include nighttime security lighting; however, this would be similar to the existing security lighting on adjacent uses and streetlights. Furthermore, the construction-related lighting would be

temporary (11 months). Therefore, construction of the Project would not create a new source of substantial light that would adversely affect day or nighttime views in the area, and light impacts associated with construction would be less than significant. No mitigation measures are required.

Operation

The proposed residences would include the provision of nighttime lighting for security purposes around the residential buildings, parking areas, and open space recreation areas. Implementation of the Project could contribute additional sources to the overall ambient nighttime lighting conditions. However, the Project is located within an urban area that includes various sources of nighttime lighting and all outdoor lighting would be hooded or appropriately angled away from adjacent land uses and would comply with City development requirements that provides specifications for directing lighting away from adjacent uses and intensity of security lighting. Because the Project area is within an already developed area with various sources of existing nighttime lighting, and the Project would be required to comply with the City's lighting regulations that would be verified by the City's Building and Safety Division during the permitting process, the lighting increase that would be generated by the Project would not adversely affect day or nighttime views in the area. Overall, lighting impacts would be less than significant. No mitigation measures are required.

Reflective light (glare) can be caused by sunlight or artificial light reflecting from finished surfaces such as window glass or other reflective materials. Generally, darker or mirrored glass would have a higher visible light reflectance than clear glass. Buildings constructed of highly reflective materials from which the sun reflects at a low angle can cause adverse glare. However, the Project would not use highly reflective surfaces, or glass sided buildings. Although the residential buildings would contain windows, portions of the windows would be covered by inset into the buildings and separated by stucco, which would limit the potential for glare. As described previously, onsite lighting would be angled down and shielded, which would avoid the potential of onsite lighting to generate glare. In addition, the majority of vehicle parking would be located within garages and areas adjacent to the buildings. The Project would not contain large surface parking lots that could generate glare from numerous windshields aligned in one area. Therefore, the Project would not generate substantial sources of glare, and impacts would be less than significant. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing City Condition of Approval would reduce potential impacts related to aesthetics.

COA: Lighting: Project plans and specifications shall comply with City standard Conditions of Approval for lighting, which states that all lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.

Mitigation Measures

No mitigation measures related to aesthetics are required.

References

California Scenic Highway Mapping System (Caltrans, 2026). Accessed at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Municipal Code. Accessed at: https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is developed for urban uses and located in an area that is developed for urban residential, church, and school uses. The Project site and vicinity is void of agricultural uses. The California Department of Conservation Important Farmland mapping identifies the Project site as Urban and Built-Up land (CDC 2025). No areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by the Project or converted to a non-agricultural use. Thus, no impact would occur, and no mitigation measures are required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. As described in the previous response, the Project area is void of any agricultural uses. As shown in Figure 5, *Existing Zoning Designation*, the Project site is zoned for residential uses and is surrounded by areas zoned for residential and open space. No agricultural zoning is located in the vicinity of the Project area and no parcels within the Project vicinity have Williamson Act contracts (DLRP 2025). Therefore, implementation of the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Thus, no impact would occur, and no mitigation measures are required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project site is generally developed for urban uses and located in an area that is developed for urban uses. The Project site and vicinity is void of forest land or timberland. In addition, the Project site is zoned for residential uses and surrounded by areas zoned for residential and open space uses. Therefore, the Project would not conflict with existing forest land, timberland, or zoning for forest or timberland uses. Thus, no impact would occur, and no mitigation measures are required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As described in the previous response, the Project area is void of any forest land or land zoned for forest uses. Thus, the Project would not result in the loss of forest land or conversion of forest land to non-forest uses. No impact would occur, and no mitigation measures are required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As described in the previous responses, the Project area does not include and is not near any farmland or forest land or land zoned for either farm or forest uses. No other changes to the existing environment would occur from implementation of the Project that could result in conversion of farmland to non-agricultural use or forest land to non-forest use. Thus, no impact would occur, and no mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

There are no existing regulations or City Conditions of Approval related to agriculture and forestry that would reduce impacts and are applicable to the Project.

Mitigation Measures

No mitigation measures related to agriculture and forestry are required.

References

California Department of Conservation Important Farmland Finder (CDC 2025). Accessed at: https://maps.conservation.ca.gov/dlrp/ciff/

California Department of Conservation Division of Land Resource Protection Williamson Act Maps (DLRP 2025). Accessed at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?	☐	☐	☐	☒

The discussion below is based on the Air Quality, Energy, and Greenhouse Gas Impact Analysis, which is included as Appendix A and the Level of Service (LOS) Screening Analysis, which is included as Appendix B.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The City is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) is responsible for regulating and controlling emissions within the basin. The SCAQMD and Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, SCAQMD and SCAG uses regional growth projections to forecast, inventory, and allocate regional emissions from land use and development-related sources. The most recently adopted AQMP is the 2022 AQMP that was adopted by the SCAQMD Governing Board on December 2, 2022, and includes scientific and technological data, planning assumptions, and updated emission inventory methodologies.

As described in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993), for purposes of analyzing consistency with the AQMP, projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The Project would redevelop the site to provide 26 residential townhomes on 1.81 gross acres. The Project would not house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 square feet of floor area. Thus, the Project would not be defined as a regionally significant project under CEQA and would not meet SCAG's Intergovernmental Review criteria.

The proposed Project would construct and operate 26 residential townhomes on the Project site under the proposed General Plan Land Use designation of Low Medium Density Residential (LMR). The LMR designation allows densities between 11 and 21 dwelling units per acre. The Project would result in 14.4 residential units per acre. As detailed below in Section 14, *Population and Housing*, the proposed 26 residences would result in approximately 90 residents at full capacity that would equate to a 0.05 percent increase in both the City's population and number of housing units in the City; and would be 0.4 percent of the SCAG projected increase in households within the City by year 2050. Additionally, the City's Regional Housing Needs Assessment (RHNA) for the 2021–2029 planning period identifies that the City's future housing need is 19,168 units for very-low income, low income, moderate income, and above moderate income households. The Project would be within the City's future housing need for the 2021–2029 planning period. As a result, the Project would not exceed growth projections, and therefore, is consistent with the AQMP.

In addition, as described in Response b), emissions generated by construction and operation of the Project would not exceed thresholds, which are based on the AQMP and are designed to bring the SCAB into attainment for the criteria pollutants for which it is in nonattainment. Therefore, because the Project does not exceed any of the emissions thresholds, it would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation and would not conflict with SCAQMD's goal of bringing the SCAB into attainment for all criteria pollutants. As such, it is consistent with the AQMP, and impacts related to conflict with the AQMP from the Project would be less than significant. No mitigation measures are required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The SCAB has a non-attainment status for federal ozone standards, federal carbon monoxide standards, and state and federal particulate matter standards. Any development in the SCAB, including the proposed Project, could cumulatively contribute to these pollutant violations. The methodologies from the SCAQMD CEQA Air Quality Handbook are used in evaluating project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are listed in Table AQ-1. The SCAQMD's CEQA Air Quality Handbook methodology describes that any project that results in daily emissions that exceed any of these thresholds would have both an individually (project-level) and cumulatively significant air quality impact. If estimated emissions are less than the thresholds or reduced to below the thresholds with implementation of mitigation, impacts would be considered less than significant.

Table AQ-1: SCAQMD Regional Daily Emissions Thresholds[2]

Pollutant	Construction (lbs/day)	Operations (lbs/day)
NOx	100	55
ROG	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SOx	150	150
CO	550	550
Lead	3	3

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter

Construction

The proposed Project would redevelop the site with 26 new townhome residences within an 11-month construction period. Construction activities associated with the proposed Project would generate pollutant emissions from the following: (1) demolition and removal of the existing onsite improvements and hauling demolition debris offsite; (2) preparation of the site; (3) grading and excavation; (4) construction workers traveling to and from the Project site; (5) delivery and hauling of construction supplies to, and debris from, the Project site; (6) fuel combustion by onsite construction equipment; (7) building construction; application of architectural coatings; and paving. The volume of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring.

The demolition of the existing buildings and hardscape is anticipated to amount to 3,527 tons of debris over the 20-working day demolition phase. Also, based on the preliminary grading plan, the Project would not require import or export of material during the grading phase; however, for conservative analysis purposes, 1,000 cubic yards of export is assumed to account for potential spoils.

Although not criteria pollutants for which the region is in non-attainment, as detailed further in Section 9, *Hazards and Hazardous Materials*, due to the age of the existing structures, it is possible that asbestos-containing building materials and lead-based paint are present. As a result, asbestos and lead based paint surveys would be required. Further, abatement of any asbestos containing materials would be required prior to demolition of the existing buildings pursuant to the existing SCAQMD, Cal/OSHA, and Section 19827.5 of the California Health and Safety Code requirements. SCAQMD Rule 1403 sets forth specific procedures for the removal of asbestos and requires that an onsite representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of asbestos-containing materials. Mandatory compliance with the provisions of Rule 1403, through City permitting, would ensure that construction does not result in airborne asbestos. With compliance with AQMD Rule 1403, potential impacts related to asbestos air quality emissions would be less than significant.

Likewise, existing regulations specify actions to manage and control exposure to lead-based paint, including the Code of Federal Regulations Title 29, Section 1926.62 and California Code of Regulations Title 8 Section

[2] Regional thresholds are from the SCAQMD Air Quality Significance Thresholds, March 2015.

1532.1, that cover the demolition, removal, cleanup, transportation, and disposal of lead-containing material. Specifically, Cal/OSHA's Lead in Construction Standard requires a project to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction to ensure that lead based dust does not become airborne. With compliance with the Cal/OSHA requirements, potential impacts related to lead-based paint air quality emissions would be less than significant.

Regarding criteria pollutants, it is mandatory for all construction projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM_{10}, and $PM_{2.5}$ emissions, from construction activities. Rule 403 would be implemented as a standard City construction Condition of Approval and requirements include, but are not limited to: applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12-inches, and maintaining effective cover over exposed areas. In addition, implementation of SCAQMD Rule 1113 that governs the ROG content in architectural coating, paint, thinners, and solvents, would further reduce construction emissions of ROG from the Project.

As shown in Table AQ-2, CalEEMod results indicate that construction emissions generated by the proposed Project would not exceed SCAQMD regional thresholds. Therefore, emissions from construction activities would be less than significant, and no mitigation is required.

Table AQ-2: Maximum Regional Construction Emissions Summary

Maximum Daily Emissions	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2027	2.17	19.61	23.81	0.04	5.20	2.00
2028	13.78	12.16	17.79	0.03	0.67	0.40
Maximum Daily Emission (2027-2028)	**13.78**	**19.61**	**23.81**	**0.04**	**5.20**	**2.00**
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

Operation

Operation of the proposed 26 residential townhomes would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as landscaping, applications of architectural coatings, and consumer products. Also, vehicular emissions would generate a substantial portion of the operational emissions from the Project. As detailed in Section 17, *Transportation*, the existing church, preschool and daycare uses are estimated to generate approximately 219 daily trips, including 37 trips during the a.m. peak hour and 28 trips during the p.m. peak hour. The proposed Project is anticipated to generate approximately 161 daily trips, with 11 trips during the a.m. peak hour and 14 trips during the p.m. peak hour.

The Project would result in 58 fewer daily trips, including 26 fewer trips during the a.m. peak hour, and 24 fewer trips during the p.m. peak hour than the existing uses on the site. This reduction in vehicle trips would result in a net decrease for ROG, NOx, CO, SO2, PM_{10}, and $PM_{2.5}$ daily emissions, as detailed in Table AQ-3. Therefore, the Project would result in reduced vehicular emissions compared to the existing site uses; and would not result

in an exceedance of the emissions thresholds. The Project's operational emissions would be less than significant. No mitigation measures are required.

Table AQ-3: Summary of Peak Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile	0.49	0.38	4.62	0.01	1.28	0.33
Area	0.78	0.01	1.48	<0.01	<0.01	<0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total Operational Emissions	1.27	0.39	6.10	0.01	1.28	0.33
Existing Operational Emissions	1.55	0.96	9.57	0.02	2.08	0.55
Net Operational Emissions	- 0.28	- 0.56	- 3.47	- 0.01	- 0.79	- 0.22
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008) recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ construction-related impacts to sensitive receptors in the immediate vicinity of the Project site. Sensitive receptors can include residences, schools, playgrounds, childcare centers, athletic facilities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, "offsite mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). SCAQMD has developed LSTs that represent the maximum emissions from a Project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards; and thus, would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NOx, CO, PM_{10}, and $PM_{2.5}$ pollutants for each of the 38 source receptor areas (SRAs) in the SCAB. The Project site is located in SRA 17, Central Orange County.

Construction

The localized thresholds from the mass rate look-up tables in SCAQMD's Final Localized Significance Threshold Methodology document, were developed for use on projects that are less than or equal to 5-acres in size or have a disturbance of less than or equal to five acres daily; and include thresholds for projects that would disturb one, two, three, four, or five acres. As the Project site is 1.81-acres, the SCAQMD criteria for LSTs is to assume that the proposed Project would disturb a maximum of 1.81 acres per day. Thus, construction emissions were evaluated by interpolating between the 1-acre and 2-acre disturbance thresholds to estimate thresholds for a 1.81-acre site (total site area).

Table AQ-4 identifies the localized impacts at the nearest receptor location in the vicinity of the Project, which is a residence located approximately 2.25 meters (7.38 feet) south of the Project site. Therefore, the closest SCAQMD threshold distance of 25 meters was applied (25 meters is the shortest distance from source to receptor contained in the SCAQMD emission lookup tables). As shown, Project construction-source emissions

would not exceed the applicable SCAQMD LSTs for emissions of any criteria pollutant. Thus, implementation of the Project would not result in a localized air quality impact, and no mitigation is required.

Table AQ-4: Maximum Daily Localized Construction Emissions (lbs/day)

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
2027 (Year 1)				
Demolition	12.43	14.44	4.20	1.00
Site Preparation	18.37	19.78	0.88	0.81
Grading	17.00	17.83	0.91	0.84
Building Construction	11.46	15.23	0.37	0.34
Maximum On-site Emission (2027)	***18.37***	***19.78***	***4.20***	***1.00***
2028 (Year 2)				
Building Construction	10.95	15.21	0.33	0.30
Paving	4.88	7.21	0.19	0.18
Architectural Coating	1.08	1.49	0.02	0.02
Maximum On-site Emission (2028)	***10.95***	***15.21***	***0.33***	***0.30***
Maximum Daily Emissions	***18.37***	***19.78***	***4.20***	***1.00***
SCAQMD Screening Thresholds	108.50	671.30	5.60	3.80
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: NOx = nitrogen oxides, CO = carbon monoxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

Additionally, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD's standard construction practices (Rules 402 and 403). Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source, which is implemented as a standard City construction Condition of Approval. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during construction, and impacts would be less than significant. No mitigation measures are required.

Diesel Particulate Matter (DPM) from construction is a source of airborne toxins that are generated by heavy-duty diesel engines. Peak localized emissions of DPM occur during demolition and earthwork phases of construction. Key sources include grading equipment, excavators, generators, and haul trucks. As provided in Section 3.3, *Project Construction*, the Project would result in a limited volume of demolition and earthwork completed over approximately 26 days and be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays, per GGMC Chapter 8.47. The California Air Resources Board (CARB) details that DPM is a subset of $PM_{2.5}$ and that NOx emissions from diesel engines can undergo chemical reactions in the atmosphere leading to formation of $PM_{2.5}$ (CARB 2026). As detailed in Table AQ-4, the maximum daily localized emissions of $PM_{2.5}$ are 26% of the screening threshold and the maximum localized daily emissions of NOx are 17% of the threshold. Due to the limited volumes of emissions, additional analysis of DPM construction emissions is not required.

Operation
According to the SCAQMD LST methodology, LSTs apply to stationary mobile sources. Projects that involve mobile sources that spend long periods queuing and idling at a site, such as transfer facilities or warehousing and distribution buildings, have the potential to exceed the operational localized significance thresholds. The proposed Project would operate 26 residential townhome units, which do not involve vehicles idling or queueing for long periods. Therefore, due to the lack of significant stationary source emissions, impacts related to operational localized significance thresholds would be less than significant, and no mitigation measures are required.

d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?

No Impact. The proposed residential Project would not emit other emissions, such as those generating objectionable odors, that would affect a substantial number of people. The threshold for odor is identified by SCAQMD Rule 402, Nuisance, which states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals*.

The type of facilities that are considered to result in other emissions, such as objectionable odors, include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

The proposed Project would implement residential development that does not involve the types of uses that would emit objectionable odors affecting a substantial number of people. In addition, odors generated by the Project are required to be in compliance with SCAQMD Rule 402, which would prevent nuisance odors.

During construction, emissions from construction equipment, architectural coatings, and paving activities may generate odors. However, these odors would be temporary, intermittent in nature, and would not affect a substantial number of people. The noxious odors would be confined to the immediate vicinity of the construction equipment. Also, the short-term construction-related odors would cease upon the drying or hardening of the odor-producing materials. Therefore, impacts associated with other emissions, such as odors, would not adversely affect a substantial number of people. No mitigation is required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations and City Condition of Approval would reduce potential impacts related to air quality.

SCAQMD Rule 402 – Nuisance: The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The Project shall not

discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

COA: SCAQMD Rule 403 – Fugitive Dust: The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403 as implemented by the City's standard Condition of Approval, which includes dust minimization measures, the use of electricity from power poles rather than diesel or gasoline powered generators, and the use of methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment, where feasible.

SCAQMD Rule 1113 – Architectural Coatings: The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of Volatile Organic Compound) and/or High Pressure Low Volume (HPLV) applications shall be used.

Mitigation Measures

No mitigation measures related to air quality are required.

References

AQMD Attainment Status for South Coast Air Basin. Accessed at: http://www.aqmd.gov/home/air-quality/clean-air-plans

AQMD Rule 402. Nuisance. Accessed at: www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

Air Quality, Energy, and Greenhouse Gas Impact Analysis, prepared by EPD Solutions, Inc., Appendix A

California Air Resources Board (CARB 2026). Overview: Diesel Exhaust & Health Accessed at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health

Level of Service (LOS) Analysis Screening Memo, prepared by EPD Solutions, Inc., Appendix B.

South Coast AQMD Final 2022 AQMP. Accessed at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

South Coast Air Quality Management District Final Localized Significance Threshold Methodology (SCAQMD 2008). Accessed: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf

Southern California Association of Governments Regional Housing Needs Assessment 2021-2029. Accessed: https://scag.ca.gov/rhna

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The Project site is developed with buildings that are surrounded by paved surfaces and small areas of ornamental landscaping that includes grass lawn, trees, and shrubs. The Project site is located within an urbanized area that is surrounded by buildings, fencing, and roadways. No endangered, rare, threatened, or special status plant species (or associated habitats) or wildlife species designated by the U.S. Fish and Wildlife

Service (USFWS), California Department of Fish and Wildlife (CDFW), or California Native Plant Society (CNPS) are known to occur on the site.

The Project would redevelop the site and provide new landscaping that would include a variety of ornamental trees, shrubs, and groundcover. As no sensitive species or habitats are located within the site or surrounding urban and developed areas, implementation of the Project would not result in an adverse effect, either directly or through habitat modifications, on any sensitive species, and significant impacts would not occur. No mitigation measures are required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

No Impact. Riparian habitats occur along the banks of rivers, streams, or wetland areas. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies or are known to provide habitat for sensitive animal or plant species. As described in the previous response, the Project site is within an urban area, largely developed, and does not contain any sensitive natural habitats, including riparian habitat or sensitive natural community. Additionally, the Project site is bound by developed areas that include buildings, pavement, roadways, fencing, and interspersed areas of ornamental landscaping that do not contain sensitive natural habitat areas. No riparian habitat or other sensitive natural communities occur adjacent to the Project site. Additionally, the Project site and adjacent areas are not included in any local or regional plans, policies, and regulations that identify riparian habitat or other sensitive natural community. Thus, no impacts related to riparian habitat or other sensitive natural communities identified in local or regional plans would result from Project implementation, and no mitigation would be required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The Project site and adjacent areas are located within a developed urban area and do not contain natural wetlands. Therefore, the Project would not result in impacts to wetlands. No mitigation measures are required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. Wildlife corridors are areas where wildlife movement is concentrated due to natural or anthropogenic constraints and corridors provide access to resources such as food, water, and shelter. Animals use these corridors to move between different habitats, provide avenues for wildlife dispersal, migration, and contact between other populations. The Project site is not located within a designated wildlife corridor or linkage. The Project site is within a developed area and does not provide function for wildlife movement. The site is surrounded by roadways on two sides and residential, church, and school development separated by a fence and a wall on the other two sides. Also, there are no rivers, creeks, or open drainages

near the site that could function as a wildlife corridor. Thus, implementation of the Project would not result in impacts related to wildlife movement or wildlife corridors.

The Project site contains scattered ornamental trees that could be used for nesting by common bird species that are protected by the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code Sections 3503.5, 3511, and 3515 during the avian nesting and breeding season. The provisions of the MBTA prohibit disturbing or destroying active nests. All development in the City is required to comply with established laws and regulations regarding the protection of migratory or sensitive wildlife (e.g., migratory bird treaty act) that would be implemented through the City's standard Condition of Approval. Therefore, no significant impacts to wildlife nursery sites would occur from implementation of the proposed Project, and no mitigation measures are required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. There are no local biological related policies or ordinances, such as a tree preservation policy or ordinance that is applicable to the Project. Trees in the public right-of-way in the City are protected under Chapter 11.32 of the GGMC, which regulates the planting, maintenance, and removal of trees in public locations in the City. The Project site contains scattered ornamental trees that are on private property and not subject to the City ordinance. Any street trees that would be planted, moved, or replaced within the Russell Avenue or Kerry Street right-of-way as part of the Project would comply with the removal, moving, and planting regulations included Chapter 11.32 of the GGMC that would be verified through the City's development permitting process. Therefore, implementation of the Project would not conflict with local policies or ordinances protecting trees and no impact would occur. No mitigation measures are required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project site is within a developed and urban area. The Project site does not contain any natural lands that are subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, implementation of the proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact would occur, and no mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation and City Condition of Approval would reduce potential impacts related to biological resources.

COA: Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515: The Project construction COA plans and specifications shall identify compliance with the following City standard Condition of Approval. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3515 of the California Fish and Game regulations, which require the protection of active nests of all bird species, prior to the removal of any on-site landscaping, including the removal of existing trees.

Prior to commencement of grading activities and issuance of any building permits, the City Community Development Director, or designee, shall verify that all Project grading and construction plans are consistent with the requirements of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515, as stated above, that pre-construction surveys have been completed (if needed) and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.

Mitigation Measure

No mitigation measures related to biological resources are required.

References

California Department of Fish and Wildlife. 2020. California Natural Diversity Database (CNDDB), Whittier 7.5-minute Quadrangle. Accessed at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report (SCH# 2021060714), 2021. Accessed: https://ceqanet.opr.ca.gov/Project/2021060714

City of Garden Grove Municipal Code. Accessed at: https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

United States Fish and Wildlife Service (USFWS). National Wetlands Inventory. Accessed: https://www.fws.gov/wetlands/data/mapper.html

U.S. Fish and Wildlife Service Migratory Bird Treaty Act. Accessed at: https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The discussion below is based on the Cultural Resources Study for the 9822 Russell Avenue Project, included as Appendix C, the Preliminary Geotechnical Investigation Report, which is included as Appendix D, and the Phase I Environmental Site Assessment, included as Appendix E.

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant Impact. The Project site does not contain any CEQA historical resources. CEQA defines a historical resource as something that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR); (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and CEQA Guidelines Section 15064.5[a]).

The California Register defines a "historical resource" as a resource that meets one or more of the following criteria: (1) associated with events that have made a significant contribution to the broad patterns or local or regional history of the cultural heritage of California or the United States; (2) associated with the lives of persons important to local, California, or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or (4) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The Project site is currently developed with three structures utilized for church, preschool, and daycare uses. City building permits identify that the original church structures on site were developed in 1957, 1961, and 1965, which included remodeling of the original 1957 structure. Between 1972 and 1987, a breezeway was constructed connecting the east façade of the northernmost building to the west façade of the easternmost building. Then in 1981 the 2,875 square foot one-story building was converted and remodeled for use as a school facility. It was noted in the 1981 Conditional Use Permit (CUP) for the conversion that there is no kitchen

facility (such as one that currently exists). Building permits records also identify building alterations in 1980, 1983, a new roof in 1989, roof alterations in 2003, new wrought iron fencing in 2011, and an unmanned wireless communications antennae installed in the church steeple in 2001 that is currently inoperable. Thus, the existing buildings on the site have been modified since the original construction and have lost the original integrity. Although the existing buildings were constructed over 50 years ago, which is of historic era (50 years of age or greater), the buildings are older modern structures with modern signage on the buildings, light fixtures, windows, doors, air conditioning units, roof mounted ventilation systems, and shingled roofs with modern fencing and surface parking lots.

The buildings on the Project site have been used by various churches and preschools since development, with interior improvements provided through the years. The site buildings are currently occupied by Iglesia de Cristo de Restauracion and Orangefield Child Development Center. The history of different churches and schools on the site is listed in Table CUL-1.

Table CUL-1: History of Site Occupants

Year	Site Occupants
1955	Garden Grove Church of Christ
1958	Garden Grove Church of Christ
1964	Church of Christ
1967	Church of Christ
1970	Church of Christ Christian
1975	Church of Christ
1981	Garden Grove Church of God
1986	Cornerstone Christian/Garden Grove Christian Church
1991	Bethel Missionary Church, Cornerstone Christian/Garden Grove Christian Church
1996	Cornerstone Christian/Garden Grove Christian Church
2001	Cornerstone Christian, Cross County Vietnamese Christian Church
2003	Bethel Missionary Church, Cross County Vietnamese Christian Church
2008	Iglesia de Cristo de Restauracion
2012	Sunflower Preschool
2016	Sunflower Preschool, Development Center Orange, Iglesia de Cristo de Restauracion
2020	Sunflower Preschool, Development Center Orange, Iglesia de Cristo de Restauracion
2023	Sunflower Preschool, Development Center Orange, Iglesia de Cristo de Restauracion
2024	Sunflower Preschool, Development Center Orange, Iglesia de Cristo de Restauracion

Source: Phase I ESA, Appendix E

As part of the Cultural Resources Study for the Project a records search of the site and a one-mile radius was completed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, which identified that the buildings on the Project site were previously evaluated in 2014 and determined not to be eligible for the National Register of Historic Places (NRHP). In 2014 it was noted that the property was not associated with any historic events or significant persons and does not reflect a notable example of a particular architectural style or the workmanship of a specific architect or craftsman (Appendix C).

In addition, the Cultural Resources Study (Appendix C) determined that none of the structures associated with Project site embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual, or possess high artistic values. Further, additions and modifications to the buildings have reduced the buildings' integrity of design and materials. As such, the Project site buildings are not significant or eligible for the CRHR (Appendix C). The many churches and preschool/daycare facilities

that have operated on the site are not unique to Garden Grove or the region; and these church and school buildings are not associated with events, persons, or architecture that would meet the California Register criteria of a historic resource. Therefore, impacts related to historic resources would not occur from demolition of the existing buildings.

The adjacent Sunnyside Elementary school buildings consist of typical elementary school structures that are adjacent to school parking, playgrounds, open space, and portable classrooms. The school does not consist of a historic resource. In addition, the residential structures that are to the north of Russell Avenue, to the west of Kerry Street, and adjacent to the south of the site are modern residential structures with shingle roofs and windows with a variety of architectural styles and separated by fencing and do not consist of documented historic resources.

As the Project site does not contain and is not adjacent to any historic resources, redevelopment of the site with new residential townhomes would not result in impacts to CEQA historic resources. Thus, impacts would be less than significant, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact.

Construction
The Project site has been disturbed by previous activities. Review of historic aerial photographs of the Project site and surrounding area show that the site was used for agricultural land from 1938 through 1953; and then development of church structures began in 1955. As explained in the Preliminary Geotechnical Investigation Report (Appendix D), soils beneath the Project site consist of approximately two feet of compacted artificial fill, but thicker deposits of fill are expected to be under existing building pads. The Project involves grading and excavation of the upper two feet (or one foot below footings) of soil that would be removed and recompacted. Thus, Project excavation would not be likely to encroach into non-fill soils.

The Cultural Resources Study (Appendix C) records search performed at the SCCIC at California State University, Fullerton indicated that no prehistoric resources have ever been identified within the vicinity of the Project. Additionally, the Cultural Resources Study determined that the disturbed nature of the site as a result of previous development, clearing, and grading, coupled with the records search results, indicates that there is little to no potential for any significant archaeological deposits to be present within the Project boundaries. Therefore, potential impacts to archaeological resources would be less than significant. No mitigation would be required. However, the City has a standard Condition of Approval related to archaeological resources that is included in the case that any potential resources are found during Project construction.

Operation
At the completion of Project construction, the proposed residences would not result in further disturbance of native soils on the site. Therefore, operation of the Project would not result in a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. No mitigation would be required.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. The Project site has been extensively disturbed, as described above, and has not been previously used as a cemetery. Thus, potential impacts related to human remains are less than

significant. However, in the unanticipated event that human remains are found during Project construction activities compliance with California Health and Safety Code Section 7050.5 will be required. As specified by California Health and Safety Code Section 7050.5, if human remains are found on the Project site, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will make a determination as to the Most Likely Descendent. Compliance with the existing California Health and Safety Code regulations will ensure impacts related to potential disturbance of human remains are less than significant. No mitigation would be required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation and City Condition of Approval would reduce potential impacts related to cultural resources.

COA: Archaeological Resources. The Project construction plans and specifications shall identify compliance with the following City standard Condition of Approval. During construction, if archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified archaeologist, acceptable to the City to evaluate and determine appropriate treatment for the specimen or resource, and work in the vicinity of the discovery shall halt until appropriate assessment and treatment of the resource is determined by the archeologist (work can continue elsewhere on the Project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the archaeologist shall be implemented by the applicant at its own cost.

Human Remains: In the event that human remains are encountered on the Project site, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. Prior to the issuance of grading permits, the City shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

Mitigation Measures

No mitigation measures related to energy are required.

References

California State Parks Office of Historic Preservation. California Register of Historical Resources. https://ohp.parks.ca.gov/ListedResources/

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report (SCH# 2021060714), 2021. Accessed: https://ceqanet.opr.ca.gov/Project/2021060714

Cultural Resources Study for the 9822 Russell Avenue Project, 2025. Prepared by BFSA Environmental Services. (Appendix C)

National Park Service. National Register of Historic Places
https://www.nps.gov/subjects/nationalregister/database-research.htm

Phase I Environmental Site Assessment, prepared by Partner Engineering and Science, Inc, 2025 (Appendix E).

Preliminary Geotechnical Investigation Report, 2025. Prepared by Alubs & Associates, Inc. (Appendix D).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

The discussion below is based on the Air Quality, Energy, and Greenhouse Gas Impact Analysis, included as Appendix A.

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. As the Project site is developed with a church, preschool and daycare and the site is connected to the existing utility infrastructure, which includes electrical and natural gas services. The Southern California Gas Company currently provides natural gas to the Project site and surrounding area. Additionally, Southern California Edison currently provides electricity services to the Project site and surrounding area. The proposed Project would not utilize natural gas and would install new onsite electrical infrastructure that would connect to the existing offsite lines.

Construction

Construction of the proposed Project would remove the existing site improvements and landscaping and redevelop the site with 26 new townhome residences, recreation and open space areas, landscaping, and parking facilities. During construction, energy would be consumed in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Based on these uses of energy during construction activities, the proposed buildings and the associated infrastructure would not be expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in Southern California. Construction of the Project would not involve any unusual or increased need for energy. In addition, the extent of construction activities that would occur is limited to a total of 11 months (as listed previously in Table 2, Construction Schedule), and the demand for construction-related electricity and fuels would be limited to that time frame.

As shown in Table E-1, construction of the proposed Project would require a total of 25,810 gallons of diesel fuel and 6,369 gallons of gasoline fuel from construction vehicles. This would result in a <0.01 percent increase in both countywide construction diesel fuel consumption and countywide on-road gasoline consumption. Thus, increased energy consumption from the construction of the proposed Project would be nominal. Additionally, it should be noted that this total fuel consumption is a conservative analysis and would likely overstate the amount of fuel usage, as specific construction equipment (e.g., crane) is not expected to operate during the entire duration of the construction activity.

Table E-1: Estimated Construction Equipment Fuel Consumption

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	2,342	6,369
Off-Road Construction Equipment	23,468	-
Total	**25,810**	**6,369**
Orange Countywide Consumption	148,356,352	863,917,364
Percentage Increase (%)	<0.01%	<0.01%

Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

Construction contractors are required to demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment as part of the City's construction permitting process to ensure that equipment would not use fuel inefficiently. In addition, CARB regulations and CCR Title 13, Motor Vehicles, section 2449(d)(3) limits idling times of construction vehicles to no more than 5 minutes, which avoids unnecessary and wasteful consumption of fuel due to idling of construction equipment. Because Project construction activities would comply with these existing regulations, as ensured through the City's permitting process, it would not use fuel in a wasteful, inefficient, and unnecessary manner. Thus, no impacts related to wasteful, inefficient, or unnecessary construction energy usage would occur, and no mitigation measures are required.

Operation

Once operational, the Project would generate demand for electricity and gasoline for motor vehicle trips. Operational use of energy includes the heating, cooling, and lighting of the residences, water heating, operation of electrical systems and plug-in appliances, and outdoor lighting, and the transport of electricity and water to the residences where they would be consumed. This use of energy is typical for urban development, no additional energy infrastructure would be required to be built to operate the Project, and no operational activities would occur that would result in extraordinary energy consumption.

As detailed in Table E-2, operation of the proposed Project is estimated to result in the annual use of approximately 106,474.3 kilowatt-hour (kWh) of electricity, which is approximately 61,076.91 kWh less than the existing church, preschool, and daycare uses. Also, the Project is estimated to use 24,208.6 gallons of gasoline annually, which is 13,061.9 gallons less annually than the existing church, preschool, and daycare uses. Further, operation of the proposed Project would account for less than 0.01 percent of countywide electricity consumption and less than 0.01 percent of countywide gasoline consumption.

Table E-2: Estimated Annual Operational Energy Consumption

Operational Source	Project Energy Usage	Orange Countywide Energy Consumption	Project Percentage
Electricity (Kilowatt-Hour)			
Proposed Project	106,474.3	18,759,000,000	<0.01%
Existing Use	167,551.2		
Net Electricity	- 61,076.91		
Gallons of Gasoline Fuel			
Proposed Project	24,208.6	863,917,364	<0.01%
Existing Use	37,270.5		
Net Petroleum (Gasoline)	- 13,061.9		

Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

The proposed Project would be required to meet the current Title 24 energy efficiency standards, as included in GGMC Section 18.04.010. The City's administration of the Title 24 requirements includes review of design components and energy conservation measures during the permitting process, which ensures that all requirements are met. Typical Title 24 measures include solar panels, insulation; use of energy-efficient heating, ventilation, and air conditioning (HVAC) equipment; solar-reflective roofing materials; energy-efficient indoor and outdoor lighting systems; and incorporation of skylights, etc. In complying with the Title 24 standards, impacts to peak energy usage periods would be minimized, and impacts on statewide and regional energy needs would be reduced. Thus, operation of the Project would not use large amounts of energy or fuel in a wasteful manner, and no operational energy impacts would occur. No mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would be required to meet the CALGreen energy efficiency standards in effect during permitting of the Project, which are included in the GGMC as Section 18.04.010. The City's administration of the requirements includes review of design components and energy conservation measures during the permitting process, which ensures that all requirements are met. In addition, the Project would not conflict with or obstruct opportunities to use renewable energy, such as solar energy, which would be included on the residential rooftops as required by the existing Title 24/CALGreen standards. As such, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would not occur. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations would reduce potential impacts related to energy.

CALGreen Compliance: The Project plans and specifications shall implement compliance with the CALGreen Building Code as included in the City's GGMC Section 18.04.010 to ensure efficient use of energy. CALGreen specifications are required to be incorporated into building plans as a condition of building permit approval.

California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3): The Project construction plans and specifications shall implement compliance with CCR Title 13, Motor Vehicles, Section 2449(d)(3), which states that no vehicle or engines may idle for more than 5 consecutive minutes. The idling

limit does not apply to queuing and necessary operation to accomplish work for which the vehicle/equipment was designed.

Mitigation Measures

No mitigation measures related to energy are required.

References

Air Quality, Energy, and Greenhouse Gas Impact Analysis (Appendix A), prepared by EPD Solutions, 2026.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The discussion below is based on the Preliminary Geotechnical Investigation Report, which is included as Appendix D and the Paleontological Assessment, included in Appendix F, that were completed for the Project.

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact. The Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. As described by the Preliminary Geotechnical Investigation Report prepared for the Project (Appendix D), there are no known active faults traversing the site. The closest active fault is the San Joaquin Hills Fault that is located 5.22 miles from the Project site. Thus, the Project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map, and impacts would not occur. No mitigation measures are required.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

ii. Strong seismic ground shaking?

Less than Significant Impact. As with all of Southern California, the Project site is subject to strong ground motion resulting from earthquakes on nearby faults. The principal seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along several major active or potentially active faults in Southern California. As described in the previous response, the closest active fault is the San Joaquin Hills Fault that is approximately 5.22 miles from the Project site (Appendix D). Movement along this fault, or other regional faults could result in seismic ground shaking on the Project site. The amount of motion expected at the Project site can vary from none to forceful depending upon the distance to the fault and the magnitude of the earthquake. Greater movement can be expected at sites located closer to an earthquake epicenter.

However, structures built in the City are required to be built in compliance with the California Building Code ("CBC" [California Code of Regulations, Title 24, Part 2]), as included in the GGMC in Title 18 Building Codes and Regulations, which regulates all building and construction projects within the City and implements a minimum standard for building design and construction that includes specific requirements for seismic safety, excavation, foundations, retaining walls and site demolition. The Preliminary Geotechnical Investigation Report (Appendix D), which is required pursuant to CBC regulations, prepared for the Project provides CBC seismic structural design criteria that are specific to the onsite soils and potential seismic ground shaking that includes: excavation, re-compaction, and foundation systems. Project compliance with the requirements outlined in the Preliminary Geotechnical Investigation Report shall be a condition for Project approval. Because the Project would be required to be constructed in compliance with the CBC and the GGMC, which would be verified through the City's plan check and permitting process, the Project would result in a less than significant impact related to strong seismic ground shaking. No mitigation measures are required.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, located within approximately 50 feet of the ground surface, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. During the loss of stress, the soil acquires

"mobility" sufficient to permit both horizontal and vertical movements. Soil properties and soil conditions such as type, age, texture, color, and consistency, along with historical depths to ground water are used to identify, characterize, and correlate liquefaction susceptible soils.

Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Lateral spreading is a form of seismic ground failure due to liquefaction in a subsurface layer.

The onsite borings identified groundwater as high as 14 feet below the ground surface and the Preliminary Geotechnical Investigation Report included an analysis of the potential effects related to liquefaction, which identified that the presence of layers of sands with silt, sandy silts, silty sands / sandy silts, and silty sands that are onsite that would be prone to liquefaction and onsite settlement of soils that could affect the proposed structures. In order to reduce the potential liquefaction related settlement, the Preliminary Geotechnical Investigation Report states that Project construction should include removal and re-compaction of the upper 12-inches of site soils and use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations, in compliance with the CBC, which would reduce the potential of liquefaction related settlement to a less than significant level. The Project would be required to be constructed in compliance with the CBC, the GGMC, and the recommendations of the Preliminary Geotechnical Investigation Report, which would be verified through the City's plan check and permitting process and is a standard City Condition of Approval. Thus, the Project would be required to implement re-compaction of soils and foundation systems in compliance with the CBC, and potential impacts related to liquefaction would be reduced to a less than significant level. No mitigation measures are required.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

iv. Landslides?

No Impact. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquake induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. As described above, the Project site is located in a seismically active region subject to strong ground shaking. However, the Project site is located in a flat developed urban area that does not contain or is adjacent to large slopes, and the Project would not generate large slopes. As a result, implementation of the Project would not expose people or structures to substantial adverse effects involving landslides, and impacts related to landslides would not occur. No mitigation measures are required.

b) Result in soil erosion or the loss of topsoil?

Less than Significant Impact. The Project site is largely impervious, as it is generally covered by pavement or the existing buildings. However, small areas of landscaping between the existing buildings, adjacent to the front parking area, along Kerry Street, and along the Russell Avenue frontage. During construction, the Project would redevelop the site for townhome residential uses, which would include areas of landscaping that would surround the proposed structures and be located along the site boundary, which would cover loose soils and reduce potential for soil erosion.

In addition, Section 6.40.050 of the GGMC states that all new development and significant reconstruction within the City, such as the Project, shall be undertaken in accordance with the County Drainage Area Management Plan (DAMP). The DAMP requires that construction sites implement control practices that address erosion and sedimentation (DAMP Section 8.0). Additionally, the Statewide National Pollutant Discharge Elimination

System (NPDES) Permit for General Construction Activity requires implementation of a Storm Water Pollution Prevention Plan (SWPPP), by a Qualified SWPPP Developer. The SWPPP is required to be consistent with the County DAMP, address site-specific conditions related to sources of sediment, and implement erosion control and sediment control BMPs to reduce or eliminate sediment during construction. Adherence to a City approved SWPPP, which would be verified prior to the issuance of a demolition or grading permit would ensure that potential erosion associated with construction activities would be minimized, and impacts would be less than significant.

After construction is completed, the Project site would consist of new paved areas and landscaping and would not include substantial areas of loose topsoil that could result in soil erosion or the loss of topsoil. Also, operation of the proposed Project would be required to comply with the requirements of the County DAMP that requires a Water Quality Management Plan (WQMP) that includes Low Impact Development (LID) features and BMPs to limit the potential for erosion during storm water runoff. The Project's WQMP would be reviewed and approved by the City prior to the issuance of a building permit to ensure it complies with the DAMP regulations, which would ensure that operation of the proposed Project would not result in soil erosion or loss of topsoil. With implementation of existing regulations, impacts would be less than significant, and no mitigation measures are required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. As described above, the Project site is flat and does not contain nor is adjacent to any slope or hillside area. The Project would not create slopes. Thus, on or offsite landslides would not occur from implementation of the Project. Also, as previously described, potential effects related to liquefaction would be avoided by removal and re-compaction of the upper 12-inches of the site soils and use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations in compliance with the CBC. Thus, impacts related to liquefaction would be less than significant.

Lateral spreading, a phenomenon associated with seismically induced soil liquefaction, is a display of lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. It is typically exemplified by the formation of vertical cracks on the surface of liquefied soils, and usually takes place on gently sloping ground or level ground with nearby free surface such as drainage or stream channel. As described previously, the Preliminary Geotechnical Investigation Report (Appendix D) states that onsite soils consist of layers of sands with silt, sandy silts, silty sands / sandy silts, and silty sands, and that groundwater is 14 feet below the ground surface. As a result, the site could be subject to seismic related lateral spreading. Also, as described previously, the Preliminary Geotechnical Investigation Report states that Project construction should include removal and re-compaction of the upper 12-inches of the site soils and use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations in compliance with the CBC. The City's development permitting process requires specific CBC compliant engineering design recommendations be incorporated into grading plans and building specifications as a condition of construction permit approval to ensure that Project structures would withstand effects related to ground movement, including lateral spreading. Thus, impacts would be less than significant with respect to lateral spreading, and no mitigation measures are required.

Soils collapse could occur if buildings or other improvements are built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Soils susceptible to seismically induced collapse

typically include dry loose sands. As described previously, the Preliminary Geotechnical Investigation Report (Appendix D) testing results indicate that removal and re-compaction of the upper 12-inches of the site soils and use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations in compliance with the CBC would stabilize soils and provide a solid building foundation. Thus, compliance with the CBC and the recommendations of the Preliminary Geotechnical Investigation Report, as ensured through the City's development permitting process, would reduce potential impacts to a less than significant level, and no mitigation measures are required.

d) Be located on expansive soil, as defined in in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact. Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience, such as Southern California, have a higher potential of expansive soils than areas with higher rainfall and more constant soil moisture. As described above, the Project site soil consists of layers of sands with silt, sandy silts, silty sands / sandy silts, and silty sands, which were evaluated by the Preliminary Geotechnical Investigation Report (Appendix D) and determined to have a very low expansion potential.

In addition, as described in the previous response, the Project would be required to be constructed in compliance with the CBC, the GGMC, and a site-specific geotechnical evaluation pursuant to specific engineering standards to provide the appropriate back fill, compaction of soils, and foundation design to ensure stable soils, which would be verified through the City's permitting process. Thus, impacts related to expansive soils would be less than significant. No mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project does not include construction of septic tanks or connections to septic systems or alternative wastewater disposal systems. The Project site is currently connected to the City's sewer system, and the Project would also connect to existing sewers and would not use septic tanks or alternative wastewater disposal systems. As a result, impacts related to septic tanks or alternative wastewater disposal systems would not occur from implementation of the Project. No mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated

Construction

As explained in the Preliminary Geotechnical Investigation Report, soils beneath the Project site consist of approximately two feet of compacted artificial fill, but locally thicker deposits of fill were anticipated under existing building pads. Alluvium underlying the fill extended to the maximum depth explored of 51 feet and generally consisted of silty sands to a depth of approximately 10 feet, in turn overlying sandy silts and sands with various amounts of silt.

In preparation for the Paleontological Assessment for the Project (included as Appendix F), a paleontological collections and locality records search was conducted by the Natural History Museum of Los Angeles County (LACM) that did not identify any known fossil localities within several miles of the Project. Also, a search of the

online paleontological database maintained by the San Diego Natural History Museum (SDNHM) was performed, which identified the closest fossil locality to the Project held by that institution is from Pleistocene-aged deposits in Anaheim, between three and four miles to the northeast of the Project. In addition, the Paleontological Assessment determined that the alluvium mapped at the Project has a low potential to contain paleontological resources.

The Project involves grading and excavation of the upper two feet or one foot below footings of soil that would be removed and recompacted. The Paleontological Assessment (Appendix F) determined that based upon the moderate density of the alluvial strata indicated in the geotechnical boring logs and the shallow Project grading depths, the Project would not likely encounter potentially paleontologically sensitive Pleistocene alluvium. However, Mitigation Measure PAL-1 has been included to provide procedures to be followed in the unlikely event that potential paleontological resources are discovered during grading or excavation activities. Mitigation Measure PAL-1 requires that work shall cease within 50 feet of a find until a qualified paleontologist has evaluated the find in accordance with federal and state regulations. Mitigation Measure PAL-1 would reduce potential impacts to undiscovered archaeological resources to a less than significant level.

Operation
At the completion of Project construction, the proposed residential townhomes would not result in further disturbance of native soils on the Project site. Therefore, operation of the Project would not result in a substantial adverse change in the significance of a unique paleontological resource or site or unique geologic feature. No mitigation would be required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations and City Condition of Approval would reduce potential impacts related to geology and soils.

COA: California Building Code: The Project plans and specifications shall comply with City standard Conditions of Approval for the California Building Code (CBC) and implement compliance with the CBC as included in GGMC Title 18, Building Codes and Regulations. All work shall comply with the latest edition of the California CBC at time of permit application to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer specifications for the Project are required to be incorporated into grading and building plans and specifications prior to issuance of grading and building permits.

SWPPP: Prior to grading permit issuance, the Project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) in accordance with the County Drainage Area Management Plan (DAMP). The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other DAMP requirements to comply with the National Pollutant Discharge Elimination System (NPDES) regulations to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Garden Grove staff or its designee to confirm compliance.

Water Quality Management Plan: Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all post-construction, site design, source control, and treatment control Best Management Practices (BMPs) that will be incorporated into the development project in order to

minimize the adverse effects on receiving waters. The WQMP shall comply with GGMC Section 6.40.050, the Orange County DAMP, and the Santa Ana Region, Regional Water Quality Control Board (RWQCB) requirements in effect at the time permitting.

Mitigation Measures

Mitigation Measure PAL-1: Paleontological Resources. Construction plans and specifications shall state that in the event that potential paleontological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified paleontologist (who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist) has evaluated the find. If a fossil is determined to be significant, the qualified paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

If any fossil remains are discovered, the qualified paleontologist shall make a recommendation whether monitoring shall be required for the continuance of earth moving activities. Prior to issuance of grading permits, the City shall verify that all Project grading and construction plans specify the requirements herein related to the unanticipated discovery of paleontological resources.

After completion of the salvage and curation of any resources, the qualified paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Community Development Director, or designee, and the Natural History Museum of Los Angeles County.

References

U.S. Geological Survey U.S. Quaternary Fault Mapping. Accessed: https://usgs.maps.arcgis.com/

City of Garden Grove Municipal Code. Accessed: https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

Orange County Drainage Area Management Plan. Accessed: http://www.ocwatersheds.com/documents/damp

Paleontological Assessment for the 9822 Russell Avenue Project, 2025 (Appendix F).

Preliminary Geotechnical Investigation Report, 2025. Prepared by Alubs & Associates, Inc. (Appendix D).

Society of Vertebrate Paleontology. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Accessed: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

The discussion below is based on the Air Quality, Energy, and Greenhouse Gas Impact Analysis, which is included as Appendix A.

GHG Thresholds

Global climate change describes alterations in weather features (e.g., temperature, wind patterns, precipitation, and storms) that occur across the Earth as a whole. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas (GHG) emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

The principal GHGs of concern contributing to the greenhouse effect are CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). GHGs are produced by both direct and indirect emissions sources. Direct emissions include equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal. The large majority of GHG emissions generated from residential projects are related to vehicle trips.

The SCAQMD has proposed interim numeric GHG significance thresholds that are based on capture of approximately 90 percent (90%) of emissions from residential or commercial development, which is 3,000 metric tons carbon dioxide equivalent ($MTCO_2e$) per year (SCAQMD 2008). In 2008 the SCAQMD used the Executive Order S-3-05 year 2050 goal as the basis for the 3,000 metric ton threshold. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 parts per million (ppm), thus stabilizing global climate. Therefore, for purposes of examining potential GHG impacts from implementation of the proposed Project, the threshold of 3,000 $MTCO_2e$ is utilized herein to determine if GHG emissions from this Project would be significant.

Also, SCAQMD methodology to calculate a project's GHG construction emissions is to average them over 30-years and then add them to the project's operational emissions to determine if the project would exceed the 3,000 metric ton threshold. This approach is widely used by cities in the South Coast Air Basin, including the City of Garden Grove.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact

Construction

During construction, temporary sources of GHG emissions include use of heavy-duty construction equipment onsite, use of construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O.

The proposed Project would remove the existing church, preschool, daycare, related improvements, pavement, infrastructure, and landscaping on the site and redevelop the site with 26 new townhome residences. As shown on Table GHG-1, the Project is estimated by CalEEMod to generate a total of approximately 12 $MTCO_2e$ per year from construction emissions when amortized over 30 years per SCAQMD methodology.

Table GHG-1: Construction Greenhouse Gas Emissions (metric tons per year)

Activity	Annual GHG Emissions ($MTCO_2e$)
2027	155
2028	197
Total Emissions	**352**
Total Emissions Amortized Over 30 Years	12

Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

Operation

Operation of the proposed 26 residential townhomes uses would result in GHG emissions from vehicle trips, electricity consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the residences would be generated offsite by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. However, as detailed in Section 17, *Transportation*, the proposed 26 residential townhomes would result in 58 fewer daily trips than the existing church, preschool and daycare uses, which would provide a reduction in vehicular GHG emissions.

As shown in Table GHG-2, the proposed Project would result in 222 $MTCO_2e$ operational emissions, plus 12 $MTCO_2e$ amortized construction emissions to result in a total of 234 $MTCO_2e$, which is below the 3,000 $MTCO_2e$ threshold. When compared to emissions from operation of the existing church, preschool, and daycare buildings, including the reduction in 58 daily vehicle trips, the Project would result in a net decrease of 180 $MTCO_2e$ per year. Thus, impacts related to GHG emissions would be less than significant, and no mitigation measures are required.

Table GHG-2: Total Project Generated Greenhouse Gas Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)*
Mobile	195
Area	<0.01
Energy	18
Water	3
Waste	6
Refrigeration	<0.01
Total Project Operation Emissions	**222**
Amortized Construction Emissions	12
Total Project Emissions	**234**
Existing Emissions	414
Net New Emissions	**-180**
Significance Threshold	3,000
Threshold Exceeded?	**No**

Source: AQ, Energy, and GHG Impact Analysis, Appendix A.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The proposed Project would redevelop the site with 26 residential townhomes that would comply with state programs that are designed to be energy efficient. The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As described in the previous response, the Project would not exceed the GHG emissions threshold that is based on the Executive Order S-3-05 year 2050 goal and would reduce GHG emissions in comparison to operation of the existing use. In addition, the Project would comply with regulations imposed by the state and the SCAQMD that reduce GHG emissions, as described below:

- Global Warming Solutions Act of 2006 (AB 32) is applicable to the project because many of the GHG reduction measures outlined in AB 32 (e.g., low carbon fuel standard, advanced clean car standards, and cap-and-trade) have been adopted and implementation activities are ongoing. The advanced clean car standards are regulations for car manufacturers; and cap-and-trade refers to a policy tool where emissions from a certain region or sector (e.g., electricity generation, petroleum refining, cement production) are limited to a certain amount and emissions reductions can be traded ultimately providing flexibility on how the emitter can comply. The project would redevelop the project site for new residential townhomes that would not conflict with automobile fuel regulations, car standards, or cap-and-trade. The project would include solar panels and electric vehicle plug in facilities as required by CALGreen/Title 24 regulations that are included in the GGMC as Section 18.04.010.
- Title 24 California Code of Regulations (Title 24) establishes energy efficiency requirements for new construction that address the energy efficiency of new (and altered) residences and related infrastructure, appliances, irrigation. Title 24 is included in the GGMC as Section 18.04.010, which would provide efficient energy and water consumption. The City's administration of the requirements includes review of the energy conservation measures during the permitting process, which ensures that all requirements are met.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard [LCFS]) requires low carbon content of fuel sold in California. Because the LCFS applies to any transportation fuel that is sold or

supplied in California, all vehicles trips generated by the project within the state would comply with LCFS.

- California Water Conservation in Landscaping Act of 2006 (AB 1881) provides requirements to ensure water efficient landscapes in new development and reduced water waste in existing landscapes. The project is required to comply with AB 1881 landscaping requirements (included in the GGMC in Section 9.12.040.085 and pursuant to the Title 24 regulations in GGMC Section 18.04.010), which the City includes as a Condition of Approval and would be verified by the City during the project permitting process.

2022 CARB Scoping Plan

The 2022 CARB Scoping Plan Update sets the GHG emission reduction target for 2045 at 85 percent below 1990 levels. Table GHG-3 lists all GHG reduction policies applicable to residential developments. The following table also includes policies from Appendix D of the Scoping Plan, which provide GHG reduction policies for local governments to implement. The local action policies are focused on climate action planning and approval of new land use development projects. As shown below, the proposed Project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs within the 2022 Scoping Plan.

Table GHG-3: 2022 Scoping Plan Consistency Summary

Action	Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40% Below 1990 levels by 2030.	**Consistent.** The Project would comply with Title 24, Part 6 building energy requirements along with other local and State initiatives that aim to achieve the 40 percent below 1990 levels by 2030 goal. Also, as detailed previously, the Project would generate a total of 234 MTCO2e, which is far below the 3,000 MTCO2e threshold; and compared to emissions from operation of the existing church, preschool, and daycare buildings, the Project would result in a net decrease of 180 $MTCO_2e$ per year. Thus, the Project is consistent.
Smart Growth/Vehicle Miles Traveled VMT	
VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045.	**Consistent.** As detailed in Section 17, *Transportation*, the Project would result in a reduction of 58 trips per day, which would reduce VMT compared to the existing uses on the Project site.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100% of LDV sales are ZEV by 2035.	**Consistent.** The proposed Project would be designed and constructed in accordance with Title 24 Part 6 and Part 11 requirements, which includes constructing homes to allow for electric vehicle charging.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The Project would comply with Title 24, Part 6 building energy requirements, which would require all in-unit appliances for residential projects to be all-electric and Energy Star certified.

Action	Consistency
Construction Equipment	
25% of energy demand electrified by 2030 and 75% electrified by 2045.	**Consistent.** The proposed Project would be required to use construction equipment that is registered by CARB and meet CARB's standards. CARB sets its standards to be in line with the goal of reducing energy demand by 25 percent in 2030 and 75 percent in 2045.
Transportation Electrification	
Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as permit streamlining, infrastructure siting, consumer education, or preferential parking policies).	**Consistent.** The proposed Project would be designed and constructed in accordance with Title 24 Part 6 and Part 11 requirements, which includes constructing homes to allow for electric vehicle charging. Therefore, the proposed Project would not interfere with the implementation of a ZEV ecosystem within the City.
Local Action Policies - VMT Reduction	
Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).	**Consistent.** The Project site is located in a developed urban area. Sidewalks would be provided throughout the site and would connect to existing sidewalks along Russell Avenue and a new sidewalk along Kerry Street that would be installed by the Project. The Project also includes bicycle rack for short-term bike parking. In addition, the proposed residential units would allow for charging of electric vehicles. The nearest bus stop is provided along Brookhurst Street, approximately 600 feet to the east of the site) by OCTA Bus Route 35 with service every 30 minutes during the peak hour.
Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).	**Consistent.** The proposed Project proposes a General Plan Amendment to change the land use designation from LDR to LMDR, and a Zone Change to change the designation from R1 to PUD with an R2 base zone. These changes would allow for the development of a compact residential community on an underutilized parcel within a walkable portion the City. The Project includes sidewalks throughout the site that would connect to existing sidewalks along Russell Avenue and a new sidewalk along Kerry Street that would be installed by the Project.
Local Action Policies - Building Decarbonization	
Adopt all-electric new construction reach codes.	**Consistent**. The proposed Project would comply with Title 24 Parts 6 and 11, which includes electric heat pumps installed during construction and electric hookups for all appliances.
Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).	**Consistent.** The proposed Project would be constructed in accordance with Title 24 CALGreen requirements, which includes installation of Energy Star equipment and appliances in new buildings.

Action	Consistency
Facilitate deployment of renewable energy production and distribution and energy storage.	**Consistent.** The proposed Project would be constructed in accordance with the CALGreen Building Energy Efficiency Standards (Title 24 Part 6), including solar, and meet all other requirements related to energy efficiency standards.
Building Decarbonization	
Adopt all-electric new construction reach codes.	**Consistent**. The proposed Project is fully electric, does not propose any natural gas, and would comply with Title 24 Parts 6 and 11, including the installation of EV charging infrastructure in garages, electric heat pumps, and electric hookups for all appliances.
Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).	**Consistent.** The proposed Project would be constructed in accordance with CALGreen requirements, which includes installation of Energy Star equipment and appliances in new buildings.
Facilitate deployment of renewable energy production and distribution and energy storage.	**Consistent.** The proposed Project would be constructed in accordance with the California Energy Code (Title 24 Part 6) to meet all requirements related to solar energy production and the CALGreen Building Energy Efficiency Standards (Title 24 Part 11) to meet efficiency standards.

Source: (California Air Resources Board, 2022, pp. 72-79)

Overall, implementation of the Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Thus, impacts would not occur, and no mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation would reduce potential impacts related to greenhouse gases.

CALGreen Compliance. As listed previously in Section 6, *Energy*.

COA AB 1881 Landscaping. The Project Conditions of Approval would require compliance with AB 1881 landscaping requirements (included in the GGMC in Section 9.12.040.085 and pursuant to the Title 24 regulations in GGMC Section 18.04.010.

Mitigation Measures

No mitigation measures related to greenhouse gas emissions are required.

References

Air Quality, Energy, and Greenhouse Gas Impact Analysis (Appendix A), prepared by EPD Solutions, 2026.

Level of Service (LOS) Screening Analysis, prepared by EPD Solutions, Inc., Appendix B.

South Coast Air Quality Management District Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Thresholds (SCAQMD 2008). Accessed: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires ?	☐	☐	☐	☒

The discussion below is based on the Phase I Environmental Site Assessment, which is included as Appendix E.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human

health and safety or to the environment if released into the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that regulatory agencies have a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the home, workplace, or environment. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

Construction
The Project's proposed construction activities would involve the transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. In addition, hazardous materials would be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state requirements. These regulations include: the federal Occupational Safety and Health Act and Hazardous Materials Transportation Act; Title 8 of the California Code of Regulations (CalOSHA), and the state Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. As a result, the routine transport, use or disposal of hazardous materials during construction activities of the Project would be less than significant. No mitigation measures are required.

Operation
Operation of the Project would include residential uses, which would involve use of hazardous materials including solvents, cleaning agents, paints, pesticides, batteries, fertilizers, and aerosol cans. These types of materials are not acutely hazardous and would only be used and stored in limited quantities within the Project area. The normal routine use of these hazardous materials products pursuant to existing regulations would not result in a significant hazard to people or the environment in the vicinity of the Project. Therefore, the Project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste, and impacts would be less than significant. No mitigation measures are required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact.

Construction
Accidental Releases. While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during construction activities would not pose health risks or result in significant impacts; improper use, storage, transportation and disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. To avoid an impact related to an accidental release during construction, best management practices (BMPs) are implemented as part of a SWPPP as required by the NPDES General Construction Permit. Implementation of an SWPPP would minimize potential adverse effects to workers, the public, and the environment. Construction contract specifications would include strict onsite handling rules and BMPs that include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling and construction dewatering activities including secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and

- Properly disposing of discarded containers of fuels and other chemicals.

Implementation of the required SWPPP and related regulations during construction would reduce potential impacts to a less than significant level.

Asbestos-Containing Materials. The use of asbestos-containing materials (a known carcinogen) and lead paint (a known toxin) was common in building construction prior to 1978 (the use of asbestos-containing materials in concrete products was common through the 1950s). Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the federal Environmental Protection Agency (EPA). Federal asbestos requirements are found in the Code of Federal Regulations (CFR) Title 40, Part 61, Subpart M, and are enforced in the Project area by the SCAQMD. SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities.

Based on the age of the onsite structures, the Phase I (Appendix E) determined that it is possible that asbestos-containing building materials are present. As a result, asbestos surveys and abatement would be required prior to demolition of the existing buildings pursuant to the existing SCAQMD, Cal/OSHA, and Section 19827.5 of the California Health and Safety Code requirements.

SCAQMD Rule 1403 requires notification of the SCAQMD prior to commencing any demolition or renovation activities that involve asbestos containing materials. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an onsite representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of asbestos-containing materials. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with asbestos-containing materials. With compliance with AQMD Rule 1403, potential impacts related to asbestos being released into the environment would be less than significant. No mitigation measures are required.

Lead Based Paint. Based on the age of the onsite structures, it is possible that lead-based paint may be present. Pursuant to existing regulations, a lead-based paint survey shall be completed prior to any activities with the potential to disturb suspected lead based painted surfaces. The regulations specify actions to manage and control exposure to lead-based paint (per the Code of Federal Regulations Title 29, Section 1926.62 and California Code of Regulations Title 8 Section 1532.1) that cover the demolition, removal, cleanup, transportation, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring and compliance to ensure the safety of construction workers exposed to lead-based materials. In addition, Cal/OSHA's Lead in Construction Standard requires the Project to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction. The plan must describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. Cal/OSHA requires 24-hour notification if more than 100 square feet of lead-based paint would be disturbed. With compliance with the Cal/OSHA requirements, potential impacts related to lead-based paint being released into the environment would be less than significant. No mitigation measures are required.

Operation
Operation of the Project includes activities related to residential uses, which involve use of hazardous materials including solvents, cleaning agents, paints, pesticides, batteries, fertilizers, and aerosol cans. These types of materials are not acutely hazardous and would only be used and stored in limited quantities within the Project residences and maintenance areas. The normal routine use of these hazardous material products pursuant to existing regulations would not result in a significant hazard to people or the environment in the vicinity of the Project. Therefore, the Project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste, and impacts would be less than significant. No mitigation measures are required.

c) Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The Sunnyside Elementary School is located adjacent to the Project site at 9972 Russell Avenue. As described in response a), construction and operation of the Project would involve the use, storage, and disposal of small amounts of hazardous materials on the Project site. These hazardous materials would be limited and used and disposed of in compliance with federal, state, and local regulations, which would reduce the potential for accidental release into the environment near the school. In addition, the proposed residential uses would not involve the use or handling of acutely hazardous materials.

Also, the emissions that would be generated from construction and operation of the Project were evaluated in the air quality analysis presented in Section 3, and the emissions generated from the Project would not cause or contribute to an exceedance of the federal or state air quality standards. Thus, the Project would not emit hazardous or handle acutely hazardous materials, substances, or waste near the school, and impacts would be less than significant. No mitigation measures are required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Phase I Environmental Site Assessment did not identify the Project site or any properties in the nearby area as included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Appendix E). In addition, a search of the California Department of Toxic Substances Control EnviroStor database did not identify the Project site or adjacent areas as a hazardous materials site. Thus, impacts related to hazards from being located on or adjacent to a hazardous materials site would not occur from implementation of the Project. No mitigation measures are required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is not located within an airport land use plan or within 2 miles of an airport. The closest air facility to the Project is the Los Alamitos Joint Forces Training Base, located approximately 5 miles northwest of the Project site. The closest public airports to the Project site include Fullerton Municipal Airport that is over 7 miles to the north of the site and John Wayne Airport, which is located over 7.75 miles to the

southeast of the Project site. Therefore, the Project would not result in a safety hazard for people residing or working in the Project area, and no impacts would occur. No mitigation measures are required.

f) Impair implementation of an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

Construction
The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site, and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of new driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed Project would not require closure of Russell Avenue or Kerry Street. Any temporary lane closures needed for utility connections or driveway access construction would be implemented consistent with the recommendations of the California Joint Utility Traffic Control Manual (Caltrans 2014), as incorporated into a Traffic Management Plan for the Project that the City requires for receipt of construction permits. The Traffic Management Plan would include designated haul routes, temporary traffic control devices, travel time restrictions, and other elements determined through the construction review and permitting process by the City's Public Works Division that would ensure that substantial traffic queuing along Russell Avenue or Kerry Street would not occur, and that all construction equipment would be staged on site. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access or evacuation impacts to a less than significant level. No mitigation measures are required.

Operation
Direct access to the Project site would be provided from driveways along Russell Avenue. The Project driveway and internal access has been reviewed and approved by OCFA and meets the design standards to ensure adequate emergency access and evacuation. The Project is also required to provide fire suppression facilities (e.g., hydrants and sprinklers) that would be reviewed and approved by the City for compliance with GGMC standards that include the California Fire Code, which is adopted by reference in GGMC Chapter 18.04 and as amended in GGMC Chapter 18.16. Further, the City's standard Condition of Approval to comply with the OCFA Master Plan would be included. As such, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant. No mitigation measures are required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project site is within an urbanized residential area of the City of Garden Grove. The Project site is surrounded by developed and urban areas. The Project site is not adjacent to any wildland areas. According to the CAL FIRE Hazard Severity Zone map, the Project site is not within a fire hazard zone. As a result, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations and City Condition of Approval would reduce potential impacts related to hazards and hazardous materials.

SWPPP. As listed below in Section 10, *Hydrology and Water Quality*.

COA: Fire Master Plan: The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements, including but not limited to the Fire Master Plan.

SCAQMD Rule 1403 – Asbestos Containing Materials: The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 1403. If asbestos is found, the Project applicant shall follow all procedural requirements and regulations of SCAQMD Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.

Lead Based Paint: The Project Plans and specifications shall implement compliance with the provisions of the Code of Federal Regulations Title 29, Section 1926.62, California Code of Regulations Title 8 Section 1532.1, and Cal/OSHA's Lead in Construction Standard to require a lead-based paint survey be conducted, and if lead-based paint is found, the Project applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. Cal-OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.

Mitigation Measures

No mitigation measures related to hazards and hazardous materials are required.

References

California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zone Map. Accessed:
https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones

California Department of Toxic Substances Control EnviroStor database. Accessed:
https://www.envirostor.dtsc.ca.gov/public/

Phase I Environmental Site Assessment, prepared by Partner Engineering and Science, Inc, 2025 (Appendix E).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

The discussion below is based on the Preliminary Hydrology Report and the Preliminary Water Quality Management Plan, which are included as Appendix G and H.

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact

Construction

Implementation of the proposed Project includes demolition of the existing buildings, pavement, and infrastructure, site preparation, construction of new buildings, and infrastructure improvements. Demolition of existing structures, grading, stockpiling of materials, excavation, construction of new structures, and landscaping activities would expose and loosen sediment and building materials, which would have the potential to mix with stormwater and urban runoff and degrade surface and receiving water quality.

Additionally, construction generally requires the use of heavy equipment and construction-related materials and chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents, and paints. In the absence of proper controls, these potentially harmful materials could be accidentally spilled or improperly disposed of during construction activities and could wash into and pollute surface waters or groundwater, resulting in a significant impact to water quality. However, Section 6.40.050 of the GGMC states that all new development and significant redevelopment within the City shall be undertaken in accordance with the County DAMP, including any conditions and requirements established related to the reduction or elimination of pollutants in storm water runoff from the Project site, which are verified prior to the issuance of a grading permit and/or building permit by the City.

The DAMP requires construction sites to implement BMPs that address control of construction related pollutants discharges, including erosion/sediment control, onsite hazardous materials, and waste management (DAMP Section 8.0). Additionally, the Statewide NPDES Permit for General Construction Activity requires implementation of a SWPPP, by a Qualified SWPPP Developer. The SWPPP is required to be consistent with the County DAMP; address site-specific conditions related to construction; identify the sources of sediment and other pollutants that may affect the quality of storm water discharges during construction; and implement erosion control and sediment control BMPs to reduce or eliminate sediment, pollutants adhering to sediment, and other non-sediment pollutants in water discharges during construction. Typical erosion control methods that are designed to minimize potential pollutants entering stormwater during construction include:

- Perimeter gravel bags or silt fences to prevent offsite transport of sediment;
- Storm drain inlet protection (filter fabric gravel bags and straw wattles), with gravel bag check dams within paved roadways;
- Regular sprinkling of exposed soils to control dust during construction and soil binders for forecasted wind storms;
- Specifications for construction waste handling and disposal;
- Contained equipment wash-out and vehicle maintenance areas;
- Erosion control measures including soil binders, hydro mulch, geotextiles, and hydro seeding of disturbed areas ahead of forecasted storms;
- Construction of stabilized construction entry/exits to prevent trucks from tracking sediment on City roadways;
- Construction timing to minimize soil exposure to storm events; and
- Training of subcontractors on general site housekeeping.

Adherence to a City approved SWPPP, which would be verified prior to the issuance of a demolition and/or grading permit would ensure that potential water quality degradation associated with construction activities would be minimized, and impacts would be less than significant. No mitigation measures are required.

Operation

The proposed Project includes operation of new residential uses. Potential pollutants associated with the proposed uses include various chemicals from cleaners, nutrients from fertilizer, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. If these pollutants discharge into surface waters, it could result in degradation of water quality.

However, operation of the proposed Project would be required to comply with the requirements of the County DAMP and would be required to implement a Water Quality Management Plan (WQMP) that includes Low Impact Development (LID) features and BMPs to limit the potential for pollutants to enter surface water, such as storm water runoff. The Preliminary WQMP has been completed and is included as Appendix H. The purpose of a WQMP is to reduce discharge of pollutants by reducing or eliminating sources of pollutants, capture pollutants, and manage site runoff volumes and flow rates through application of appropriate LID features and BMPs. The WQMP is required to include implementation of non-structural, structural, source control and treatment control BMPs that have been designed to protect water quality. As described in the Project description, the Project would install drainage features to convey runoff to biofiltration treatment devices that would be installed on the site, which have been designed to capture, infiltrate, and treat flows from the 85th percentile storm as required by the DAMP. The additional types of BMPs that would be implemented as part of the Project WQMP are listed in Table WQ-1.

Table WQ-1: Types of BMPs Incorporated into the Project WQMP

Type of BMP	Description of BMPs
LID Site Design	Optimize the site layout: The site has been designed so that runoff from impervious surfaces would flow to either landscaped areas or an underground infiltration tank for treatment by infiltration.
	Use pervious surfaces: Landscaping is incorporated into the Project design to increase the amount of pervious area and onsite retention of stormflows.
Source Control	Storm Drain Stenciling: All inlets/catch basins would be stenciled with the words "Only Rain Down the Storm Drain," or equivalent message.
	Litter Control: Design and construct trash and waste storage areas to reduce pollution introduction and provide or arrange for weekly sweeping and trash pick-up that can be done as part of landscape maintenance.
	Need for future indoor & structural pest control: The buildings would be designed to avoid openings that would encourage entry of pests.
	Landscape/outdoor pesticide use: Landscape plans would accomplish all of the following: • Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. • Consider using pest-resistant plants, especially adjacent to hardscape. • To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.
	Roofing, gutters, and trim: The architectural design would avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.
	Sidewalks and parking lots: Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing would be collected to prevent entry

Type of BMP	Description of BMPs
	into the storm drain system. Wash water containing any cleaning agent or degreaser would be collected and discharged to the sanitary sewer and not discharged to a storm drain.
Treatment Control	Biofiltration Systems: The underground biofiltration treatment devices proposed for the Project would detain runoff, filter it, prior to infiltration into site soils.

As described previously, a WQMP is required to be approved prior to the issuance of a building or grading permit. The Project's WQMP would be reviewed and approved by the City to ensure it complies with the DAMP regulations. In addition, the City's permitting process would ensure that all LID features in the WQMP would be implemented with the Project. Overall, implementation of the WQMP pursuant to the existing regulations would ensure that operation of the proposed Project would not violate any water quality standards, waste discharge requirements, or otherwise degrade water quality; and impacts would be less than significant. No mitigation measures are required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The Preliminary WQMP for the Project (Appendix H) describes that the Project site is largely (86.8%) impervious, as it is generally covered by the existing pavement and building structures, except for the areas of landscaping the site. In the existing condition, storm flows drain across the site to the north toward Russell Avenue and west toward Kerry Street where flows are conveyed westerly and southerly until entering the storm drain system through a catch basin on Donegal Drive near the Trask Avenue intersection. The Project site currently has no water quality or drainage devices installed.

The Preliminary WQMP for the Project details that the pervious areas on the site would increase with the proposed Project due to installation of a central open space recreation area and approximately 16,278 square feet of landscaping. After Project development, the site would contain 20.7 percent pervious areas, which would be an increase of 7.5 percent. Also, stormwater on the site would be conveyed to the proposed biofiltration treatment devices that would treat and infiltrate flows into site soils. Therefore, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

In addition, groundwater within the Project region is managed by the Orange County Water District (OCWD). To ensure the Basin is not overdrawn, OCWD monitors water levels and recharges the Basin with local and imported water. Continued management of the groundwater basin by OCWD ensures that substantial depletion of groundwater supplies would not occur. Thus, impacts related to the groundwater recharge would not occur. No mitigation measures are required. The evaluation of water supplies needed for the Project is provided in Section 19, *Utilities and Service Systems*.

ci) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. The Project site does not include a stream, river, creek, or other water body.

Construction
Construction of the proposed Project would require demolition of the existing buildings foundations and floor slabs and pavement, and excavation and grading activities that would expose and loosen building materials and sediment, which has the potential to mix with storm water runoff and result in erosion or siltation offsite. However, the Project site does not include any slopes, which reduces the erosion potential.

The NPDES Construction General Permit and Orange County DAMP require preparation and implementation of a SWPPP by a Qualified SWPPP Developer for the proposed construction activities. The SWPPP is required to address site-specific conditions related to potential sources of sedimentation and erosion and would list the required BMPs that are necessary to reduce or eliminate the potential of erosion or alteration of a drainage pattern during construction activities.

In addition, a Qualified SWPPP Practitioner (QSP) is required to ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The SWPPP would be amended and BMPs revised, as determined necessary through field inspections, in order to protect against substantial soil erosion, the loss of topsoil, or alteration of the drainage pattern. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP would prevent construction-related impacts related to potential alteration of a drainage pattern or erosion from development activities. With implementation of the existing construction regulations that would be verified by the City during the permitting approval process, impacts related to alteration of an existing drainage pattern during construction that could result in substantial erosion, siltation, and increases in stormwater runoff would be less than significant. No mitigation measures are required.

Operation
The Preliminary WQMP details that the Project site currently consists of 86.8 percent impervious surfaces and 13.2 percent pervious surfaces. After completion of Project construction, the site would be 79.3 percent impervious and 20.7 percent pervious (Appendix H), which is a reduction of 7.5 percent impervious surface area. The pervious areas proposed for the Project would be landscaped, which would inhibit erosion.

The proposed Project would maintain the existing drainage pattern. In the existing condition, storm flows drain across the site to the north toward Russell Avenue and west toward Kerry Street. With implementation of the Project, stormwater runoff would be conveyed to landscape areas and to biofiltration treatment devices for treatment and infiltration into site soils. The DAMP requires new development projects to prepare a WQMP including BMPs to reduce the potential of erosion and/or sedimentation through site design and structural treatment control BMPs. The Preliminary WQMP has been completed and is included as Appendix H. As part of the permitting approval process, the proposed drainage and water quality design and engineering plans would be reviewed by the City to ensure that the site-specific design limits the potential for erosion and siltation. Overall, the proposed drainage system and adherence to the existing regulations would ensure that Project impacts related to alteration of a drainage pattern and erosion/siltation from operational activities would be less than significant. No mitigation measures are required.

cii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than Significant Impact. The Project site does not include, and is not adjacent to, a stream or river. Implementation of the Project would not alter the course of a stream or river.

Construction
Construction of the proposed Project would require demolition of the existing building, including foundation, floor slabs, and utilities systems, and would require excavation and grading activities. These activities could temporarily alter the existing drainage pattern of the site and change runoff flow rates. However, as described previously, implementation of the Project requires a SWPPP that would address site specific drainage issues related to construction of the Project and include BMPs to eliminate the potential of flooding or alteration of a drainage pattern (including those of a stream or river) during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP as verified by the City through the construction permitting process would prevent construction-related flooding impacts from potential alteration of a drainage pattern, stream, or river on or offsite from development activities. Therefore, construction impacts would be less than significant. No mitigation measures are required.

Operation
As described previously, the proposed Project would result in a 7.5 percent increase of pervious surfaces. The Project would maintain the existing drainage pattern and convey runoff to landscape areas and to biofiltration treatment devices that would filter and infiltrate runoff into site soils. This proposed drainage has been designed to capture, infiltrate, and treat flows pursuant to the DAMP requirements. As part of the permitting approval process, the proposed drainage design and engineering plans would be reviewed by the City to ensure that these design flows would be accommodated. Overall, the proposed drainage system and adherence to the existing DAMP regulations would ensure that Project impacts related to alteration of a drainage pattern or flooding from operational activities would be less than significant. No mitigation measures are required.

ciii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. As described previously, the Project site does not include, and is not adjacent to, a stream or river. Implementation of the Project would not alter the course of a stream or river.

Construction
As described in the previous response, construction of the proposed Project would require demolition and excavation activities that could temporarily alter the existing drainage pattern of the site and could result in increased runoff and polluted runoff if drainage is not properly controlled. However, implementation of the Project requires a SWPPP that would address site specific pollutant and drainage issues related to construction of the Project and include BMPs to eliminate the potential of polluted runoff and increased runoff during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP as verified by the City through the construction permitting process would prevent construction-related impacts related to increases in run-off and pollution from development activities. Therefore, impacts would be less than significant. No mitigation measures are required.

Operation

As described previously, the Project site is largely (86.8%) impervious and redevelopment of the site would increase pervious areas by 7.5 percent. Storm flows would drain to landscape areas and to biofiltration treatment devices that have been designed to accommodate the Project and would provide stormwater filtration, as required by the DAMP. Therefore, redevelopment of the Project site would not result in an increase in runoff that would exceed the capacity of the existing City storm drain system or provide substantial additional sources of polluted runoff. No mitigation measures are required.

civ) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows??

Less than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06059C0139, the Project site is not within a flood zone. As detailed in the previous responses, storm flows would drain to landscape areas and to catch basins that would route runoff to biofiltration treatment devices that have been designed to accommodate the Project per the 85th percentile storm water flows as required by the DAMP. Also, as described previously, the Project would increase pervious areas on the site by 7.5 percent compared to existing conditions. Therefore, the Project would not result in impeding or redirecting flood flows by the addition of the impervious surfaces. As detailed previously, the City's permitting process would ensure that the drainage system specifications adhere to the DAMP regulations, and compliance with existing regulations would ensure that impacts would be less than significant. No mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. A 100-year flood hazard area is an area in which a flood event has a 1 percent (1%) probability of occurring in any given year. The FEMA FIRM for the Project site and vicinity (FEMA FIRM number 06059C0139) shows that the site is within a 0.2 percent (0.2%) annual chance of flood hazard and is identified as "Zone X". Therefore, the site is not within a 100-year flood zone. In addition, the Project site does not contain any bodies of water and is not located in the vicinity of any bodies of water that could result in flooding on the Project site. Thus, the Project site is not located within a 100-year flood hazard area as mapped by FEMA, and impacts related to flooding would not occur. No mitigation measures are required.

Tsunamis are generated ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. The proposed Project is over 7 miles from the ocean shoreline. Based on the distance of the Project site to the Pacific Ocean, the Project site is not at risk of inundation from tsunami. Therefore, the proposed Project would not risk release of pollutants from inundation from a tsunami. No impact would occur, and no mitigation is required.

Seiching is a phenomenon that occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. The Project site is not located adjacent to any water retention facilities. For this reason, the Project site is not at risk of inundation from seiche waves. Therefore, the proposed Project would not risk the release of pollutants from inundation from seiche. No impact would occur, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As described previously, use of BMPs during construction implemented as part of a SWPPP as required by the NPDES Construction General Permit, would serve to ensure that Project impacts related to construction activities resulting in a degradation of water quality would be less than significant. Thus, construction of the Project would not conflict or obstruct implementation of a water quality control plan.

Also, as described previously, new development projects are required to implement a WQMP that would comply with the Orange County DAMP. The WQMP and applicable BMPs are verified as part of the City's permitting approval process, and construction plans would be required to demonstrate compliance with these regulations. Therefore, operation of the proposed Project would not conflict with or obstruct a water quality control plan.

In addition, as detailed previously, groundwater within the Project region is managed by OCWD. To ensure the Basin is not overdrawn, OCWD monitors water levels and recharges the Basin with local and imported water. Continued management of the groundwater basin by OCWD ensures that substantial depletion of groundwater supplies would not occur. Thus, impacts related to water quality control plan or sustainable groundwater management plan would be less than significant. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations would reduce potential impacts related to hydrology and water quality.

Stormwater Pollution Prevention Plan: Prior to grading permit issuance, the Project developer shall have a SWPPP prepared by a QSD (Qualified SWPPP Developer) pursuant to the Orange County DAMP. The SWPPP shall incorporate all necessary BMPs and other DAMP requirements to comply with NPDES regulations to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City staff, or designee to confirm compliance.

Water Quality Management Plan: Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all post-construction, site design, source control, and treatment control Best Management Practices (BMPs) that will be incorporated into the development project in order to minimize the adverse effects on receiving waters. The WQMP shall comply with GGMC Section 6.40.050, the Orange County DAMP, and the Santa Ana Region, Regional Water Quality Control Board (RWQCB) requirements in effect at the time permitting.

Mitigation Measures

No mitigation measures related to hydrology and water quality are required.

References

California Department of Water Resources Inundation Maps. Accessed:

https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Inundation-Maps

City of Garden Grove Municipal Code. Accessed at:
https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

Federal Emergency Management Agency Flood Maps. Accessed: https://msc.fema.gov/portal

Orange County Water District Groundwater Management. Accessed: https://www.ocwd.com/what-we-do/groundwater-management/

Preliminary Hydrology Report, 2025. Prepared by CA Engineering, Inc. Appendix G.

Preliminary Water Quality Management Plan, 2025. Prepared by CA Engineering, Inc. Appendix H.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Physically divide an established community?

No Impact. The Project site is currently developed with a church, preschool, wireless facility, and daycare. The Project site is part of the established community and is located within an urban area and is adjacent to roadways, residential, church, and school uses. Direct access to the site is provided by a driveway along Russell Avenue, which bounds north side of the Project site and a driveway along Kerry Street bounds the west side of the site. Both single-family and multi-family residences are located to the north beyond Russell Avenue and to the west beyond Kerry Street. Single-family residences and a church parking lot bound the south of the site, and Sunnyside Elementary School is located to the east.

The proposed Project would redevelop the site to provide 26 residential townhomes with open space, landscaping and parking. The new residences would be accessed by a driveway along Russell Avenue, which is consistent with the existing site access. The proposed townhomes would be consistent with the existing residential uses and complementary to the existing school and church uses. Therefore, the change of the Project site from a church, preschool, and daycare to new residential townhomes with open space and landscaping would not physically divide an established community. In addition, the Project would not change roadways or install any infrastructure that would result in a physical division. Thus, the proposed Project would not result in impacts related to physical division of an established community. No mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact.

General Plan

The Project site currently has a General Plan land use designation of Low Density Residential (LDR), as shown previously in Figure 4, *Existing General Plan Land Use Designations*. The General Plan describes that the LDR land use is characterized by detached, single-unit structures and accessory dwelling units, and allows up to 11 dwelling units per acre.

The proposed Project includes a General Plan Amendment to change the land use designation of the site to Low Medium Density Residential (LMR) that allows a residential density between 11 and 21 dwelling units per

acre. Consistent with the proposed LMR designation, the Project would develop the 1.81-acre Project site with 26 residential townhomes, which would result in a density of 14.4 dwelling units per acre and would be within the allowable LMR residential density. The Project would be consistent with the density allowable under the proposed General Plan land use designations. The proposed land use designation change and development of residential townhomes on the site pursuant to the LMR General Plan land use designation would not result in conflict with any regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Additionally, the Project would comply with the goals and policies of the City's General Plan that are relevant to the Project and related to avoiding or mitigating an environmental effect, as detailed in Table LU-1. As such, no impact related to conflict with a General Plan policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect would occur. No mitigation measures are required.

Table LU-1: General Plan Policy and Goal Consistency

General Plan Element / Goal / Policy	Project Consistency
Land Use Element	
Policy LU-2.3: Prohibit uses that lead to deterioration of residential neighborhoods or adversely impact the safety or the residential character of a residential neighborhood.	**Consistent.** The proposed Project would extend and enhance the existing residential neighborhood by transitioning a site from largely a surface parking lot and aged church, preschool, and daycare structures into a new residential neighborhood with new streetscaping that would improve the existing character of the site and be consistent with surrounding one and two-story residential single-and multi-family structures. The new residences would not deteriorate or impact safety of the neighborhood.
Circulation Element	
Policy CIR-3.3: Review new development or redevelopment projects adjacent to established residential neighborhoods for potential traffic intrusion impacts. The review should recommend methods, such as but not limited to 1) expanding parkways to reduce the roadway width, 2) limiting the number of ingress/egress locations on-site, 3) traffic circles, 4) diverters, or speed humps, 5) curb extensions, 6) entrance treatments, or other effective traffic management techniques that reduce or eliminate the traffic intrusion impacts.	**Consistent.** The proposed Project would be accessed from the existing adjacent roadways and would reduce vehicular trips compared to existing uses, as detailed in Section 17, *Transportation*. Also, the City's construction review and permitting process would ensure that the site driveway and other site design features would not result in traffic intrusion impacts.
Policy CIR-3.5: Require new developments to implement access and traffic management plans that will reduce the potential for neighborhood traffic intrusion through factors such as driveway location, turn restrictions, shuttle bus operations, and/or travel demand strategies.	**Consistent.** The proposed Project has been reviewed by the City's traffic engineering staff to ensure that the site driveway and other site design features would not result in traffic intrusion impacts. As described previously, the Project would reduce vehicular trips compared to the existing site use, which would reduce the potential for neighborhood traffic intrusion.
Goal CIR-4: A reduction in vehicle miles traveled in order to create a more efficient urban form.	**Consistent.** As detailed in Table T-1, the proposed Project would result in 58 fewer daily trips compared to the existing land use of the site, which would result in a reduction in vehicle miles traveled. In addition, the proposed LMR General Plan Land Use designation

General Plan Element / Goal / Policy	Project Consistency
	provides for a more efficient urban form than the existing LDR General Plan Land Use designation. The proposed LMR use would increase the number of residences in an urban area near existing community resources such as the adjacent school, commercial uses along Brookhurst Street, and near existing transit stops on Brookhurst Street.
Policy CIR-5.4: Provide appropriate pedestrian access throughout the City of Garden Grove.	**Consistent.** The proposed Project would install new onsite pedestrian access throughout the site that would connect to the new sidewalk that the Project would install along the Russell Avenue and Kerry Street site frontages.
Policy CIR-7.1: Design safe and efficient vehicular access to properties from arterial streets to ensure efficient vehicular ingress and egress.	**Consistent.** The proposed Project has been reviewed by the City's Traffic Engineering to ensure that the site driveway and other site design features would not result in traffic safety impacts and to ensure efficient vehicular ingress and egress.
Policy CIR-7.2: Review development plans and encourage designs that consolidate access locations onto streets and provide adequate turn lanes into sites to minimize conflicts with through traffic on adjacent streets.	**Consistent.** The proposed Project has been reviewed by the City's Traffic Engineering to ensure that the site driveway and other site design features would not result in conflicts with through traffic on adjacent streets.
Goal CIR-9: Improved aesthetic quality and maintenance of arterial highways and local roadways.	**Consistent.** The proposed Project would install new sidewalks and new landscaping along Russell Avenue and Kerry Street frontages, as shown in Figure 10, *Conceptual Landscaping Plan*; thus, improving the aesthetic quality of the surrounding local roadways.
Goal CIR-11: Continued compliance with regional congestion management, transportation demand, traffic improvement, air quality management, and growth management programs.	**Consistent.** As detailed in Table T-1, the proposed Project would result in 58 fewer daily trips compared to the existing land use of the site, which would be consistent with this goal.
Infrastructure Element	
Policy INFR-1.2: New development and redevelopment projects shall ensure that water infrastructure systems are adequate to serve the development.	**Consistent.** As detailed in Section 19, *Utilities and Service Systems*, water and sewer Will-Serve letters have been received for the Project and detail that water infrastructure systems are adequate to serve the development.
Policy INFR 3.3: Minimize the adverse effects of urbanization upon drainage and flood control facilities.	**Consistent.** The proposed Project would not increase utilization of drainage and flood control facilities. Drainage from the Project site would be captured by biofiltration devices and runoff would infiltrate into site soils, as detailed in Section 10, *Hydrology and Water Quality*.
Noise Element	
Goal N-1: Noise considerations must be incorporated into land use planning decisions.	**Consistent.** The Noise Study for the proposed Project has been prepared to incorporate noise considerations into land use planning decisions.

General Plan Element / Goal / Policy	Project Consistency
Policy N-1.1: Require all new residential construction in areas with an exterior noise level greater than 55 dBA to include sound attenuation measures.	**Consistent.** As detailed in Section 13, *Noise,* exterior noise levels are below the General Plan acceptable ambient noise levels.
Policy N-1.2: Incorporate a noise assessment study into the environmental review process, when needed for a specific project for the purposes of identifying potential noise impacts and noise abatement procedures.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that no noise abatement measures are required and a 10-foot setback from the southern site boundary would mitigate potential construction vibration impacts, as detailed in Section 13, *Noise*.
Policy N-1.3: Require noise reduction techniques in site planning, architectural design, and construction, where noise reduction is necessary consistent with the standards in Tables 7-1 and 7-2, Title 24 of the California Code of Regulations, and Section 8.47 of the Municipal Code.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that no noise reduction measures are required, and that the Project is consistent with the standards in General Plan Tables 7-1 and 7-2, Title 24 of the California Code of Regulations, and Section 8.47 of the GGMC.
Policy N-1.4: Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise sensitive areas.	**Consistent.** The Noise Study for the proposed Project has been prepared to ensure that acceptable noise levels are maintained near the adjacent school, church, and residential noise sensitive areas. As detailed in Section 13, *Noise*, the proposed Project would maintain acceptable noise levels on and surrounding the site.
Policy N-1.7: Avoid locating noise-sensitive land use in existing and noise-impacted areas.	**Consistent.** The proposed Project is not located in a noise-impacted area. As detailed in Section 13, *Noise,* exterior noise levels are below the General Plan acceptable ambient noise levels for the proposed Project.
Policy N-2.2: Fully integrate noise considerations into land use planning decisions to prevent new noise/land use conflicts.	**Consistent.** The Noise Study for the proposed Project has been prepared to integrate noise considerations into this Project's land use planning decisions to prevent new noise/land use conflicts. As detailed in Section 13, *Noise*, the proposed residences would not result in any noise/land use conflicts.
Policy N-2.3: Incorporate noise reduction features for items such as but not limited to parking and loading areas, ingress/egress point, and refuse collection areas, during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that no noise reduction measures are required.
Policy N-2.4: Permit only those new development or redevelopment projects that have incorporated appropriate mitigation measures, so that standards contained in the Noise Element or adopted ordinance are met.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that no noise reduction measures are required, and that the Project is consistent with the standards in General Plan and the noise regulations in Section 8.47 of the GGMC.
Goal N-3: Minimized noise impacts from freeways, ensuring that City and State interior and exterior noise standards are not exceeded.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that interior and exterior noise standards would not be exceeded and that no noise reduction measures are required.

General Plan Element / Goal / Policy	Project Consistency
Goal N-4: Minimize noise impacts for residential uses and noise sensitive receptors along the City's arterial streets, ensuring that City and State interior and exterior noise levels are not exceeded.	**Consistent.** A Noise Study for the proposed Project has been prepared and is included as Appendix I, which details that interior and exterior noise standards would not be exceeded and that no noise reduction measures are required.
Air Quality Element	
Policy AQ-2.3: Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new development or redevelopment projects.	**Consistent.** The proposed Project would install new onsite pedestrian access throughout the site that would connect to the new sidewalk that the Project would install along the Russell Avenue and Kerry Street site frontages.
Policy AQ-4.1: Review site developments to ensure pedestrian safety and promote non-automotive users.	**Consistent.** The proposed Project would install new onsite pedestrian access throughout the site that would connect to the new sidewalk along the Russell Avenue and Kerry Street site frontages that would be reviewed and permitted by the City to ensure compliance with applicable pedestrian safety design requirements.
Policy AQ-4.3: Encourage "walkable" neighborhoods with pedestrian walkways and bicycle paths in residential and other types of developments to encourage pedestrian rather than vehicular travel.	**Consistent.** The proposed Project would install new onsite pedestrian access throughout the site that would connect to the new sidewalk that the Project would install along the Russell Avenue and Kerry Street site frontages.
Conservation Element	
Policy CON-1.3: Promote water conservation in new development or redevelopment project design, construction, and operations.	**Consistent.** The proposed Project would implement water conservation measures as required by CALGreen and Title 24 requirements, such as use of water efficient plumbing fixtures and irrigation systems, routing runoff to landscape areas, and provision of separate meters for each residence.
Policy CON-2.1: Enhance water infiltration throughout watersheds by decreasing accelerated runoff rates and enhancing groundwater recharge. Whenever possible, maintain or increase a site's pre-development infiltration to reduce downstream erosion and flooding.	**Consistent.** The proposed Project would decrease runoff rates and enhance infiltration onsite. Drainage from the Project site would be captured by biofiltration devices and runoff would infiltrate into site soils, as detailed in Section 10, *Hydrology and Water Quality*.
Policy CON-2.2: Encourage practices that enable water to percolate into the surrounding soil, instead of letting sediment, metals, pesticides and chemicals runoff directly into the storm drain system, creeks, or regional flood control facilities.	**Consistent.** The proposed Project would treat and infiltrate stormwater onsite. Drainage from the Project site would be captured by biofiltration devices and runoff would infiltrate into site soils, as detailed in Section 10, *Hydrology and Water Quality*.
Policy CON-2.4: Continue to comply with Federal, State, and regional governments and agencies to protect and improve the quality of local and regional groundwater resources available to the City.	**Consistent.** The proposed Project would implement a site specific construction SWPPP and a WQMP to comply with the Orange County DAMP and NPDES permitting, as detailed in Section 10, *Hydrology and Water Quality*.
Goal CON-7: Significant historical, architectural, archeological, and cultural value resources shall be preserved and protected.	**Consistent.** The proposed Project would not result in impacts to significant historic, archaeological, or cultural value resources, as detailed in Section 5, *Cultural Resources*.

General Plan Element / Goal / Policy	Project Consistency
Policy CON-7.1: Preserve and protect Garden Grove's significant historical, archaeological and cultural value resources.	**Consistent.** The proposed Project would not result in impacts to significant historic, archaeological, or cultural value resources, as detailed in Section 5, *Cultural Resources*.
Policy CON-7.2: Preserve Garden Grove's significant historic resources to promote community identity, stability, and aesthetic character.	**Consistent.** The proposed Project would not result in any impacts to significant historic resources, as detailed in Section 5, *Cultural Resources*.
Safety Element	
Policy SAF-2.2: Encourage Crime Prevention Through Environmental Design (CPTED) techniques; design that discourages crime and promotes pedestrian safety, for all new development and redevelopment projects.	**Consistent.** The proposed Project includes design measures that incorporate the concepts of Crime Prevention Through Environmental Design (CPTED), which involve the placement, and orientation of structures, access and visibility of common areas, placement of doors, windows, addressing, lighting and landscaping. CPTED promotes public safety, physical security, and allows residents the ability to monitor activity.
Goal SAF-6: Minimize risk associated with seismic activity and geologic conditions to people and property.	**Consistent.** The proposed Project would be required to be implemented consistent with the California Building Code as included in the GGMC Title 18 Building Codes and Regulations, which would minimize risk associated with seismic activity and geologic conditions to people and property.
Policy SAF-6.1: Avoid or minimize to the greatest extent feasible hazards resulting from development on unstable ground conditions.	**Consistent.** The proposed Project would be required to be implemented consistent with the California Building Code as included in the GGMC Title 18 Building Codes and Regulations, which would minimize hazards related to unstable ground conditions.
Policy SAF-6.3: Ensure that new structures are seismically safe through the proper design and construction. The minimum level of design necessary would be in accordance with seismic provisions and criteria contained in the most recent version of the State and County Codes. Construction shall require effective oversight and enforcement to ensure adherence to the earthquake design criteria.	**Consistent.** The proposed Project would be required to be implemented consistent with earthquake design criteria of the California Building Code as included in the GGMC Title 18 Building Codes and Regulations, which would minimize seismic related hazards.
Policy SAF-10.11: Encourage infill, redevelopment, and higher density development consistent with the goals and policies of the Land Use Element.	**Consistent.** The proposed Project consists of infill, redevelopment, and higher density housing that, as detailed throughout this Table, is consistent with the relevant General Plan policies.
Housing Element	
Goal H-1: Preserve, maintain, and enhance housing and neighborhoods citywide.	**Consistent.** The proposed Project would provide additional housing within an existing neighborhood that would assist in preserving and enhancing the neighborhood.
Policy H-1.1: Neighborhood Preservation. Preserve the character, scale, and quality of established residential neighborhoods.	**Consistent.** The proposed Project would provide two-story residential townhomes that would be consistent with the character, scale, and quality of the established residential neighborhood.

General Plan Element / Goal / Policy	Project Consistency
Policy H-1.10: Sustainable Practices. Promote and encourage sustainable development and green building practices for all new residential development and the retrofit of existing housing.	**Consistent.** The proposed Project would be required to meet the current Title 24 energy efficiency standards, as included in GGMC Section 18.04.010 that include insulation; solar panels, use of energy-efficient HVAC equipment; solar-reflective roofing materials; energy-efficient indoor and outdoor lighting systems and appliances. Thus, the Project would implement sustainable development and green building practices.
Goal H-2: Housing supply to accommodate housing needs at all affordability levels.	**Consistent.** The proposed Project would result in additional housing supply to accommodate needs of above-moderate income households.
Goal H-3: A range of available housing types, densities, and affordability levels to meet diverse community needs.	**Consistent.** The California Department of Finance data from May 2025 states that there are 50,273 housing units within the City. Of these housing units, 97.1 percent of them were occupied, 9 percent were single-family attached residences, and 8.5 percent were residences within buildings containing between 2 and 4 units. The proposed Project would provide additional attached single-family residences that would be in buildings containing 3 and 4 units; and thus, would contribute to the range of available units and increase the number of attached residences in groupings of between 2 and 4 units in the City increasing the diversity of housing.
Policy H-3.1: Adequate Housing Sites. Maintain land use policies and regulations that create capacity for development of a range of residential development types that can fulfill local housing needs, including accessory dwelling units, low-density single family uses, moderate-density townhomes and middle housing, higher-density apartments and condominiums, senior housing, and mixed-use projects.	**Consistent.** The proposed Project would implement a PUD that creates capacity for residential development to fulfill local housing needs, including moderate-density townhomes.
Policy H-3.2: Meeting Housing Needs. Provide adequate sites to encourage housing development that will meet the needs of all income groups.	**Consistent.** The 2021-2029 Housing Element details that the City of Garden Grove has a RHNA for 8,936 new residential units for above moderate income households. The proposed Project would provide an adequate site and new housing to assist in meeting this requirement.
Policy H-3.3: Balance of Housing Types. Promote a balance of housing types, including mixed use development, to meet the needs of the community.	**Consistent.** The proposed Project would provide additional attached townhome residences that would contribute to the balance housing types within the City.
Policy H-3.7: Infill Housing. Encourage infill housing development that is compatible in character with established residential neighborhoods.	**Consistent.** The proposed Project would implement infill housing that would consist of two-story duplex structures that would be compatible with the surrounding established residential neighborhood of one and two-story residences.
Policy H-3.8: New Housing. Critically analyze the location of any proposed new housing to determine suitability for healthy living conditions.	**Consistent.** The Project site would provide healthy living conditions within an existing neighborhood adjacent to residences, a school, and a church. There are no onsite or adjacent conditions that would be unhealthy or otherwise generate unsuitability for residential uses.

Zoning

The Project site is zoned Single-Family Residential (R-1), as shown previously in Figure 5, *Existing Zoning Designations*. Section 9.08.020.020 of the GGMC states that the R-1 zone is intended to provide for the establishment and promotion of single-family detached residences on individual lots and compatible associated activities. Section 9.08.020.020 of the GGMC details that churches, child daycare centers, religious schools, educational institutions are permitted within the R-1 zone with a Conditional Use Permit (CUP).

The proposed Project includes a zoning designation amendment to change the zoning of the site from Single-Family Residential (R-1) to Planned Unit Development (PUD) with the general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards, which implements the LMR General Plan land use designation. The proposed zoning amendment change and development of residential townhomes on the site pursuant to the PUD and consistent with the proposed LMR General Plan land use designation would not result in conflict with any regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

There are no existing regulations or Conditions of Approval related to land use and planning that are applicable to the Project. Regulations listed in Table LU-1 are listed in applicable environmental topic sections herein.

Mitigation Measures

No mitigation measures related to land use and planning are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified based on geologic factors without regard to existing land use and land ownership. The areas are categorized into 4 Mineral Resource Zones (MRZ):

MRZ-1: An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

MRZ-2: An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.

MRZ-3: An area containing mineral deposits, the significance of which cannot be evaluated.

MRZ-4: An area where available information is inadequate for assignment to any other MRZ zone.

The mapping by the California Geological Survey indicates that the Project site is located within an area designated as MRZ-3, which is an area where the significance of mineral deposits is not evaluated. In addition, the Project site is not designated/zoned for the extraction of mineral deposits and no active mining operations exist in the City.

The Project site has no history of mining. In addition, the site is located within a residential, church, and school area that does not include mining. Therefore, implementation of the Project would not cause the loss of availability of mineral resources valuable to the region or state, and no impact would occur. No mitigation measures are required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on the general plan, specific plan or other land use plan?

No Impact. The Project site and the surrounding vicinity are highly urbanized, and they are not in or near a mining site identified by the City's General Plan. The site currently has General Plan land use and zoning designations for residential uses. No mineral extraction activities occur on or near the Project site, and it is not

located within an area known to contain locally important mineral resources. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan as a result of Project implementation. No impacts would occur. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

There are no existing regulations and/or City Conditions of Approval related to mineral resources that are applicable to the Project.

Mitigation Measures

No mitigation measures related to mineral resources are required.

References

California Department of Conservation Mineral Land Classification Map Anaheim Quadrangle. Accessed: https://maps.conservation.ca.gov/mineralresources/

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report (SCH# 2021060714), 2021. Accessed: https://ceqanet.opr.ca.gov/Project/2021060714

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The discussion below is based on the Noise and Vibration Impact Analysis, which is included as Appendix I.

State Law

An interior community noise equivalent level (CNEL) of 45 decibels (dB) is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28) for residential dwellings and hotel and motel rooms.

City of Garden Grove General Plan Noise Element

The City's General Plan Noise Element includes a noise and land use compatibility matrix (Table 7-1) to determine if new land uses are compatible with the existing noise environment. The table identifies noise environments that are less than 65 A-weighted decibel (dBA) CNEL to be normally acceptable for multiple family residential land uses and areas that are less than 70 dBA CNEL are conditionally acceptable with low density, single-family, and duplex residential uses that have air conditioning systems.

Garden Grove Municipal Code

GGMC Section 8.47.040 outlines the City's exterior noise limits as it relates to stationary noise sources. The residential limits are 55 dBA between 7:00 a.m. and 10:00 p.m. and 50 dBA between 10:00 p.m. and 7:00 a.m.

GGMC Section 8.47.040 states that these ambient base noise levels shall be used as the basis for determining noise levels in excess of those allowed unless the actual measured ambient noise level occurring at the same time as the noise under review is being investigated exceeds the ambient base noise level. When the actual measured ambient noise level exceeds the ambient base noise level, the actual measured ambient noise level shall be used as the basis for determining whether or not the subject noise exceeds the level allowed by this section. In situations where two adjoining properties exist within two different use designations, the most restrictive ambient base noise level will apply. Sections 8.47.040 and 8.47.050(C) state that the noise standard for a cumulative period of more than 30 minutes in any hour is the ambient base noise level plus 5 dBA, as

measured at the property line of the noise generation property. Table N-1 lists the ambient base noise levels and noise level standards for various sensitive and conditionally sensitive uses.

Table N-1: Municipal Code Ambient Base Noise Levels and Noise Level Standards

Use Designations	Ambient Base Noise Level	Noise Level Standard	Time of Day
Residential Use	55 dBA	60 dBA	7:00 a.m. - 10:00 p.m.
	50 dBA	55 dBA	10:00 p.m. - 7:00 a.m.
Institutional Use	65 dBA	70 dBA	Any Time
Office-Professional Use	65 dBA	70 dBA	Any Time
Hotels and Motels	65 dBA	70 dBA	Any Time

Source: Noise and Vibration Impact Analysis, Appendix I
dBA = A-weighted decibels

GGMC Section 8.47.060(d) Permitted Construction Hours and Days, states that it is unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any construction or repair work on buildings, structures, or projects, including construction-related vehicles arriving, idling, or being loaded/unloaded at or near a construction site, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device outside of the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction or repair work shall be permitted on Sundays or federal holidays. This is a standard City Condition of Approval.

Federal Transit Administration

The FTA *Transit Noise and Vibration Impact Assessment* (2018) provides construction noise criteria to determine if the project would create a substantial temporary noise increase to the nearby sensitive receptors. The criteria for a detailed assessment provide a residential threshold of 80 dBA Leq during the daytime.

The FTA *Transit Noise and Vibration Impact Assessment* also provides thresholds for increases in ambient noise from vehicular traffic based on increases to ambient noise. An impact would occur if existing noise levels at noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA Ldn and the project creates an increase of 3 dBA or greater project-related noise level increase; or if existing noise levels range from 60 to 65 dBA Ldn and the project creates 2 dBA or greater noise level increase. Noise level increase of 1 dBA or less would not result in an impact.

Caltrans Transportation and Construction Vibration Guidance Manual

California Department of Transportation's (Caltrans) Transportation and Construction Vibration Guidance Manual guidelines are used as a screening tool for assessing the potential for adverse vibration effects related to structural damage and human perception. The guidance manual provides thresholds for continuous (construction-related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second PPV for transient sources at 0.04 inch per second PPV for continuous sources; and that the threshold for building damage to older residential structures of 0.30 inch per second PPV.

Sensitive Receptors

The nearest sensitive receptors to the Project site are single-family residences located approximately 10 feet south of the Project site southern boundary. There are also residences to the north of the site beyond Russell Avenue, and to the west of the site beyond Kerry Street. The nearest school is Sunnyside Elementary School that is adjacent to the east of the Project site. The school parking lot is located to the east of the Project site eastern boundary and school buildings are located behind the parking area.

Existing Ambient Noise Levels

To identify the existing ambient noise levels in the Project area, noise level measurements were taken on the Project site on December 9 and 10, 2025. Figure NOI-1 shows the location of the noise measurements. As shown on Table N-2, the average daily noise levels in the Project area were 66.8 to 69.8 Community Noise Equivalent Level (CNEL). Traffic noise from SR-22 is the dominant source of ambient noise in the vicinity of the Project site.

Table N-2: 24-Hour Ambient Noise Level Measurements

Location Number	Location Description	Daytime Noise Levels[1] (dBA L_{eq})	Evening Noise Levels[2] (dBA L_{eq})	Nighttime Noise Levels[3] (dBA L_{eq})	Average Daily Noise Levels (dBA CNEL)
LT-1	9822 Russell Avenue, Garden Grove. On the northwest corner of the Project site, on a tree. Approximately 30 feet from the Kerry Street centerline, 45 feet from the Russell Avenue centerline, and 940 feet from the SR-22 centerline.	54.6-61.9	57.7-58.7	54.3-64.0	66.8
LT-2	9822 Russell Avenue, Garden Grove. Near the southeast corner of the Project site, on a light pole. Approximately 780 feet from the SR-22 centerline.	56.8-63.8	59.7-62.7	59.4-66.8	69.8

Source: Noise and Vibration Impact Analysis, Appendix I

[1] Daytime Noise Levels = noise levels during the hours of 7:00 a.m. to 7:00 p.m.

[2] Evening Noise Levels = noise levels during the hours of 7:00 p.m. to 10:00 p.m.

[3] Nighttime Noise Levels = noise levels during the hours of 10:00 p.m. to 7:00 a.m.

CNEL = Community Noise Equivalent Level L_{eq} = equivalent continuous sound level

dBA = A-weighted decibels SR-22 = California State Route 22



9822 Russell Avenue, Garden Grove

Figure NOI-1: Noise Measurement Locations

Map Date: 2/2/2026
Data Sources: LSA, 1/26/2026

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a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact

Construction

Construction crew commutes and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on access roads leading to the site. The results of the CalEEMod for the proposed Project indicate that, during the demolition phase the acoustical equivalent traffic volume would be 1,765 passenger car equivalent vehicles (Appendix I). Based on the Orange County Highway Design Manual (County of Orange 2005), the traffic volume on residential collector streets such as Russell Avenue, assumed to be the main construction access, is between 1,200 and 6,000 vehicles (average of 3,600 vehicles). Noise and Vibration Impact Analysis determined that when adding 1,765 to the existing average daily trips, the increase is 1.8 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

Noise generated by construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high noise levels. Construction is expected to occur in the following stages: demolition, site preparation, grading, building construction, architectural coating, paving. Noise levels generated by heavy construction equipment can range from approximately 76 dBA to 87 dBA when measured at 50 feet, as shown on Table N-3.

Table N-3: Construction Equipment Reference Noise Levels

Equipment Description	Acoustical Usage Factor (%)[1]	Maximum Noise Level (L_{max}) at 50 ft[2]
Auger Drill Rig	20	84
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Jackhammers	20	85
Paver	50	77
Pickup Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85

Equipment Description	Acoustical Usage Factor (%)[1]	Maximum Noise Level (L_{max}) at 50 ft[2]
Scrapers	40	85
Tractors	40	84
Trencher	50	80
Welder	40	73

Source: Noise and Vibration Impact Analysis, Appendix I.

The construction noise from the proposed Project would occur over an approximate 11-month period and would be temporary in nature as the operation of each piece of construction equipment would not be constant throughout the construction day, and equipment would be turned off when not in use. Also, per GGMC Section 8.47.060(d), construction activities are limited to occur between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction or repair work shall be permitted on Sundays or federal holidays. The proposed Project's construction activities would occur pursuant to these regulations, as ensured through the permitting process.

Construction equipment was analyzed based on being placed in the middle of the Project site, per the FTA Manual for a General Assessment, and is based on the rationale that mobile equipment would likely move around the entire Project site in a typical workday. As such, the middle of Project site would provide the acoustical average noise level created over a typical workday. However, to provide a conservative analysis, all equipment was analyzed as if operating simultaneously, instead of just the two nosiest pieces of equipment as recommended by the FTA Manual.

Table N-4 identifies the nearest sensitive uses to the Project site and their distances from the center of construction activities and the composite noise levels that do not consider intervening topography or barriers. As shown, construction noise at the closest residences and adjacent school would range from 76 to 79 dBA Leq, which would not exceed the 80 dBA Leq threshold during the daytime for residential uses. These noise levels would only occur when all construction equipment is operating simultaneously and, therefore, are conservative in nature. As construction noise at sensitive receiver would not exceed the 80 dBA Leq threshold, impacts would be less than significant, and no mitigation measures are required.

Table N-4: Project Construction Noise Levels at Sensitive Receivers

Receptor (Location)	Composite Noise Level (dBA L_{eq}) at 50 ft[1]	Distance (ft)	Composite Noise Level (dBA L_{eq})
Residential Uses (North)	87	160	76
School (East)		175	76
Residential Uses/School (South)		120	79
Residential Uses (West)		220	74

Source: Noise and Vibration Impact Analysis, Appendix I.
Note: The assessment distance is the distance from the center of construction activities to the property line of the surrounding uses.

Operation

Exterior Noise. As detailed in Table N-1, the existing ambient noise at the Project site is 66.8 dBA CNEL near the northwestern boundary of the site and 69.8 dBA CNEL near the southeastern boundary of the site. Traffic noise from SR-22 is the dominant source of noise in the vicinity of the Project site. The main amenity areas where residents would spend time include the common open space recreation area near the eastern edge of the Project site as well as the ground-level patios of the proposed townhomes. The Project includes 6-foot-high

CMU walls along the south and east site boundaries. Based on the distance of SR-22 to the Project site, a 6-foot-high wall is expected to provide an approximately 5 dBA noise reduction, which would reduce levels at the exterior habitable areas to 64.8 dBA CNEL. This noise level is below the General Plan "normally acceptable" level of 65 dBA CNEL, and no noise reduction measures would be required.

Interior Noise. As described previously, the existing ambient noise is 69.8 dBA CNEL near the southern façade of the proposed building closest to SR-22. Based on the EPA's Protective Noise Levels (1974), with windows and doors open, interior noise levels at the units along the southern boundary would be 58 dBA (i.e., 70 dBA - 12 dBA = 58 dBA). In addition, with the proposed HVAC systems that allow window closed conditions, standard residential building construction, and standard windows with a minimum Sound Transmission Class 28, interior noise levels would be below 45 dBA CNEL (Appendix I). No additional reduction measures would be required.

Traffic Noise. As described in Section 17, *Transportation*, Table T-1, operation of the proposed Project would result in a reduction of 58 daily vehicle trips, with 26 fewer trips in the a.m. peak hour and 24 fewer trips in the p.m. peal hour. Thus, vehicular noise from the proposed Project would be less than what is generated by the existing use, and operational roadway noise impacts to the nearby sensitive receptors would not occur. No mitigation measures are required.

Onsite Noise. The Project would include ground-floor heating, ventilation, and air conditioning (HVAC) equipment that could operate 24 hours per day. The HVAC equipment would generate noise levels of approximately 66.5 dBA Leq at 5 ft based on previous measurements conducted for similar residential units (Appendix I). A group of four HVAC units would generate noise levels of approximately 72.5 dBA Leq at 5 ft. The nearest HVAC units to off-site sensitive uses would be approximately 68 feet from the residential property line to the west. Attenuating for distance would reduce the noise level by 22.7 dBA. Noise levels of 49.8 dBA generated from on-site HVAC units would not exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standards of 60 dBA and 55 dBA, respectively, for residential uses. All other sensitive receptors are farther from the proposed HVAC equipment. Additionally, noise levels to the south and east would be further reduced by the proposed six-foot-high CMU walls along the south and east site boundaries. Therefore, no off-site noise impacts from on-site HVAC equipment would occur. No mitigation measures are required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant with Mitigation Incorporated

Construction

Construction activities associated with the proposed Project would require the operation of off-road equipment and trucks that are known sources of vibration. Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance.

Since neither the GGMC nor the General Plan provides a quantifiable vibration threshold, guidance from the *Transportation and Construction Vibration Guidance Manual*, prepared by Caltrans, has been utilized. The Caltrans guidance provides thresholds for building damage, where transient vibration sources up to 0.30 inch per second peak particle velocity (PPV) is considered safe for older residential structures, such as those near

the Project site. Also, this Caltrans guidance identifies human response, where transient vibration sources become distinctly perceptible at 0.04 root-mean-square (RMS) in/sec. Vibration levels calculated in RMS are best for characterizing human response to building vibration, and vibration level in PPV is best for characterizing the potential for damage.

A range of vibration is generated by construction equipment. As shown in Table N-5, the PPV and RMS vibration levels at 25 feet from bulldozers and other heavy-tracked construction equipment (expected to be used for this Project) generate approximately 0.089 in/sec PPV or 0.062 in/sec RMS of ground-borne vibration.

Table N-5: Vibration Source Levels for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	RMS (in/sec)[1]
Pile Driver (Impact), Typical	0.644	0.451
Pile Driver (Sonic), Typical	0.170	0.119
Vibratory Roller	0.210	0.147
Hoe Ram	0.089	0.062
Large Bulldozer[1]	**0.089**	**0.062**
Caisson Drilling	0.089	0.062
Loaded Trucks (Dumpers/Tenders)[1]	**0.076**	**0.053**
Jackhammer	0.035	0.025
Small Bulldozer[1]	**0.003**	**0.002**

[1] Equipment shown in **bold** is expected to be representative of the equipment used on site.
Source: Noise and Vibration Impact Analysis, Appendix I.

The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings, and the Project construction boundary. The closest structures to construction activities are the residential uses to south, which are approximately 10 feet from the property line. The vibration levels generated by large bulldozers and other large equipment would generate ground-borne vibration levels of up to 0.352 in/sec PPV at 10 feet from the closest structures to the south of the Project site, as shown on Table N-6.

Table N-6: Potential Construction Vibration Damage at Nearest Receptor

Receptor (Location)	Reference Vibration Level (in/sec PPV) at 25 ft[1]	Distance (ft)[2]	Vibration Level (in/sec PPV)
Residential Uses (North)	0.089	75	0.017
School (East)	0.089	65	0.021
Residential Uses (South)	0.089	10	0.352
	0.089	20[3]	0.124
	0.003	10	0.012
Residential Uses (West)	0.089	50	0.027

[1] This reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The assessment distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.
[3] A distance of 20 feet from the perimeter of large equipment construction activity to the nearest structure to the south would apply with the implementation of Mitigation Measure NOI-1.
Source: Noise and Vibration Impact Analysis, Appendix I.

Therefore, Mitigation Measure NOI-1, has been included to restrict the use of large construction equipment such as large bulldozers within 10 feet of the southern property line, which would result in a 20 foot setback from the closest structures to the south and would reduce vibration levels to 0.124 in/sec PPV, which is below the 0.3 in/sec PPV threshold. Vibration levels at all other buildings would be lower. With the implementation of Mitigation Measure NOI-1, construction would not exceed the vibration damage threshold, and impacts would be less than significant.

In addition, vibration levels would approach 0.011 in/sec RMS at the closest receptors, as shown in Table N-7, and would not exceed the annoyance threshold of 0.04 in/sec RMS. Therefore, impacts related to construction vibration annoyance would be less than significant.

Table N-7: Vibration Annoyance from Construction at Nearest Receptor

Receptor (Location)	Reference Vibration Level (in/sec RMS) at 25 ft[1]	Distance (ft)[2]	Vibration Level (in/sec RMS)
Residential Uses (North)	0.062	180	0.007
School (East)		240	0.005
Residential Uses (South)		125	0.011
Residential Uses (West)		225	0.006

[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The assessment distance is associated with the average condition, identified by the distance from the center of construction activities to the nearest buildings of surrounding uses.
Source: Noise and Vibration Impact Analysis, Appendix I.

Operation

Operation of the proposed residential uses would include heavy trucks for residents moving in and out of the units and garbage trucks for solid waste disposal. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. However, as shown on Table N-5, vibration levels from loaded trucks generate 0.076 inch per second PPV. Truck movements on site would be travelling at very low speed, so it is expected that truck vibration at nearby sensitive receptors would be less than 0.076 inch per second PPV, which is less than the older residential structure damage threshold of 0.3 inch per second PPV threshold. Further, structures greater than 20 feet from the roadways would experience vibration levels below the most conservative standard of 0.12 in/sec PPV. Therefore, operational vibration impacts would be less than significant. No mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is not located within an airport land use plan or within 2 miles of an airport. The closest air facility is the Los Alamitos Joint Forces Training Base, located approximately 5 miles northwest of the Project site. The closest public airports to the Project site include the Fullerton Municipal Airport that is approximately 7 miles to the north of the site and John Wayne Airport, which is located over 7.75 miles to the southeast of the Project site. Therefore, the Project would not result in excessive noise levels related to airports, and no impacts would occur. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation and City Condition of Approval would reduce potential impacts related to noise.

COA: Construction Noise. Project construction plans and specifications shall detail that construction activities shall occur in compliance with GGMC Section 8.47.060(d), which states that it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any construction or repair work on buildings, structures, or projects, including construction-related vehicles arriving, idling, or being loaded/unloaded at or near a construction site, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device outside of the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction or repair work shall be permitted on Sundays or federal holidays.

Mitigation Measures

Mitigation Measure NOI-1: Construction Vibration. Prior to issuance of demolition or grading permits, the Community Development Director, or designee, shall verify that the construction plans require that the construction contractor restrict the use of heavy construction equipment (i.e., greater than 80,000 pounds), vibratory rollers, large loaded trucks, and large dozers within 10 feet of the southern property line. Instead, smaller, rubber-tired bulldozers (less than 80,000 pounds) shall be used within this area during Project construction to reduce vibration levels.

References

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report (SCH# 2021060714), 2021. Accessed: https://ceqanet.opr.ca.gov/Project/2021060714

City of Garden Grove Municipal Code. Accessed at: https://ecode360.com/GA4928/home

Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018. Accessed: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Noise and Vibration Impact Analysis prepared by LSA Associates, Inc., 2026 (Appendix I)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Induce substantial unplanned population growth in an area, either directly or indirectly?

Less than Significant Impact. The Project site is currently developed with a church, preschool, wireless facility, and daycare facility and does not currently provide for housing; however, the site is within a developed area that includes residential, school, and church uses.

The California Department of Finance data from May 2025 states that there are 171,492 residents and 50,273 housing units within the City. Of these housing units, 97.1 percent of them were occupied. The different types of housing units in the City consist of 57 percent single-family residences, 9 percent were single-family attached residences, 8.5 percent were residences within buildings containing between 2 and 4 units, 22.5 percent were in buildings containing 5 or more units, and 3.1 percent consist of mobile homes. The average household size within the City is 3.47 persons per household. The Southern California Association of Governments (SCAG) Connect SoCal demographics and growth forecasts project that the number of households in the City's will grow to 53,600 by the year 2035 and 57,700 by the year 2050. This is an increase of 3,327 households by 2035, which is a 6.6 percent increase over the 2025 number of housing units in the City. The increase in households by 2050 is 7,427, which is a 14.8 percent increase over the 2025 number of housing units in the City.

Construction

Construction of the Project would provide short-term jobs over an approximately 11-month period. Many of the construction jobs would be temporary and would be specific to the Project. This workforce would include a variety of craftspeople, such as cement finishers, iron workers, welders, carpenters, electricians, painters, and laborers. It is anticipated that the Project-related construction labor force would already be located in the region, travel from one construction project to another as needed, and workers would not be expected to relocate their places of residence as a consequence of working on the Project. Therefore, the Project would not be expected to induce substantial population growth or demand for housing through increased construction employment. No mitigation measures are required.

Operation

The Project would redevelop the site with 26 residential townhomes. Based on the existing California Department of Finance estimated average household size of 3.47 persons per household, the 26 residences

that would be developed on the Project site would result in approximately 90 residents at full capacity. Assuming all residents on the Project site are new to Garden Grove, this would equate to an increase of 0.05 percent of the City's existing population. In addition, the 26 townhomes would result in a 0.05 percent increase in the number of housing units within the City; and would be 0.4 percent of the SCAG projected increase in households within the City by year 2050. This is not considered a substantial increase due to the limited number of residents and residential units that would result from the Project, which is located within an urban area. Additionally, the City's Regional Housing Needs Assessment (RHNA) for the 2021–2029 planning period identifies that the City's future housing need is 19,168 residential units, and 8,936 of which are for above moderate income households. The Project would be within the City's future housing need for the 2021–2029 planning period.

Indirect growth is related to the expansion of infrastructure, such as water, sewer, drainage, or street systems that would serve areas beyond the proposed development. The Project would be served by the existing infrastructure that currently serves the site and that the new townhomes would connect to. Therefore, the Project would not result in inducement of substantial population growth, either directly or indirectly, and impacts would be less than significant. No mitigation measures are required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently developed with a church, preschool, and daycare facility that is relocating. No housing currently exists on the Project site, and displacement of housing and people would not occur as a result of Project implementation. Therefore, the proposed Project would not result in an impact related to the displacement of housing or people, and no mitigation would be required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

There are no existing regulations and/or Conditions of Approval related to population and housing that are applicable to the Project.

Mitigation Measures

No mitigation measures related to population and housing are required.

References

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2020-2025. Sacramento, California, May 2025 Accessed: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/

Southern California Association of Governments Connect SoCal (2020–2050 Regional Transportation Plan/Sustainable Communities Strategy) Demographics and Growth Forecast Technical Report, 2024. Accessed: https://www.scag.ca.gov/sites/default/files/2024-05/23-2987-tr-demographics-growth-forecast-final-040424.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:

Fire protection?

Less than Significant Impact. The Orange County Fire Authority (OCFA) provides fire suppression, emergency medical, rescue and fire prevention, and hazardous materials coordination services for the City of Garden Grove through a contract for services. There are seven City owned Fire Stations within the City. There are four City fire stations within 2.6 miles of the site, which are listed below in order of distance from the Project site:

- Fire Station 80, located at 14162 Forsyth Lane, which is 1.1 miles from the Project site
- Fire Station 81, located at 11261 Acacia Parkway, which is 1.8 miles from the Project site
- Fire Station 82, located at 11805 Gilbert Street, which is 2.3 miles from the Project site
- Fire Station 83, located at 12132 Trask Avenue, which is 2.6 miles from the Project site

The proposed Project would remove the existing church, preschool, and daycare facilities and develop 26 new townhome residences on the site. The new townhomes would include new fire prevention infrastructure pursuant to current code requirements. The City has adopted the California Fire Code (Title 24, Part 9 of the California Code of Regulations) in GGMC Section 18.16.04, which regulates new structures related to safety

provisions, emergency planning, fire-resistant construction, fire protection systems, and appropriate emergency access throughout the site. The Project's adherence to the existing fire code requirements has been verified by the OCFA as part of the City's regular permitting process and the City's standard Condition of Approval to comply with the OCFA Master Plan would be included.

As the site and surrounding areas are currently served by Fire Station 80 that is 1.1 miles from the site, and there are three other City fire stations within 2.6 miles of the site, OCFA would be able to continue to provide fire services to the Project site and surrounding area from the existing fire stations. Additionally, the existing onsite structures are aged and not consistent with current fire code standards. The Project would provide new construction onsite that would provide improved fire safety compared to the existing structures. Also, the proposed Project would result in a limited number of residents on the site. The 90 residents at full capacity would be a maximum increase of 0.05 percent of the City's population. The new construction and limited increase in population within 2.6 miles of four fire stations would not result in the need for new or physically altered fire facilities that could cause significant environmental impacts. Therefore, the Project would result in less than significant impacts related to fire protection services and no mitigation measures are required.

Police protection?

Less than Significant Impact. The Garden Grove Police Department provides police services to the Project area. The Police Department headquarters is located approximately 1.8 miles from the Project site. In 2025, the City had 183 sworn officers and 71 non-sworn Police Department employees, which equates to 1.07 sworn officers per 1,000 residents. In addition, the City's 2025-27 Biannual Budget states that the average response times for calls for service is 5:09 minutes.

Construction

Crime and safety issues during Project construction may include: theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism, which can result in the need for police services. However, the site would have security fencing during construction activities, and onsite materials would be either locked or kept in secure locations and would be limited based on the materials needed during each phase of construction, which would reduce these concerns during the approximately 11-month construction period to a less than significant level. In addition, new construction activity on the Project site would not allow the site to be used for trespassing; and would therefore eliminate the existing security concern on the Project site. No mitigation measures are required.

Operation

Redevelopment of the Project site would result in approximately 90 residents onsite, which would replace the church, preschool, and daycare employees and patrons. The 90 residents at full capacity would be a maximum increase of 0.05 percent of the City's population. Based on the City's existing ratio of 1.07 sworn officers per 1,000 residents, the 90 residents at full capacity would result in the need for 0.10 percent of a new officer. During operation, the Project is anticipated to generate a typical range of police service calls, such as vehicle break-ins, residential thefts and disturbances, and vandalism. Security concerns would be addressed by providing low-intensity security lighting and visibility in common areas. Also, pursuant to the City's project review process, the Police Department has reviewed the Project's site plans and has not identified security concerns.

Due to the redevelopment nature of the Project site that is 1.8 miles from the Police Department headquarters, within an area that is already served, the increase would not be significant when compared to the current

demand levels and law enforcement personnel are anticipated to be able to respond in a timely manner to emergency calls from the Project site. Overall, the needs for law enforcement services from the proposed Project would result in 0.10 percent of an officer that would not require construction or expansion of the Police Department facilities. Thus, the Project would not result in the need for new or physically altered police protection facilities, and substantial adverse physical impacts associated with the provision of new or expanded facilities would be less than significant. No mitigation measures are required.

Schools?

Less than Significant Impact. The Project area is in the Garden Grove Unified School District (GGUSD), which serves a 28-square mile area with 65 schools. The following schools identified by the GGUSD website school locator would service students at the Project site:

- Sunnyside Elementary School, at 9972 Russell Avenue; adjacent to the east of the Project site
- Jordan Intermediate, at 9821 Woodbury Road; 0.8 mile south of the Project site
- Bolsa Grande High School, at 9401 Westminster Avenue; 1.6 miles south of the Project site

Development of the Project would generate a new student population on the Project site, who would generally (unless homeschooled or attending a private school) attend one of the three schools listed above. This would generate additional students to be served at local public schools. However, the need for additional school facilities is addressed through compliance with school impact fee assessment SB 50 (Chapter 407 of Statutes of 1998). SB 50 sets forth a state school facilities construction program, in which school districts (including GGUSD) collect fees at the time of issuance of building permits for development projects. In addition, pursuant to Government Code Section 65995 payment of the school impact fees provides full and complete mitigation of school impacts. As a result, impacts related to school facilities from the increase in students related to the project would be less than significant with the Government Code required fee payments. Consistent with the requirement, the payment of school fees is listed below as an existing regulation that reduces potential impacts. No mitigation measures are required.

Parks

Less than Significant Impact. The City currently maintains 13 parks and uses five public schools as additional park facilities through joint-use agreements with the GGUSD, totaling 157.1 acres of parkland throughout the City. The General Plan Parks, Recreation, and Open Space Element requires the provision of two acres of parkland per 1,000 residents.

The Project would develop 26 residential townhomes on the Project site, which would result in a new resident population of approximately 90 persons that would utilize park and recreational facilities. The Project includes a 3,695 square foot central active open space recreation area with shade structures, BBQs with buffet countertop, picnic seating, community garden with raised planter boxes, open turf, bench seating, shade trees. The Project also includes 2,901 square feet of passive open space area and 2,106 square feet of private yards. The new resident population would likely utilize the onsite open space and recreation areas; in addition to other existing nearby park facilities.

GGMC Sections 9.40.140 and 9.44.030 require that two acres of City parks per 1,000 persons existing within the City be dedicated to local parks. As described previously, the Project is estimated to result in 90 new residents at full occupancy. This would create a City requirement for dedication of 0.18 acre (7,840 square feet) of parkland and/or payment of park fees pursuant Section 9.40.140 of the GGMC, which provides an in-lieu fee

and parkland dedication requirements for development projects. Because the Project would provide both onsite recreation facilities and payment of the in-lieu fee for park and recreation, impacts related to the expanded need for parks due to the project would be less than significant. No mitigation measures are required.

Other public facilities?

Less than Significant Impact. Other public facilities include libraries. The County of Orange operates three public libraries in the City, which include:

- Garden Grove Main Library, located at 11200 Stanford Avenue, located 1.9 miles from the Project site;
- Garden Grove/Chapman Library, located at 9182 Chapman Avenue, located 2.4 miles from the Project site; and
- Garden Grove Tibor Rubin Library, located at 11962 Bailey Street, located 5.7 miles from the Project site.

Library service needs are changing with increasing resources available online and the availability of high-speed internet services. Therefore, the 26 new townhomes on the Project site do not necessarily have an incremental increased need for library resources/services or square footage of library space. The Project would install internet infrastructure and a majority of the residential units would likely have internet service and a majority of residents are likely to have cell phone service with internet access, which provides access to many of the same resources provided by the library and would limit the increased need for library services and resources. Therefore, the Project would result in less than significant impacts related to library services. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations and Condition of Approval would reduce potential impacts related to public services.

COA: Fire Master Plan: As listed previously in Section 9, *Hazards and Hazardous Materials*.

Schools Development Impact Fee: The Project will be required to pay applicable development fees levied by the Garden Grove Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.407) to offset these impacts on school facilities resulting from new development.

Park and Recreation Impact Fee: The Project will be required to pay applicable City development impact fees for park and recreational facilities pursuant to GGMC 9.44.030 In-Lieu Park Fees, which are imposed on each development project to offset the cost of providing increased park and recreation facilities.

Mitigation Measures

No mitigation measures related to public services are required.

References

California Department of Education. Accessed: https://www.cde.ca.gov/ds/

City of Garden Grove Biannual Budget 2025-27. Accessed: https://city-garden-grove-ca-cleardoc.cleargov.com/13525/448903/d

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Municipal Code. Accessed at: https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

City of Garden Grove Website Parks and Facilities Page. Accessed: https://ggcity.org/community-services/parks-and-facilities

Garden Grove Police Department. Accessed: https://ggcity.org/police

Garden Grove Fire Station Locations: Accessed: https://ggcity.org/orange-county-fire-authority/garden-grove-fire-station-locations

Garden Grove Unified School District Accessed: https://www.ggusd.us/

Orange County Fire Authority Website. Accessed: https://ocfa.org/

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would be accelerated?

Less than Significant Impact. The Project would develop 26 townhome residences on the Project site, which would result in a resident population of approximately 90 people that would utilize park and recreational facilities. The Project includes a 3,695 square foot central active open space recreation area with shade structures, BBQs with buffet countertop, picnic seating, community garden with raised planter boxes, open turf, bench seating, shade trees. The Project also includes 2,901 square feet of passive open space area and 2,106 square feet of private yards. Based on the limited number of residents at full capacity of the Project and the provision of onsite recreation area, the Project is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

In addition, as described previously, the GGMC Section 9.40.140 requires payment of park fees prior to the issuance of a building permit. By payment of the required park fees, the Project would provide funding to offset any increased usage at park and recreation facilities. Overall, the Project would not result in substantial physical deterioration of park and recreation facilities, and impacts would be less than significant. No mitigation measures are required.

b) Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. As described previously, the Project includes a 3,695 square foot central active open space recreation area with shade structures, BBQs with buffet countertop, picnic seating, community garden with raised planter boxes, open turf, bench seating, shade trees. The Project also includes 2,901 square feet of passive open space area and 2,106 square feet of private yards. The impacts of development of these recreational amenities are evaluated herein as part of the impacts of the Project as a whole and are analyzed throughout the various sections of this document. For example, activities such as excavation, grading, and construction, as required for the recreational components of this Project, are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation sections.

In addition, while the Project would contribute park development fees pursuant to GGMC Section 9.40.140 to be used towards the future expansion or maintenance parks and recreational facilities, these fees are standard with every residential development, and the Project would not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. As a result, impacts would be less than significant. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation and City Condition of Approval would reduce potential impacts related to recreation.

Park and Recreation Impact Fee: Listed previously in Section 15, *Public Services*.

Mitigation Measures

No mitigation measures related to recreation are required.

References

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Municipal Code. Accessed at: https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

City of Garden Grove Website Parks and Facilities Page. Accessed: https://ggcity.org/community-services/parks-and-facilities

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

The discussion below is based on the LOS Screening Analysis (Appendix B) and the Vehicle Miles Traveled (VMT) Screening Analysis (Appendix J).

Traffic Thresholds

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts. SB 743 specified that the criteria should promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. The bill also specified that delay-based Level of Service (LOS) could no longer be considered an indicator of a significant impact on the environment.

VMT Threshold. CEQA Guidelines Section 15064.3 - Determining the Significance of Transportation Impacts, provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT. The City of Garden Grove Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment provides screening thresholds to identify projects that would have a less than significant impact on VMT, which include being within a Transit Priority Area, being within a low traffic analysis zone (TAZ) or being a local-serving project.

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact

Construction

Construction activities associated with the Project would generate vehicular trips from construction workers traveling to and from the Project site and delivery and hauling of construction supplies to, and debris and recyclable solid waste from, the Project site. The CalEEMod modeling completed for the Project (Appendix A)

details that the demolition and grading construction phases would generate the most vehicular trips. The demolition phase would generate 44 one-way haul trips and 13 one-way worker trips per day (114 total trips per day). The grading phase would generate 31 one-way haul trips and 13 one-way worker trips per day (88 total trips per day). As detailed in Table 2, *Construction Schedule*, demolition and grading would occur over 24 working days. The building construction phase is the longest and is anticipated by CalEEMod to generate 44 round trips per day. The construction related trips would generally travel from SR-22 to Trask Avenue and/or Brookhurst Street to access the Project site during the approximate 11-month construction period.

As detailed below, operation of the existing church, preschool, and daycare on the site results in 219 daily trips. The 114 trips per day during maximum construction activities would be much less than operation of the existing site uses. Therefore, construction of the Project would not result in an increase in traffic on roadway facilities, such that it could conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant. No mitigation measures are required.

Operation

Roadway Facilities. The proposed Project would remove the existing church, preschool, wireless facility, and daycare uses and redevelop the Project site with 26 new residential townhomes, open space, and parking facilities. A Project trip generation was prepared using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 12th Edition (2025. As shown in Table T-1, the existing church, preschool, and daycare generate 219 daily trips with 37 a.m. and 38 p.m. and the proposed 26 residential townhomes are forecast to generate 161 daily vehicle trips, 11 a.m. and 14 p.m. peak hour vehicle trips. This would result in an overall reduction of 58 daily trips with 26 fewer trips in the a.m. peak hour and 24 fewer trips in the p.m. peak hour. Thus, the Project would not generate an increase in traffic on roadway facilities that could conflict with a program, plan, ordinance, or policy addressing the circulation system. No mitigation measures are required.

Table T-1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
560 Church[1]		1000 Sq. Ft. GFA	6.78	0.23	0.14	0.37	0.18	0.25	0.43
565 Day Care Center[2]		1000 Sq. Ft. GFA	39.3	5.77	5.11	10.88	5.05	5.7	10.75
220 Multifamily Housing (Low-Rise)[3]		Dwelling Units	6.21	0.1	0.31	0.41	0.32	0.2	0.52
Project Trip Generation									
Existing Uses Trip Generation									
Church[1]	15.59	1000 Sq. Ft. GFA	106	4	2	6	3	4	7
Day Care Center[2]	2.88	1000 Sq. Ft. GFA	113	16	15	31	15	16	31
Proposed Project Trip Generation									
Multifamily Housing (Low-Rise)[3]	26	Dwelling Units	161	3	8	11	9	5	14
Total Existing Trip Generation			**219**	**20**	**17**	**37**	**18**	**20**	**38**
Total Project Trip Generation			**161**	**3**	**8**	**11**	**9**	**5**	**14**
Total Net New Trip Generation			**-58**	**-17**	**-9**	**-26**	**-9**	**-15**	**-24**

Source: Level of Service Screening Analysis, Appendix B.

[1]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 560 - Church (Average Rate)

[2]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 565 - Day Care Center (Average Rate)

[3]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 220 - Multifamily Housing (Low-Rise) (Average Rate)

Pedestrian Facilities. A sidewalk currently exists on Russell Avenue along the Project site frontage. The proposed Project would redevelop and improve the existing sidewalk and provide for pedestrian circulation by constructing new onsite sidewalks and pathways that would circle the site, provide pedestrian access to the onsite recreation and open space areas, and connect to the sidewalk along Russell Avenue and the new sidewalk along Kerry Street that would be installed by the Project. The Project would provide onsite pedestrian circulation to facilitate use of the existing and new offsite sidewalks; and therefore, impacts related to pedestrian facilities or a conflict with a program, plan, ordinance, or policy related to pedestrian facilities would not occur. No mitigation measures are required.

Bicycle Facilities. There are no existing bicycle lanes located on the streets surrounding the Project site. The closest existing bicycle lanes are Class II Bike lanes, which are on-street striped lanes, that are located on Brookhurst Street. The Project includes installation of a bicycle rack for community use to encourage bicycle transportation. As a result, the Project would not result in impacts related to bicycle circulation, and no mitigation measures are required.

Transit Service. Transit service is provided along Brookhurst Street by Orange County Transportation Authority (OCTA) Bus Route 35 with service every 30 minutes during the peak hour. The existing bus services would provide efficient transportation to and from the site for residents and visitors and have the potential to reduce vehicle miles traveled. Impacts related to transit services would not occur from implementation of the proposed Project, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. The City of Garden Grove Traffic Impact Analysis Guidelines for VMT provides screening thresholds to identify projects that would have a less than significant impact on VMT, which include meeting specific criteria within a Transit Priority Area, being within a low TAZ or being a local serving retail project. The Project's consistency with these screening thresholds is detailed below.

Transit Priority Area. The City's VMT screening thresholds identify that projects in a Transit Priority Area (TPA), which are locations within 0.5 mile of an existing major transit stop (an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods) or an existing stop along a high-quality transit corridor would have a less than significant impact on VMT. However, the City guidelines state that the project may not meet the screening threshold if the following project or location specific criteria are not met:

- Has a Floor Area Ration (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate or high-income residential units.

The Project site is located approximately 327 feet (0.062 miles) from Bus Stop ID 2187 and 500 feet (0.095 miles) from Bus Stop ID 2208, both served by Orange County Transportation Authority (OCTA) Route 35. This route does not operate at 20-minute or better headways during weekday peak periods (6:00–9:00 a.m. and 3:00–7:00 p.m.). Thus, the area does not qualify as a "major transit stop," and therefore, does not meet the definition of a TPA. As such, the Project does not meet the TPA screening criteria.

Low VMT Traffic Analysis Zone. The City's TIA Guidelines use the Orange County Traffic Analysis Model (OCTAM) travel demand forecasting model to determine if a project is located in a low VMT generating area. Per these guidelines, projects located in Zone 1 areas, Lower Than VMT Threshold, can be presumed not to have a significant VMT impact and can be screened from VMT analysis.

As shown in Figure T-1, *Low VMT Generating Traffic Analysis Zones*, the Project site is located in Zone 2 that has been identified as having a lower than County average VMT. Therefore, the site is in an area that has a lower than County average VMT but higher than the City of Garden Grove's VMT Threshold and cannot be assumed to be less than significant. Therefore, the Project does not meet the Low VMT Area screening criteria.

Project Type Screening. The City of Garden Grove Traffic Impact Analysis Guidelines identify specific land uses that qualify for Project Type Screening. Residential development is not included among the listed project types. Therefore, the proposed residential townhome Project does not qualify for Screening Criteria 3.

However, the Governor's Office of Planning and Research (OPR), *Technical Advisory on Evaluating Transportation Impacts in CEQA* (original Dec. 2018; updated Jan. 22, 2019) states (p. 17) that, "Where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact."

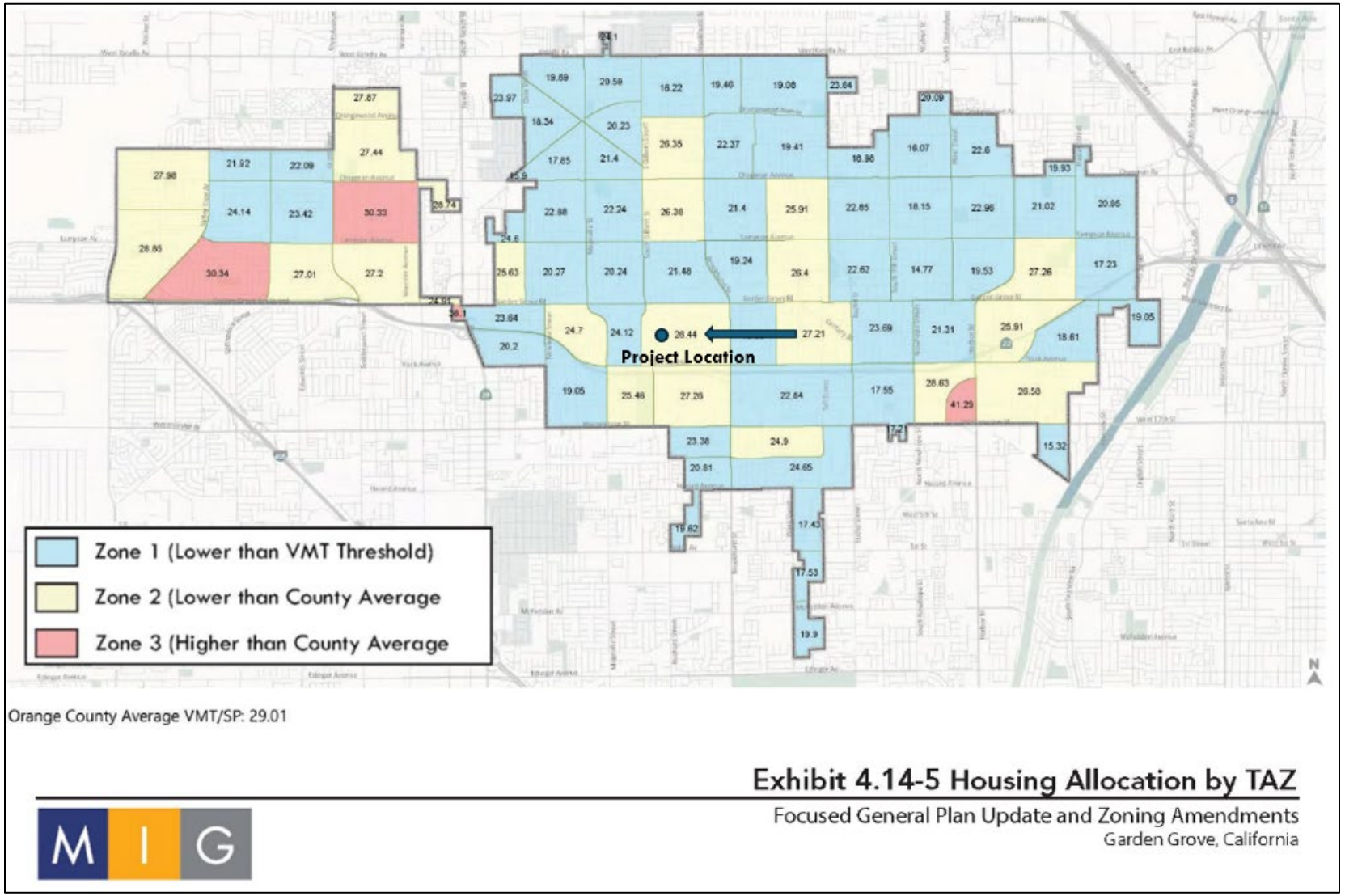
As shown in Table T-1, the Project would result in 58 fewer daily trips than the existing uses on the Project site. Table T-2 shows that the reduction in VMT from the reduction in trips would be 446 in the Project's TAZ. Therefore, the proposed Project would replace existing VMT-generating land uses and result in a net decrease in VMT. As a result of this reduction, the Project would have a less than significant impact related to VMT and no mitigation is required.

Table T-2: Project Change in VMT

	Trips Generated	TAZ Average Trip Length	Project Site Total VMT	TAZ 539 Total VMT
With Existing Use	219	7.70	1,685	124,325
With Proposed Project	161	7.70	1,239	123,879
Net VMT			**-446**	**-446**

Source: VMT Screening Analysis, Appendix J

Figure T-1: Low VMT Generating Traffic Analysis Zones



c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The Project includes development of new townhome residences, open space recreation, and circulation and parking. The Project includes only residential uses and does not include any incompatible uses, such as farm equipment.

The proposed Project area would be accessed from a driveway on Russell Avenue. Onsite vehicular circulation would be provided by a drive isle that would be a minimum of 25-feet in width, as shown on Figure 6, *Conceptual Site Plan*. Pedestrian circulation would be provided by an onsite sidewalk that would link the proposed recreation and open space areas, the residences, and the offsite sidewalk along Russell Avenue.

The Project would also not increase any hazards related to a design feature. The City's construction permitting process includes review of Project plans to ensure that no potentially hazardous transportation design features would be introduced by the Project. The onsite circulation plan has been reviewed by the City Public Works Department Engineering Division and the OCFA, which verified that the fire engine accessibility and turn around area is provided to the fire code standards. As a result, impacts related to vehicular circulation design features would be less than significant, and no mitigation measures are required.

d) Result in inadequate emergency access?

Less than Significant Impact

Construction

The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site, and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of new driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed Project would not require closure of Russell Avenue or Kerry Street. Any temporary lane closures needed for utility connections or driveway access construction would be implemented consistent with the recommendations of the California Joint Utility Traffic Control Manual (Caltrans 2014), as incorporated into a Traffic Management Plan for the Project that the City requires for receipt of construction permits. The Traffic Management Plan would include designated haul routes, temporary traffic control devices, travel time restrictions, and other elements determined through the construction review and permitting process by the City's Public Works Division that would ensure that substantial traffic queuing along Russell Avenue would not occur, and that all construction equipment would be staged on site. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level. No mitigation measures are required.

Operation

Operation of the Project would also not result in inadequate emergency access. The Project driveway and internal access has been reviewed by OCFA and meets the City's design standards and provides adequate turning space for passenger cars, fire trucks, and delivery trucks. The Project is also required to provide fire suppression facilities (e.g., hydrants and sprinklers). The City would review the development plans as part of the permitting procedures to ensure adequate emergency access pursuant to the requirements in Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), included in GGMC Chapter 18.04

and as amended in Chapter 18.16. As a result, impacts related to inadequate emergency access would not occur. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

There are no existing regulations and/or Conditions of Approval related to transportation that are applicable to the Project.

Mitigation Measures

No mitigation measures related to transportation are required.

References

Governor's Office of Planning and on Evaluating Transportation Impacts in CEQA. Accessed:
Research (OPR) Technical Advisory https://lci.ca.gov/docs/20190122-743_Technical_Advisory.pdf

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Municipal Code. Accessed at:
https://library.qcode.us/lib/garden_grove_ca/pub/municipal_code

Level of Service (LOS) Screening Analysis, prepared by EPD Solutions, Inc., Appendix B.

Vehicle Miles Traveled (VMT) Screening Analysis, prepared by EPD Solutions, Inc., Appendix J.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES.				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

The discussion below is based on the Cultural Resources Study, which is included as Appendix C and tribal consultation pursuant to SB 18 and AB 52, as detailed below.

SB 18

As the Project includes a General Plan Amendment to change the land use designation of the Project site, the Project is required to comply with Senate Bill (SB) 18 (California Government Code Section 65352.3), which sets forth requirements for local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) to aid in the protection of tribal cultural resources. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning to protect or mitigate impacts on tribal cultural resources.

AB 52

The Project is required to comply with AB 52 regarding tribal consultation. Chapter 532, Statutes of 2014 (i.e., AB 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources (TCRs)." Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074). AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside the definition stated above nonetheless qualifies as a "tribal cultural resource."

Tribal Consultation
A record search of the NAHC Sacred Lands File (SLF) was completed for the proposed Project on December 1, 2025; the results of which were negative. The NAHC provided a list of 11 tribes who may have knowledge of cultural resources in the Project area. The City also has a list of 4 tribes that have previously requested AB 52 notifications, three of which were also listed by the NAHC.

In compliance with the SB 18 and AB 52 requirements, the City sent letters on December 18, 2025 to the following 12 tribes:

- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California
- Juaneno Band of Mission Indians Acjachemen Nation – Belardes
- Juaneno Band of Mission Indians Acjachemen Nation – 84A
- Pala Band of Mission Indians
- Santa Rosa Band of Cahuilla
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- Gabrielino/Tongva Nation
- Gabrielino/Tongva Tribe

The following three tribes responded to the letters: the Gabrieleno Band of Mission Indians – Kizh Nation, Gabrielino Tongva Indians of California, Pala Band of Mission Indians, as detailed below:

- The Gabrieleno Band of Mission Indians - Kizh Nation submitted a request to consult on January 9, 2026. In response, on January 12, 2026 a consultation with the City and Tribe was scheduled for February 10, 2026. However, the City received an e-mail from the Tribe on February 9, 2026, which stated that the Tribe had conflicts and had to cancel scheduled consultation, and offered to conduct an e-mail consultation instead for which the City agreed and requested the Tribe provide information regarding cultural affiliation to Project site vicinity. The e-mail consultation from the Tribe was received on February 17, 2026, which consisted of the Tribe's requested mitigation measures. City staff reviewed the recommended mitigation and emailed redlined revisions providing enhanced CEQA mitigation language to the Tribe on February 18, 2026. The Tribe agreed to the revised mitigation language with minor text amendments (Mitigation Measures TCR-1 through TCR-3, provided below). The City officially closed consultation on March 27, 2026.
- The Gabrielino Tongva Indians of California provided an email response to the City on January 5, 2026 stating that they are in receipt of the Project information and have no comment.
- The Pala Band of Mission Indians emailed a letter on January 21, 2026 stating that the Project is not within the boundaries of the recognized Pala Indian Reservation or the Traditional Use Area (TUA) and declines consultation. However, the letter states that the Project is located close to the Reservation and would like to be maintained on the Project notification list.

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. As described previously in Section 5, *Cultural Resources*, the Project site does not contain any known CEQA historical resources. Section 5, *Cultural Resources*, details that the buildings on the Project site were determined not to be eligible for the NRHP or the CRHR. In addition, a Sacred Lands File search from the Native American Heritage Commission indicated negative results for the presence of sacred sites. Therefore, the proposed redevelopment of the site for residential uses would not result in impacts to resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). No impacts would occur and no mitigation is required.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant with Mitigation Incorporated. The Project site is developed with buildings and paved areas and has been previously disturbed by previous agricultural and development activities. As described previously in Section 5, *Cultural Resources*, the SCCIC records search results indicated that no prehistoric resources have ever been identified within the vicinity of the Project. The Preliminary Geotechnical Investigation Report (Appendix D) identifies that the Project site has approximately two feet of compacted artificial fill, but thicker deposits of fill are anticipated under existing building pads.

The Project involves grading and excavation of the upper two feet (or one foot below footings) of soil that would be removed and recompacted. Thus, Project excavation would not be likely to encroach into non-fill soils or soils not previously disturbed by agricultural activity. Thus, impacts related to tribal cultural resources are not anticipated to occur.

The information provided by Gabrieleno Band of Mission Indians – Kizh Nation does not provide substantial evidence that the proposed Project may have a significant impact on tribal cultural resources. However, due to regional historic activities by the Gabrielenos and the potential for unanticipated discoveries of resources, measures to provide tribal monitoring of ground disturbing activities and measures to implement should a potential tribal cultural resource be inadvertently unearthed from site soils during the Project's ground disturbing activities have been included. With implementation of Mitigation Measures TCR-1 through TCR-3 potential impacts related to tribal cultural resources would be less than significant.

Additionally, California Health and Safety Code Section 7050.5 requires that if human remains are discovered in the Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of Mitigation Measures TCR-1 through TCR-3 and the existing regulations, impacts to tribal cultural resources would be less than significant.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulation would reduce potential impacts related to tribal cultural resources.

Human Remains: California Health and Safety Code Section 7050.5, detailed previously in Section 5, *Cultural Resources*.

Mitigation Measures

Mitigation Measure TCR-1: Native American Monitoring.

A. The Project plans, specifications, and grading permits shall state that the Project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh). The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
C. The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Project applicant/City upon written request to the Tribe.
D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the Project applicant/City that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project applicant/City that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact any TCRs.

Mitigation Measure TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects.

A. Upon discovery of any TCRs, the Kizh monitor shall notify the City and Project applicant and all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh shall recover and retain all discovered TCRs in the form and/or manner the Kizh deems appropriate.

Mitigation Measure TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

References

California State Parks Office of Historic Preservation. California Register of Historical Resources. https://ohp.parks.ca.gov/ListedResources/

City of Garden Grove General Plan. Accessed at: https://ggcity.org/planning/general-plan

City of Garden Grove Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report (SCH# 2021060714), 2021. Accessed: https://ceqanet.opr.ca.gov/Project/2021060714

Cultural Resources Study for the 9822 Russell Avenue Project, 2025. Prepared by BFSA Environmental Services. (Appendix C)

National Park Service. National Register of Historic Places
https://www.nps.gov/subjects/nationalregister/database-research.htm

Phase I Environmental Site Assessment, prepared by Partner Engineering and Science, Inc, 2025 (Appendix E).

Preliminary Geotechnical Investigation Report, 2025. Prepared by Alubs & Associates, Inc. (Appendix D).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Require or result in the relocation or construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact

Water Infrastructure. The Project site is developed with a church, preschool, and daycare, and connected to the existing water infrastructure system. Existing 6-inch water lines are located in both Russell Avenue and Kerry Street. The Project would redevelop the site, install new onsite water lines, and connect to the existing 6-inch water line in Russell Avenue that would provide water supplies to the proposed Project. The proposed onsite water line would loop through the site conveying water supplies to each of the proposed townhomes.

As described below in Response b), the Project would result in a water demand increase of approximately 12,780 gallons per day. The City has provided a Will-Serve Letter verifying that this demand is available and would be accommodated by the existing water lines. Thus, the Project would receive water supplies through the existing water line in the Russell Avenue right-of-way, which would not require expansion to serve the

Project. Although installation of onsite water lines would be required to support the new development, no extensions or expansions to the water pipelines supplying the Project site would be required. The necessary installation of the onsite water supply lines is included as part of the Project and would not result in any physical environmental effects beyond those identified in other sections of this IS/MND. For example, construction emissions for excavation and installation of the water infrastructure is included in Section 3, *Air Quality* and Section 8, *Greenhouse Gas Emissions*. Therefore, the Project would not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant. No mitigation measures are required.

Wastewater Infrastructure. The existing onsite sewer infrastructure is connected to the 8-inch sewer line in Russell Avenue. The Project would remove the existing onsite sewer lines and install new onsite sewer lines that would connect to existing sewer line within the Russell Avenue right-of-way. The City has provided a Will-Serve letter verifying that the existing sewer lines have adequate capacity to serve the proposed residential townhomes. The construction activities related to installation of the onsite sewer infrastructure that would serve the proposed Project, are included as part of the proposed Project and would not result in any physical environmental effects beyond those identified throughout this IS/MND. For example, construction emissions for excavation and installation of the sewer infrastructure is included in Section 3, *Air Quality* and Section 8, *Greenhouse Gas Emissions*, and noise volumes from these activities are evaluated in Section 13, *Noise*.

In addition, as detailed below in Response C, the existing wastewater treatment plant that serves the Project site has capacity to accommodate the wastewater flow from the Project. As the proposed Project includes facilities to serve the proposed development and the wastewater treatment plant has capacity to serve the site, the proposed Project would not result in the need for construction of other new wastewater facilities or expansions, the construction of which could cause significant environmental effects. Therefore, impacts would be less than significant, and no mitigation measures are required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. The City's Urban Water Management Plan (UWMP) describes that the City relies on 50 percent groundwater from 13 wells in the Orange County groundwater basin and 50 percent imported water from the Metropolitan Water District of Southern California. The UWMP projects that by 2045, the population of the City would increase by 4.8 percent and the City's water supply portfolio will change to approximately 85 percent groundwater and 15 percent imported water, but that the City could purchase more imported water as needed. The City also operates eight storage and distribution reservoirs at five sites with a combined capacity of 53 million gallons (MG). The storage volume is the equivalent of more than two days average use and is more than adequate for peaking demands and firefighting needs (UWMP 2020).

The 2020 UWMP describes that City's water use in 2020 was comprised of 64.8 percent residential, 24.5 percent commercial/industrial/institutional, 2.9 percent large landscape/irrigation, and 7.7 percent other uses; and that water demand is likely to increase 2.8 percent over the next 5 years. The 2020 UWMP shows that the City's water demand in 2020 was 21,979 acre-feet yearly (AFY) and is projected to increase to 22,792 AFY by 2045. This is an increase of 813 AFY and assumes continued operation of the existing church, preschool, and daycare on the Project site.

The Project would redevelop the site with 26 residential units, which would house approximately 90 residents, as described in Section 13, *Population and Housing*. The 90 new onsite residents would be 2.6 percent of the

2020 UWMP anticipated increase in population between 2025 and 2045 (UWMP Table 3-2). The Project would result in a water demand of approximately 12,780 gallons per day (14.3 AFY) using the 2020 baseline water use rate of 142 GPCD in the 2020 UWMP, which is a conservative assumption as the City used 93 GPCD in 2020 and this doesn't account for the reduction of water from removal of the existing church, preschool, and daycare.

This represents 1.8 percent of the City's anticipated increase in water demand between 2020 and 2045, not including the reduction of water from removal of the existing church, preschool, and daycare. Therefore, the City has sufficient water supplies available to serve the Project and reasonably foreseeable development during normal, dry, and multiple dry years. In addition, the Project would implement a number of water conservation measures as required by CALGreen and Title 24 requirements, such as use of water efficient plumbing fixtures and irrigation systems, routing runoff to landscape areas, and provision of separate meters for each residence. The Project would also comply with AB 1881 landscaping requirements (included in the GGMC in Section 9.12.040.085 and pursuant to the Title 24 regulations in GGMC Section 18.04.010, which the City includes as a Condition of Approval. Overall, impacts related to water resources would be less than significant. No mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The existing church, preschool, and daycare is connected to the existing sewer system and generates wastewater. The proposed residential townhomes would generate new wastewater, which would be conveyed through existing sewer facilities to OCSD's wastewater treatment plant No. 1 in Fountain Valley that has a capacity of 320 million gallons per day (MGD). In 2024-25, the estimated average daily flow received at the wastewater treatment plant No. 1 was 116 MGD. Thus, the plant has an additional capacity of 204 MGD.

As detailed previously, the Project site currently generates wastewater that is treated by the OCSD facilities. The Project is anticipated to generate a water demand of 12,780 gallons per day, some of which would be used for landscaping and other uses and would not enter the sewer system. However, assuming the maximum water from the Project becomes wastewater, the 12,780 gallons would be accommodated by the OCSD's excess capacity. Therefore, impacts related to the wastewater treatment system would be less than significant. No mitigation measures are required.

d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. In 2024, most of the solid waste from the City, which was disposed of in landfills, went to either the Olinda Alpha Sanitary Landfill or the Frank Bowerman Sanitary Landfill (Calrecycle 2025).

The Olinda Alpha Sanitary Landfill is permitted to accept 8,000 tons per day of solid waste and is permitted to operate through 2036. In August 2025 the maximum tonnage accepted was 3,841 tons, which is 4,159 tons less than the allowable tonnage. The Frank Bowerman Sanitary Landfill is permitted to accept 11,500 tons per day of solid waste and is permitted to operate through 2053. In August 2025, the landfill had a maximum daily tonnage of 8,952; thus, having an average daily additional capacity of 2,548 tons per day (Calrecycle SWIS 2025).

Construction
Project construction would generate solid waste for landfill disposal in the form of demolition debris from the removal of the existing buildings, pavement, and infrastructure that would be removed from the site. Construction waste in the form of packaging, used construction materials, and remnant materials would also be generated by construction of the proposed Project. The demolition of the existing buildings and hardscape is anticipated to amount to 3,527 tons of debris (Appendix A). This would result in an average of 176.35 tons of solid waste demolition debris per day for 20 days (Table 2, Construction Schedule). However, the CALGreen requires demolition and construction activities to recycle or reuse a minimum of 65 percent of the nonhazardous construction and demolition waste. Thus, the demolition and construction solid waste that would be disposed of at the landfill would be approximately 35 percent of the waste generated. Therefore, the demolition activities (that would generate the most construction solid waste) would generate approximately 61.72 tons of solid waste per day.

As described above, the Olinda Alpha Sanitary Landfill has an average daily additional capacity of 4,159 tons per day and the Frank Bowerman Sanitary Landfill has an average daily additional capacity of 2,548 tons per day (Calrecycle 2025), which is sufficient permitted capacity to accommodate the additional 61.72 tons of demolition waste per day for 20 days that would result from the Project. Thus, construction impacts related to landfill capacity would be less than significant, and no mitigation measures are required.

Operation
The CalEEMod modeling identified that the proposed 26 townhomes and 90 new residents on the site would generate 19 tons of solid waste per year (Appendix A), which equates to 731 pounds of solid waste per week. However, based on the current recycling requirements, which require diversion of 75 percent of solid waste away from landfills, the Project would result in an increase of 182.75 pounds of solid waste per week being disposed of in landfills. Thus, it is anticipated that the increase of solid waste landfill disposal from operation of the Project would be approximately 182.75 pounds per week. As described above, the Olinda Alpha Sanitary Landfill has an average daily additional capacity of 4,159 tons per day and the Frank Bowerman Sanitary Landfill has an average daily additional capacity of 2,548 tons per day (Calrecycle 2025), which is sufficient permitted capacity to accommodate the additional solid waste disposal needs that would result from the Project, and impacts related to landfill capacity would be less than significant. No mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed Project would result in new development that would generate an increased amount of solid waste. All solid waste-generating activities within the City is subject to the requirements set forth in Section 5.408.1 of the California Green Building Standards Code and the GGMC Section 18.60.040 that requires demolition and construction activities to recycle or reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, and AB 341 that requires diversion of a minimum of 75 percent of operational solid waste. Implementation of the proposed Project would be consistent with all state regulations, as ensured through the City's development permitting process. Therefore, the proposed Project would comply with all solid waste statutes and regulations; and impacts would not occur. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing regulations and Conditions of Approval would reduce potential impacts related to utilities and service systems.

COA AB 1881 Landscaping. As listed previously in Section 8, *Greenhouse Gas Emissions*.

Construction Waste. The GGMC Section 18.60.040, Minimum Construction and Demolition Waste Diversion Requirements. Construction plans and specifications shall implement reuse, recycling, and/or diversion of the minimum percentage amount of designated recyclable and reusable materials as set forth by the CALGreen (Part 11 of Title 24, California Code of Regulations).

CALGreen Compliance. As listed previously in Section 6, *Energy*.

Mitigation Measures

No mitigation measures related to utilities and service systems are required.

References

Air Quality, Energy, and Greenhouse Gas Impact Analysis, prepared by EPD Solutions, Inc., Appendix A

CalReycyle Jurisdiction Disposal and Beneficial Reuse by Destination (Calrecycle 2025). Accessed at: https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial

CalRecycle. 2025b. SWIS Facility/Site Inspection Details – Olinda Alpha Landfill (30-AB-0035). [online]: https://www2.calrecycle.ca.gov/SolidWaste/SiteInspection/Details/349413. Accessed October 2025.

CalRecycle. 2025a. SWIS Facility/Site Inspection Details – Frank R. Bowerman Sanitary LF (30-AB-0360). [online]: https://www2.calrecycle.ca.gov/SolidWaste/SiteInspection/Details/349346?siteID=2103. Accessed October 2025.

Calrecycle Solid Waste Information System (SWIS) Database (Calrecycle SWIS 2023). Accessed: https://calrecycle.ca.gov/SWFacilities/

City of Garden Grove 2020 Urban Water Management Plan. Accessed: https://ggcity.org/sites/default/files/Garden%20Grove%202020%20UWMP%20FINAL-2021.06.29.pdf

Orange County Sanitation Districts, Regional Sewer Service, Facts, and Key Statistics. Accessed: https://www.ocsan.gov/regional-sewer-service/

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRES. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project site is developed and within an urbanized area of the City of Garden Grove. The Project site is surrounded by developed and urban areas. The Project site is not adjacent to any wildland areas. According to the CAL FIRE Hazard Severity Zone map, the Project site is not within a fire hazard zone. Also, as described previously, the proposed Project area would be accessed from a driveway on Russell Avenue. Permitting of the driveways and onsite circulation would provide adequate and safe circulation to, from, and through the Project site that would provide appropriate emergency access and evacuation routes. Because the Project is required to comply with the California Fire Code (included as GGMC Chapter 18.04 and as amended in GGMC Chapter 18.16), as verified through OCFA review. Also, the City's standard Condition of Approval to comply with the OCFA Master Plan would be included. Therefore, potential impacts related to impairment of an emergency response or evacuation plan would not occur. No mitigation measures are required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The Project site is largely developed and within an urbanized residential area of the City of Garden Grove. The Project site is surrounded by developed and urban areas. The Project site is not adjacent to any wildland areas, and as determined by the CAL FIRE Hazard Severity Zone map, the Project site is not within a fire hazard zone. In addition, the Project site is flat and within a flat area. The site is adjacent to two roadways, parking lots for the adjacent school and church and existing residences. There are no factors on or adjacent to the Project site that would exacerbate wildfire risks. Thus, no impacts related to other factors that would expose persons on site to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would occur from the Project. No mitigation measures are required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. As described previously, the Project site is developed and within a developed and urban area that is not within a wildfire hazard zone. The Project does not include any infrastructure that would exacerbate fire risks. In addition, the Project would provide internal circulation and fire suppression facilities (e.g., hydrants and sprinklers) that conform to the California Fire Code requirements, included in GGMC Chapter 18.04 and as amended in GGMC Chapter 18.16, as verified through the City's permitting process. Therefore, impacts related to infrastructure that could exacerbate fire risks would not occur with the proposed Project. No mitigation measures are required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As described previously, the Project site is developed and within a developed and urban area that is not within a wildfire hazard zone. In addition, the Project site is flat and surrounded by flat areas. There are no slope or hillsides that would become unstable. The Project would install onsite drainage that would convey stormwater above the 85th percentile to the proposed bioretention treatment devices prior to infiltration into site soils. Therefore, impacts related to flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would not occur from the proposed Project. No mitigation measures are required.

Existing Regulations and/or Conditions of Approval that Reduce Potential Impacts

The following existing Condition of Approval related to wildfire are applicable to the Project.

COA: Fire Master Plan: As listed previously in Section 9, *Hazards and Hazardous Materials*.

Mitigation Measures

No mitigation measures related to wildfire are required.

References

California Department of Forestry and Fire Protection (CAL FIRE). 2023. Fire Hazard Severity Zone Map. Accessed: https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153

21. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. As described in Section 4, *Biological Resources*, the Project site is developed, and no special status vegetation types or wildlife species are located on or adjacent to the Project site. No potentially suitable habitat for special status plant or wildlife species is on or adjacent to the site. Additionally, the Project site does not include riparian, wetland, grassland, woodland, or other natural areas. The Project site contains a limited number of ornamental trees that could be used for nesting by common bird species that are protected by the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code Sections 3503.5, 3511, and 3515 during the avian nesting and breeding season. The provisions of the MBTA prohibit disturbing or destroying active nests, which would be implemented through the City's development permitting process, and impacts would be less than significant.

Also, as described Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources*, the Project site does not contain any historic resources, archaeological resources, or known tribal cultural resources. The site has been disturbed from past agricultural and development activities and contains approximately two feet of compacted artificial fill, but thicker deposits of fill are anticipated under existing building pads. Further, the SCCIC records search results indicated that no prehistoric resources have ever been identified within the

vicinity of the Project. As a result, the potential for archaeological impacts are less than significant and Mitigation Measure PAL-1 has been included to ensure that any inadvertent discovery of potential paleontological resources during ground-disturbing activities would be less than significant. Likewise, impacts related to tribal cultural resources are not anticipated to occur; however, due to regional tribal historic activities Mitigation Measures TCR-1 through TCR-3 have been included to ensure that impacts would not result. Thus, impacts would be less than significant with mitigation incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. CEQA Guidelines, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

The Project site is developed and is located in an urban area. The Project would redevelop the site for residential uses. The proposed residential townhomes are consistent with the surrounding residential and school and church development near the Project site. Much of the anticipated future development in the Project area consists of redevelopment of single and multi-family residences with additional residences.

The City has identified four development projects that are in the general vicinity of the Project site that may have the potential to result in cumulative effects, as they would increase the density of existing uses in the Project vicinity. These projects include the following:

- Residential Townhome Project: 30 residential townhomes (13252 Brookhurst Street) approximately 0.3-mile northeast of the Project site.
- Multiple-Family Residential Apartment Complex: 98 apartment units (9891 Garden Grove Boulevard), approximately 0.5-mile north of the Project site.
- Multiple-Family Residential Apartment Building: 94 apartment units (12854 Brookhurst Way) approximately 0.6-mile north of the Project site.
- Mixed-use: 9,786 square feet of retail space, 9,270 square feet of medical space, and 52 apartment units (10201 Garden Grove Boulevard) approximately 0.7-mile north of the Project site.

The cumulative projects involve redevelopment of parcels within the existing urban environment and are community type uses that include residences, retail, and medical uses. The proposed Project is consistent with

the community uses of each of the cumulative projects. The closest cumulative project is 0.3-mile northeast of the Project site. Due to this distance, cumulative construction noise, vibration, and vehicular trips would not cumulatively combine to be potentially significant.

As explained in Section 17, *Transportation*, the proposed Project would result in a reduction of daily and peak hour vehicular trips compared to the existing church, preschool, and daycare uses on the site, and it would not generate a cumulative transportation impact. Likewise, air quality emissions, greenhouse gas emissions, energy, and traffic noise from the Project would be less than that of the existing uses on the site and would not contribute to potential impacts from other development projects; and thus, would be less than cumulatively considerable.

All of the other potential impacts related to implementation of the Project would be less than significant or reduced to a less than significant level with implementation of mitigation measures related to paleontological resources, construction vibration, and tribal cultural resources. In addition, the cumulative effect of the Project is limited, due to the small scale and redevelopment nature of the Project on land that has been previously disturbed and because it can be accommodated by the existing roadway system, public services, and utilities systems. Overall, impacts to environmental resources or issue areas would not be cumulatively considerable; and cumulative impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. The Project proposes redevelopment of the Project site for residential townhome uses. As described previously, the Project site is within an urban area and surrounded by residential, church and school land uses. The Project would not consist of any use or any activities that would result in a substantial negative effect on persons in the vicinity. All resource topics associated with the proposed Project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts or less-than-significant impacts with implementation of mitigation measures related to paleontological resources, construction vibration, and tribal cultural resources; and existing laws and regulations that are required by the City. Therefore, the proposed Project would result in less than significant environmental effects on human beings directly and indirectly, with incorporation of mitigation.

5 DOCUMENT PREPARERS

Lead Agency:
City of Garden Grove
Community and Economic Development Department
11222 Acacia Parkway
Garden Grove, CA 92840

Project Contact:
Priit Kaskla, AICP, Senior Planner
Email: priitk@ggcity.org
Phone: 714-741-5303

CEQA Consultant:
RE Consulting
Contact: Renee Escario
Email: renee@renvconsulting.com
Phone: 949-346-4633

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To:	City of Garden Grove
Drafted by:	Maryam Javanmardi, EPD Solutions, Inc.
Reviewed by:	Alex J. Garber, Tina Yuan, EPD Solutions, Inc.
Date:	3/16/2026
Re:	Air Quality, Energy, and Greenhouse Gas Impact Analysis for 9822 Russell Ave, Garden Grove Project, EPD Project Number 25-142

Project Overview

The 9822 Russell Avenue, Garden Grove Project ("Project," or "proposed Project") is located at 9822 Russell Avenue in the central portion of the City of Garden Grove. The Project site is approximately 0.12 miles north of State Route 22 (SR-22) and one block west of Brookhurst Street, both of which provide regional access to the site. Local access to the Project site is provided by Russell Avenue to the north and Kerry Street to the west.

The Project site is identified as Assessor Parcel Number's (APN) 098-081-19. It is located within the United States Geologic Survey (USGS) Anaheim 7.5 Minute Series Topographic Quadrangle, and within Section 5, Township 5 South, Range 10. The 1.81-acre Project site is currently developed with a church, preschool and daycare facility, wireless facility, a parking lot, and landscaping areas. The church sanctuary consists of 7,700 square feet, the office and meeting rooms used by the church total 7,892 square feet, and the preschool/daycare is 2,875 square feet, which totals 18,467 square feet of building space on the site. The existing preschool/daycare facility (Orangefield Child Development Center) is for children ages 2 to 6 years and has a licensed capacity for 60 students[1].

The Project requests the approval from the City of Garden Grove to demolish the existing church, preschool, and daycare facility building and improvements on the Project site and construct 26 two-story townhome residences, open space/recreation, and parking. Each residential unit would have three or four bedrooms, ranging in size from approximately 1,442 square feet to 1,800 square feet and would have two-car garages. The 26 residences on the 1.81-acre site would result in a density of 14.4 units per acre. The Project would include parking, open space, ornamental landscaping, and associated infrastructure.

The Project requests the approval of a General Plan Amendment to change the land use from Low-Density Residential (LDR) to Low-Medium Density Residential (LMR), which allows residential densities between 11 and 21 dwelling units per acre. The Project also includes a zone change to change the site zoning from R-1 to Planned Unit Development (PUD) with a general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards. The proposed Project site plan is shown in Figure 1.

To support the CEQA document for the proposed Project, this report analyzes the proposed Project's construction and net operational impacts related to air quality (emission of criteria pollutants), energy, and greenhouse gas (GHG) emissions using the California Emissions Estimator Model (CalEEMod Version 2022.1)

[1] CA Department of Social Services. (2025). *Facility Detail – Orangefield Child Development Center*. Accessed: https://www.ccld.dss.ca.gov/carefacilitysearch/FacDetail/304371054

and the Emission Factor model (EMFAC Version 2021). Table 1, *Construction Schedule,* shows the estimated construction schedule, which is expected to last about 11 months.

Table 1: Construction Schedule

Activity	Start Date	End Date	Total Working Days
Demolition	9/1/2027	9/29/2027	20
Site Preparation	9/30/2027	10/2/2027	2
Grading	10/3/2027	10/8/2027	4
Building Construction	10/9/2027	7/15/2028	200
Paving	10/9/2027	10/22/2028	10
Architectural Coating	7/1/2028	7/22/2028	15

Source: CalEEMod output sheets are provided in Attachment A

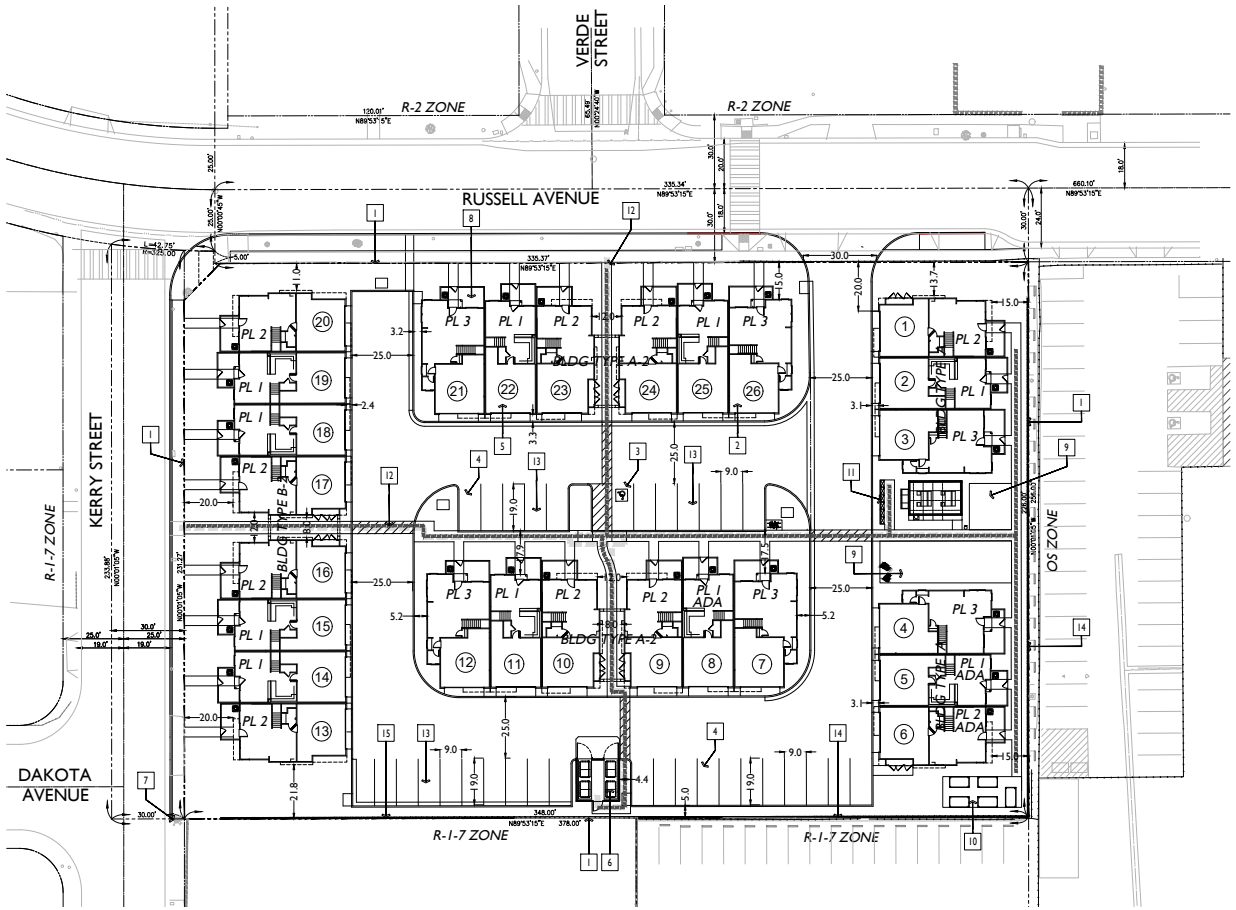
CalEEMod Modeling Details

The following non-default assumptions were used in CalEEMod for this analysis:

- **Land Use:** The lot acreage was adjusted to match the site plan provided by the client.
- **Construction Schedule:** The demolition phase was extended to accommodate the size of the buildings and the volume of debris. The building construction duration was shortened to align with the Project's anticipated operational year. Paving is scheduled to commence on October 9, 2029, with a duration of 10 days. Architectural coating will be completed in a single phase, spanning three weeks from July 1 to July 22, 2029, consistent with the updated project assumptions.
- **Construction Equipment:** It was assumed that all equipment would be used for 8 hours per workday. Tractor/loaders/backhoes were replaced with crawler tractors in the site preparation and grading construction phases.
- **Demolition:** The demolition of the existing buildings and hardscape is anticipated to amount to 3,527 tons of debris. These calculations can be found in Attachment C, *Demo Calculations Sheet*.
- **Construction Earthmoving Activity:** Based on the preliminary grading plan, the Project would not require import or export of material during the grading phase; however, for conservative analysis purposes, 1,000 cubic yards of export is assumed to account for potential spoils.
- **Operations:** Hearths, wood stoves, and wood fireplaces were removed in accordance with South Coast Air Quality Management District (SCAQMD) Rule 445, which prohibits the installation of wood-burning devices in an effort to reduce particulate matter and reduce production of volatile organic compounds (VOCs).[2] Gas and propane fireplaces were also removed as neither is proposed for the Project.
- **Operational Vehicle Data:** The trip rate was adjusted to match the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition (2025), using the Church land use (ITE Land Use Code 560) for the existing church building, the Day Care Center land use (ITE Land Use Code 565) for the existing the preschool/daycare facility, and the Multifamily Housing land use (ITE Land Use Code 220) for the proposed Project.[3]
- **Measures, Energy:** The Project does not propose natural gas. *Measure E-15, requiring all-electric development,* is selected for the Project.

[2] SCAQMD (2020). *Rule 445, Wood-Burning Devices.* https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf
[3] EPD Solutions, Inc. (2025). *25-142 9822 Russell Ave, Garden Grove Vehicles Miles Traveled (VMT) Screening Memo.*

Figure 1: Proposed Project Site Plan



PROJECT SUMMARY

A.P.N.	098-081-19
EXISTING G.P.	LOW DENSITY RESIDENTIAL (LDR)
EXISTING ZONE	SINGLE FAMILY RESIDENTIAL (R-1-7)
PROPOSED G.P.	LOW MEDIUM DENSITY RESIDENTIAL (LMDR)
PROPOSED ZONE	PLANNED UNIT DEVELOPMENT (PUD)
TOTAL UNITS	26 UNITS
SITE AREA	78,537 S.F. / 1.8 AC
DENSITY	14.4 DU/AC
LOT COVERAGE	43.2% (50% ALLOWED)
BUILDING HEIGHT	30'

DWELLING UNIT SUMMARY

				PRIV. YD.
PL 1	10	1,442 SF	3 BD	111 S.F.
PL 2	10	1,652 SF	3BD/LOFT-OPT 4BD	104 S.F.
PL 3	6	1,800 SF	4 BD	136 S.F.

PARKING SUMMARY

GARAGE STALLS (20' X 20', 2 CAR)	52 STALLS
GUEST STALLS (9' X 19')	33 STALLS
TOTAL PARKING PROVIDED	85 STALLS

3 & 4 BEDROOMS - 3.25 STALLS/UNIT REQUIRED
TOTAL PARKING REQUIRED 84.5 STALLS

ELECTRIC VEHICLE CHARGING SUMMARY
REQUIRED = 1 / DWELLING UNIT = 26 EV GARAGE STALLS
TOWN-HOUSES W/ ATTACHED PRIVATE GARAGES SHALL COMPLY WITH 2025 CGBSC 4.106.4.1.

LOT COVERAGE

BLDG TYPE A FOOTPRINT =	3,239 S.F. X 2 =	6,478 S.F.
BLDG TYPE A-2 FOOTPRINT =	6,478 S.F. X 2 =	12,956 S.F.
BLDG TYPE B-2 FOOTPRINT =	8,364 S.F. X 1 =	8,364 S.F.
BUILDING COVERAGE	=	27,798 S.F.
TRASH ENCLOSURE	=	312 S.F.
OPEN PARKING STALLS	=	5,795 S.F.

LOT COVERAGE = 33,905 S.F. / 78,537 S.F. = 0.432 OR 43.2%

OPEN SPACE SUMMARY (SEE SHEET OS)

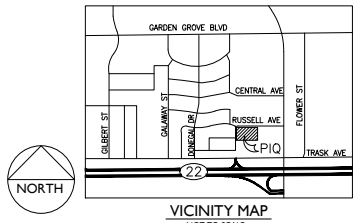
COMMON AREA - ACTIVE	3,695 S.F. (142/U)
PRIVATE YARDS (EXCL. UNITS 13-20)	2,106 S.F. (6' MIN. DIM.)
PASSIVE OPEN AREA (5,802 S.F. X 50%)	2,901 S.F. (10' MIN. DIM.)
TOTAL OPEN SPACE PROVIDED	8,702 S.F. (335 S.F./UNIT)

ACCESSIBLE UNIT SUMMARY (MULTISTORY, PRIVATELY FUNDED)
REQUIRED = 10% OF MULTISTORY DWELLINGS PER CBC 1102A.3.1
26 DU X 10% = 3 REQUIRED ACCESSIBLE UNIT
PROVIDED = 3 ACCESSIBLE UNITS (UNIT NO'S. 5, 6 AND 8)

BUILDING CODE SUMMARY
CALIFORNIA RESIDENTIAL CODE (2025 CRC)
OCCUPANCY TYPE R3/U
NUMBER OF STORIES 2
CONSTRUCTION TYPE V-B
FIRE SPRINKLERS NFPA 13D (CRC R313.1)

KEYNOTES

1. PROPERTY LINE
2. 2-STORY ROW TOWNHOME, TYP.
3. ACCESSIBLE PARKING STALL - 9' X 19' (TYP.) VAN W/ 8' WIDE STRIPING (PASSENGER SIDE)
4. STANDARD OPEN GUEST STALL - 9' X 19' (TYP.)
5. 2-CAR GARAGE (20' X 20' MIN.)
6. COVERED COMMUNITY TRASH ENCLOSURE
7. PUBLIC FIRE HYDRANT
8. PRIVATE PATIO, TYP.
9. COMMON OPEN SPACE AREA
10. COMMUNITY GARDEN AREA
11. COMMUNITY MAILBOX LOCATION
12. ADA PATH OF TRAVEL
13. WATER QUALITY AREA (INFILTRATION CHAMBERS) - SEE CIVIL PLANS
14. NEW CONCRETE BLOCK WALL - REFER TO LANDSCAPE PLANS
15. EXISTING CONCRETE BLOCK WALL TO BE REMOVED AND REPLACED



VICINITY MAP
NOT TO SCALE

GARDEN GROVE

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

9822 RUSSELL - 2 STORY TOWNHOMES

0 20 40 60

JAN 12, 2026

SITE PLAN

SUMMA ARCHITECTURE
5256 S. Mission Road, Ste. 404
Bonsall, CA 92003
www.summarch.com p.760.724.1198

SP

Summary of Air Quality, Energy and GHG Impacts

Air Quality

The proposed Project's maximum daily emissions (regional and local) for construction and operation would not exceed the SCAQMD's regional thresholds of significance. In addition, all construction activities would comply with applicable SCAQMD rules and regulations, including Rule 402, Rule 403, Rule 445, Rule 1113, and Rule 1403:

- Rule 402, *Public Nuisance*: Prohibits the discharge of air contaminants that cause injury, nuisance, or annoyance to the public or damage to property.
- Rule 403, *Fugitive Dust:* Aims to minimize fugitive particulate matter dust emissions during construction activities.
- Rule 445, *Wood-Burning Devices:* Reduce emission production of particulate matter and volatile organic compounds from wood-burning devices.
- Rule 1113, *Architectural Coatings*: Allows only low-VOC paints to be used.
- Rule 1403, *Asbestos Demolition and Removal:* Establishes work practice requirements to limit asbestos emissions from building demolition or renovation. These requirements include asbestos surveying, public notification, removal and handling procedures, time schedules, and storage/disposal/landfill requirements. Records of compliance must be maintained and all appropriate warning labels, signs, and marking must be utilized.

The construction and operation of the proposed Project would not exceed SCAQMD thresholds for any of the six criteria pollutants. Projects that do not exceed the regional thresholds are assumed to not have a significant impact on both a project level and cumulative level. The proposed Project aligns with SCAQMD'S 2022 Air Quality Management Plan (AQMP), reflecting adherence to regional air quality management goals and standards. Furthermore, odors produced by construction and operation of the proposed Project would be minimal and comply with SCAQMD Rule 402. Therefore, the proposed Project would have a less-than-significant air quality impact. No mitigation would be required.

Energy

Construction activities related to the proposed Project and the associated infrastructure are not expected to result in demand for fuel greater on a per-unit-of-development basis than any other development projects in Southern California. The proposed Project's energy consumption during construction activities would comply with existing fuel standards, machinery efficiency requirements, and California Air Resources Board (CARB) regulations limiting truck idling. Additionally, for operation, the proposed Project would be required to meet the California Code of Regulations (CCR) Title 24 energy efficiency standards and comply with all applicable County energy codes. The Project buildings would install solar in compliance with current Title 24 requirements. There are no unusual Project characteristics that would cause the construction or operation of the Project to be less energy-efficient when compared with other similar commercial developments throughout the state. Therefore, the proposed Project would not result in impacts related to inefficient, wasteful, or unnecessary consumption of energy, nor would the Project inhibit the use of, and would instead allow for future flexibility relating to, renewable energy.

GHG Emissions

The proposed Project's construction and operational GHG emissions would total 234 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. When compared to emissions from the existing buildings, the Project would result in a net decrease of 180 $MTCO_2e$ per year, below the SCAQMD significance threshold of 3,000 $MTCO_2e$ per year and baseline conditions. Additionally, the Project would be consistent with applicable policies and measures for reducing GHG emissions, including the 2022 CARB Scoping Plan and the City's General Plan. Therefore, the Project would have a less-than-significant impact on GHG emissions.

Air Quality

Regional Emissions

To calculate the operational impacts, the air quality emissions from the existing land use were estimated using CalEEMod. The SCAQMD has adopted maximum daily emission thresholds (pounds/day) for criteria pollutants during the construction and operation of a project.[4] While incremental regional air quality impacts of an individual project are generally very small and difficult to measure, SCAQMD's regional maximum emission thresholds set standards to reduce the burden of SCAQMD to attain and maintain ambient air quality standards. The regional thresholds apply to the criteria pollutants listed in Table 2, *Regional Construction Emission Estimates*, and Table 3, *Regional Operation Emission Estimates*.

Table 2 shows the CalEEMod estimated emissions for the project construction. The estimated Project emissions include those generated both from on-site sources (such as off-road construction equipment and fugitive dust) and off-site sources (vehicles traveling to and from the site). As shown in Table 2, the proposed Project would not exceed SCAQMD's thresholds for construction emissions, and therefore, would have less-than-significant regional air quality impacts related to construction.

Table 2: Regional Construction Emission Estimates

Maximum Daily Emissions	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
2027	2.17	19.61	23.81	0.04	5.20	2.00
2028	13.78	12.16	17.79	0.03	0.67	0.40
Maximum Daily Emission (2027-2028)	**13.78**	**19.61**	**23.81**	**0.04**	**5.20**	**2.00**
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: CalEEMod output sheets are provided in Attachment A, and the detailed calculation sheets are provided in Attachment B.

Table 3 shows the CalEEMod estimated Project emissions for operation. As detailed in the VMT Analysis Screening Memo prepared for the Project, the existing church, preschool and daycare uses are estimated to generate approximately 219 daily trips, including 37 trips during the AM peak hour and 28 trips during the PM peak hour. The proposed Project is anticipated to generate approximately 161 daily trips, with 11 trips during the AM peak hour and 14 trips during the PM peak hour. Overall, the Project would result in 58 fewer daily trips, including 26 fewer trips during the AM peak hour, and 24 fewer trips during the PM peak hour. Thus, as seen in Table 3, the reduction in vehicle trips from operation of the proposed Project would result in a net decrease for ROG, NO_x, CO, SO_2, PM_{10}, and $PM_{2.5}$ daily emissions. Therefore, operation of the Project would not exceed the SCAQMD's thresholds for any of the six criteria pollutants and would have a less-than-significant regional air quality impact related to operation.

[4] SCAQMD. (March 2023). *South Coast AQMD Air Quality Significance Thresholds*. https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25

Table 3: Regional Operation Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)*					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	0.49	0.38	4.62	0.01	1.28	0.33
Area	0.78	0.01	1.48	<0.01	<0.01	<0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total Operational Emissions	1.27	0.39	6.10	0.01	1.28	0.33
Existing Operational Emissions	1.55	0.96	9.57	0.02	2.08	0.55
Net Operational Emissions	- 0.28	- 0.56	- 3.47	- 0.01	- 0.79	- 0.22
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
* Values may vary slightly due to rounding.
CalEEMod output sheets are provided in Attachment A, and the detailed calculation sheets are provided in Attachment B.

Local Emissions

Localized significance thresholds (LSTs) were also adopted by the SCAQMD due to project-related construction or operational air emissions having the potential to exceed the State and national air quality standards in the project vicinity, while not exceeding the regional emission significance thresholds adopted by the SCAQMD. These thresholds set the maximum rates of daily construction or operational emissions from a project site that would not exceed a national or State ambient air quality standard.[5] The differences between regional thresholds and LSTs are as follows:

1. Regional thresholds include all sources of project construction and operational emissions generated from on-site and off-site emission sources whereas the LSTs only consider the emissions generated from on-site emission sources.
2. LSTs only apply to carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM_{10} and $PM_{2.5}$), while regional thresholds include both reactive organic gases (ROG) and sulfur dioxide (SO_2).
3. Regional thresholds apply to emission sources located anywhere within the SCAQMD whereas the LSTs are location dependent and rely on the size of the project and emission location relative to the nearest sensitive receptor.

SCAQMD provides screening tables (Appendix C of the SCAQMD *2008 Final Localized Significance Threshold Methodology*) for projects that disturb less than or equal to 5 acres in a day.[6] These tables were created to easily determine if the daily emissions of NOx, CO, PM_{10}, and $PM_{2.5}$ from a project could result in a significant impact to the local air quality. The thresholds are determined by:

- Source receptor area (SRA), which is the geographic area within the SCAQMD that can act as both a source of emissions and a receptor of emission impacts (the Project is located within SRA 17, Central Orange County);

[5] SCAQMD. (2008). *Final Localized Significance Threshold Methodology*. http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf
[6] SCAQMD. (2008). *Final Localized Significance Threshold Methodology Appendix C*. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2

- Size of grading disturbance (construction)/size of the project (operation); and
- Distance to the nearest sensitive receptor, which is defined as an individual who is most susceptible to negative health effects when exposed to air pollutants, and includes children, the elderly, and adults with chronic health issues. Locations for such receptors include residences, schools, elderly care centers, and hospitals.

The demolition, site preparation, and grading phases would result in approximately 0.5 acres, 1.5 acres, and 2.5 acres of ground disturbance, respectively, as can be found in Attachment B, *Detailed Calculation Sheets*. Therefore, the maximum ground disturbance occurs during the grading phase with a maximum of 2.5 acres disturbed. Pursuant to SCAQMD guidance, which recommends selecting thresholds based on the smaller of the total site area or the daily disturbed area, construction emissions were evaluated by interpolating between the 1-acre and 2-acre disturbance thresholds to estimate thresholds for a 1.81-acre site (total site area). The nearest sensitive receptor to the Project site is the residence located south of the Project site, at a distance of 2.25 meters (7.38 feet). Therefore, the construction emission thresholds for 25 meters were used as an approximate distance and the lowest distance thresholds available.

Table 4, *Localized Construction Emission Estimates*, shows the thresholds and estimated maximum daily construction emissions for the proposed Project. As shown in Table 4, the proposed Project would not exceed applicable thresholds and therefore would result in a less-than-significant localized construction air quality impact.

Table 4: Localized Construction Emission Estimates

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
2027 (Year 1)				
Demolition	12.43	14.44	4.20	1.00
Site Preparation	18.37	19.78	0.88	0.81
Grading	17.00	17.83	0.91	0.84
Building Construction	11.46	15.23	0.37	0.34
Maximum On-site Emission (2027)	***18.37***	***19.78***	***4.20***	***1.00***
2028 (Year 2)				
Building Construction	10.95	15.21	0.33	0.30
Paving	4.88	7.21	0.19	0.18
Architectural Coating	1.08	1.49	0.02	0.02
Maximum On-site Emission (2028)	***10.95***	***15.21***	***0.33***	***0.30***
Maximum Daily Emissions	***18.37***	***19.78***	***4.20***	***1.00***
SCAQMD Screening Thresholds	108.50	671.30	5.60	3.80
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: NOx = nitrogen oxides, CO = carbon monoxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: CalEEMod output sheets are provided in Attachment A, and the detailed calculation sheets are provided in Attachment B.

According to the SCAQMD LST methodology, LSTs apply to a project's stationary and on-site mobile sources. Projects that involve mobile sources that spend long periods queuing and idling at a site, such as transfer facilities or warehousing and distribution buildings, have the potential to exceed the operational LSTs. The proposed Project would operate as a residential development, which does not typically involve diesel vehicles regularly idling or queuing for long periods. Therefore, due to the lack of significant stationary

source emissions or idling diesel-powered vehicles, impacts related to operational LSTs are presumed to be less than significant.

Air Quality Management Plan Consistency

The SCAQMD's CEQA Handbook provides the following two criteria to determine whether a project would be consistent with the 2022 AQMP:

1. The Project would not generate population and employment growth that would be inconsistent with Southern California Association of Governments (SCAG)'s growth forecasts from the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); and
2. The Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 1 refers to SCAG's growth forecasts and the associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's regional growth projections, which rely in part on the general plans of jurisdictions within the SCAG region. Implementation of the proposed Project would require a General Plan Amendment to change the land use from LDR to LMR, which allows residential densities between 11 and 21 dwelling units per acre. The Project also includes a zone change to change the site zoning from R-1 to PUD for small lot subdivisions with the general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards.

As a residential development consisting of 26 two-story townhomes, the Project does not include employment-generating uses beyond what is anticipated under the County's General Plan. Therefore, it would not induce substantial unplanned employee growth or exceed growth assumptions for the area. The population of City of Garden Grove in 2025 as recorded by the California Department of Finance is approximately 171,492 persons.[7] SCAG growth forecasts indicated an increase from 176,000 persons in 2016 to 185,800 persons in 2045.[8] Based on the California Department of Finance reported average household size of 3.47 persons per household for Garden Grove, the Project's 26 two-story townhome units would add approximately 90 residents. This increase represents a negligible portion (0.92 percent increase) of the City's projected population growth over the 2016–2045 period.

Accordingly, the Project would be consistent with the growth assumptions used in the development of the 2020–2045 RTP/SCS and would not jeopardize attainment of the air quality levels identified in the AQMP. With the required City approvals, the Project would be consistent with the applicable General Plan and zoning designations and thus satisfies Consistency Criterion No. 1.

Consistency Criterion No. 2 refers to the California Ambient Air Quality Standards. An impact would occur if emissions associated with the proposed Project exceed SCAQMD's significance thresholds during construction or operation. As shown in Table 2 and Table 3, the Project's construction and operational

[7] City of Garden Grove's Population and Persons per Household Estimates (171,492 persons and 3.47 persons per household as of January 1, 2025):
California Department of Finance. (January 2025). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2025*. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025

[8] SCAG Growth Forecasts (9,800 persons between 2016 and 2045):
Southern California Association of Governments (SCAG). (September 2020). *Demographics and Growth Forecast*. /https://scag.ca.gov/sites/default/files/old/file-attachments/0903fconnectsocal_demographics-and-gro…

emissions would not exceed any applicable SCAQMD thresholds. Therefore, the Project would be consistent with Consistency Criterion No. 2.

As the Project would be consistent with both Consistency Criteria No. 1 and 2, impacts related to the Project's consistency with the AQMP would be less than significant.

Odors

Odors would be produced during the construction of the proposed Project due to the operation of heavy-duty off-road equipment. The primary odor emitted would be diesel particulate matter (DPM) from the vendor trucks and heavy-duty off-road equipment. This odor may be noticeable by nearby residents; however, these odors would be expected and not necessarily objectionable. These odors would also dissipate quickly and would be temporary. Therefore, due to the nature of the odor produced during construction as temporary and non-objectionable to a substantial number of people, the odor impact from construction of the proposed Project would be less than significant.

For operational odor emissions, SCAQMD's *CEQA Air Quality Handbook* describes odor complaints associated with the following land uses:

- Agricultural uses
- Chemical plants
- Composting activities
- Dairies
- Fiberglass molding
- Food processing plants
- Landfills
- Refineries
- Wastewater treatment plants

The Project does not propose any of the above land uses and is required to comply with SCAQMD Rule 402, *Nuisance*, which states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.*

Thus, impacts associated with odor produced by operation of the proposed Project would be less than significant.

Conclusion

The proposed Project's maximum daily regional and localized construction and operational emissions would not exceed SCAQMD's regional thresholds of significance, as detailed in Tables 2 through 4. All construction activities would comply with applicable SCAQMD rules and regulations, ensuring minimal and temporary odor exposure during construction. Operational impacts are also anticipated to be minimal and consistent with surrounding land uses. In addition, the proposed Project is consistent with SCAQMD'S 2022 AQMP, reflecting adherence to regional air quality management goals and standards. During construction, any odors produced will be temporary and not significantly objectionable. Additionally, the proposed Project

involves land uses that do not typically generate significant odor complaints and complies with SCAQMD Rule 402, which addresses potential odor impacts. Overall, the proposed Project's impacts related to air quality would be less than significant.

Energy

The CEQA Guidelines do not have specific numerical thresholds for energy consumption. Rather, the questions in Appendix G, (VI) Energy, ask: (a) "[Would the proposed Project] Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?" and (b) "[Would the project] Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?"[10] Therefore, for the purpose of this analysis, a significant impact would occur if:

a) The project design and/or location encourages wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, as well as the use of fuel by vehicles anticipated to travel to and from the project; or
b) The project design impedes the growth of future renewable energy developments.

Southern California Edison and the Southern California Gas Company would provide electricity and natural gas, respectively, for construction and operation of the proposed Project. The following assumptions were used to calculate the energy (electricity, natural gas, and petroleum) consumption of the proposed Project:

- Construction equipment fuel consumption was derived from the CARB OffRoad2021 emission model.
- Fuel consumption from vehicle travel was derived from the CARB EMFAC2021 emission model.
- The Project would not consume natural gas on-site; therefore, CalEEMod measure *E-15 Require All-Electric Development* is applied.
- Electricity consumption was derived from CalEEMod (Version 2022.1).

Construction

Electricity and Natural Gas Usage

Due to the Project size and the fact that construction is temporary, the electricity used during construction of the proposed Project would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption. The electric power used would be for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. Natural gas is not anticipated to be needed for construction activities. Any natural gas consumption during construction would be minor and negligible in comparison with Countywide consumption.

Petroleum Fuel Usage

Construction equipment associated with construction activities (off-road/heavy duty vehicles) would rely on diesel fuel, as would vendor and haul trucks involved in delivering building materials and removing demolition debris from the Project site. Construction workers would travel to and from the Project site throughout the duration of construction, and for a conservative analysis, it is assumed that construction workers would travel in gasoline-powered passenger vehicles. The proposed Project's construction vehicle fuel usage is based on vehicle miles traveled (VMT) and fuel usage factors contained in the CARB EMFAC2021 model, which are included in Attachment B, *Detailed Calculation Sheets*. The trips included are those of worker vehicles, vendor vehicles, and haul vehicles. Construction equipment would be transported to the site and operated on-site only. Please refer to Attachment B for the total fuel consumption and horsepower-hour data contained within the CARB Off-Road 2021 emission model for specific types of diesel construction equipment.

[10] California Energy Commission. (2023). *CEQA Statutes and Guidelines Attachment 10 Appendix G: Environmental Checklist Form*. https://www.energy.ca.gov/sites/default/files/2024-01/11_Attachment_10_-_Appendix_G_from_CEQA_Handbook_ada.docx

As shown in Table 5, *Total Construction Fuel Usage*, construction of the proposed Project would require a total of 25,810 gallons of diesel fuel and 6,369 gallons of gasoline fuel from construction vehicles. As shown in Table 5, this would result in a <0.01 percent increase in both countywide construction diesel fuel consumption and countywide on-road gasoline consumption. Thus, increased energy consumption from the construction of the proposed Project would be nominal. Additionally, it should be noted that this total fuel consumption is a conservative analysis and would likely overstate the amount of fuel usage, as specific construction equipment (e.g., crane) is not expected to operate during the entire duration of the construction activity.

Table 5: Total Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	2,342	6,369
Off-Road Construction Equipment	23,468	-
Total	25,810	6,369
Orange Countywide Consumption	148,356,352	863,917,364
Percentage Increase (%)	<0.01%	<0.01%

Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B)

Operation

Operation of the proposed Project would consume electricity and gasoline. Electricity consumption for the proposed Project can be found in Attachment A, *CalEEMod Output Sheets*. The gasoline consumption rates utilize the same assumptions that were used for construction worker vehicles. The Project's estimated net energy consumption is shown in Table 6, *Project Net Annual Operational Energy Requirements*, below. The proposed Project is expected to require consumption of electricity and gasoline. However, the proposed Project's energy consumption would be consistent with similar sized projects and would not constitute an inefficient use of energy. Additionally, the Project is anticipated to result in a net decrease in consumption of electricity and gasoline fuel in comparison to the existing site. Finally, as shown in Table 6, operation of the proposed Project would account for less than 0.01 percent of countywide electricity consumption and less than 0.01 percent of countywide gasoline consumption. Thus, the Project's operational energy use would be nominal at the countywide scale.

Table 6: Project Net Annual Operational Energy Requirements

Operational Source	Energy Usage	Orange Countywide Energy Consumption	Project Percentage
Electricity (Kilowatt-Hour)			
Proposed Project	106,474.3	18,759,000,000	<0.01%
Existing Use	167,551.2		
Net Electricity	- 61,076.91		
Petroleum (Gasoline) Consumption			
Gallons of Gasoline Fuel			
Proposed Project	24,208.6	863,917,364	<0.01%
Existing Use	37,270.5		
Net Petroleum (Gasoline)	- 13,061.9		

Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B)

Future Renewable Energy Developments

The proposed Project would be required to meet the CCR Title 24 State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards in effect during permitting of the proposed Project and comply with all applicable City energy codes. The City's administration of energy efficiency requirements includes review of design components and energy conservation measures during the permitting process to ensure that all requirements are met. In addition, the Project buildings would install solar in compliance with current Title 24 requirements. As such, the Project would not inhibit the use of and would instead allow for future flexibility relating to renewable energy.

Conclusion

As described above, the Project would not result in significant impacts related to energy. Construction activities associated with the proposed Project are not expected to result in fuel demand, on a per-unit-of-development basis, that exceeds that of comparable residential projects in Southern California. The Project does not include any unusual characteristics that would require the use of construction equipment with lower energy efficiency than that used for typical residential development. In addition, construction activities would comply with applicable regulations aimed at reducing energy consumption and emissions, including restrictions on vehicle idling, fuel standards, and equipment efficiency requirements, and estimated energy consumption from construction of the Project would be nominal compared to the energy consumption of the region.

During operation, the Project would consume less electricity and gasoline than the site's previous use. Operational energy demand would be consistent with that of similar residential developments and would not result in inefficient, wasteful, or unnecessary energy consumption. Energy consumption from the operation of the Project would be nominal compared to that of the region. Therefore, the Project would result in a less-than-significant energy impact during both construction and operation, and no mitigation would be required.

In addition, the operation of the Project would also be similar to other residential projects within the County and would be required to meet CCR Title 24 energy efficiency standards and comply with all applicable County energy codes. The proposed Project would install solar energy systems in compliance with current Title 24 requirements. Therefore, the Project would not inhibit the use of and would instead allow for future flexibility relating to renewable energy.

Overall, the Project would result in less-than-significant impacts related to wasteful, inefficient, and unnecessary consumption of energy and impediment of future renewable energy development.

Greenhouse Gas Emissions

Regulatory Background and Thresholds

California State Executive Order S-3-05, issued by Governor Arnold Schwarzenegger in June 2005, established comprehensive GHG reduction targets for the State.[11] It mandated reducing GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. This Executive Order laid the foundation for subsequent climate change mitigation efforts in California, including the development of various policies and programs aimed at reducing emissions across sectors such as transportation, energy, and industry. The objective of the Executive Order is to contribute to capping worldwide CO_2 concentrations at 450 parts-per-million (ppm), stabilizing global climate change.

The SCAQMD convened a GHG Emissions CEQA Significance Threshold Working Group to help lead agencies determine significance thresholds for GHG emissions when the SCAQMD is not the lead agency. The last working group was held in September 2010 (Meeting No. 15) and proposed a tiered approach (Tier 1 to Tier 5), which involves different methods to determine significance of GHG emissions.[12] This assessment will apply the Tier 3 (Numerical Screening Thresholds) approach. Tier 3 consists of screening values which the lead agency can choose from, but it must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project impact would be less than significant:

- Option 1, all land use types: 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year
- Option 2, based on land use type:
    - Residential: 3,500 $MTCO_2e$ per year
    - Commercial: 1,400 $MTCO_2e$ per year
    - Mixed-use: 3,000 $MTCO_2e$ per year

The City of Garden Grove does not have an adopted climate action plan or GHG reduction plan. Therefore, the proposed Project was analyzed for consistency with the goals of Assembly Bill (AB) 32, the 2022 Scoping Plan, which accounts for SB 32 and AB 1279 GHG reduction targets, and the SCAG 2020–2045 RTP/SCS.

The City of Garden Grove understands that the 3,000 $MTCO_2e$ per year threshold was proposed by the SCAQMD a decade ago and was adopted as an interim policy; however, no permanent, superseding policy or threshold has since been adopted. The 3,000 $MTCO_2e$ per year threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the *Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold* document and subsequent Working Group meetings (latest of which occurred in 2010).[13] The SCAQMD has not withdrawn its support of the interim threshold and all documentation supporting the interim threshold remains on the SCAQMD website on a page that provides guidance to CEQA practitioners for air quality analysis (and where all SCAQMD significance thresholds for regional and local criteria pollutants and toxic air contaminants also are listed). Further, as stated by SCAQMD, this threshold "uses the Executive Order S- 3-05 goal [80 percent below 1990 levels by 2050] as the basis for deriving the screening level" and, thus,

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11 Executive Department State of California Executive Order S-3-05: https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf

12 SCAQMD. (2010). *Minutes of the GHG CEQA Significance Threshold Stakeholder Working Group #15.* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year- 2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf

13 SCAQMD. (2008). *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf

remains valid for use in 2025 and for purposes of this CEQA document. Lastly, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction.

Project GHG Emissions

The Project's construction GHG emissions are shown in Table 7, *Project Construction GHG Emissions*, which are amortized over 30 years and added to the operational GHG emissions shown in Table 8, *Total Project GHG Emissions*. These emissions were calculated using the CalEEMod model. As shown in Table 8, the proposed Project's construction and operational GHG emissions would total 234 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year.

When compared to emissions from operation of the existing church, preschool, and daycare buildings, including the reduction in 58 daily vehicle trips, the Project would result in a net decrease of 180 $MTCO_2e$ per year. Thus, the proposed Project would not exceed the SCAQMD significance threshold of 3,000 $MTCO_2e$ per year, and would result in a less than significant impact on GHG emissions.

Table 7: Project Construction GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
2027	155
2028	197
Total Emissions	**352**
Total Emissions Amortized Over 30 Years	12

Source: CalEEMod output sheets are provided in Attachment A, and the detailed calculation sheets are provided in Attachment B.

Table 8: Total Project GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)*
Mobile	195
Area	<0.01
Energy	18
Water	3
Waste	6
Refrigeration	<0.01
Total Project Operation Emissions	**222**
Amortized Construction Emissions	12
Total Project Emissions	**234**
Existing Emissions	414
Net New Emissions	**-180**
Significance Threshold	3,000
Threshold Exceeded?	**No**

* Numbers may vary due to rounding.
Source: CalEEMod output sheets are provided in Attachment A, and the detailed calculation sheets are provided in Attachment B.

Greenhouse Gas Reduction Plans Consistency

Based on project-specific emissions modeling, the proposed Project would result in annual GHG emissions of 234 $MTCO_2e$, a net decrease of approximately 180 $MTCO_2e$ compared to existing emissions, as shown in Table 8 above. This is below the SCAQMD's 3,000 $MTCO_2e$ per year screening threshold as well as the baseline conditions. Thus, the Project would not exceed the applicable GHG significance threshold.

The Project would comply with applicable plans and programs intended to reduce greenhouse gas emissions, including the City of Garden Grove General Plan, the 2022 CARB Scoping Plan, and the SCAG 2020–2045 RTP/SCS. The Project would implement all mandatory measures in effect at the time of construction and operation, including compliance with the California Building Standards Code (Title 24), which incorporates the California Energy Code and CALGreen Code. As a residential development of 26 two-story townhome units, the Project would not result in population or employment growth beyond what is anticipated in the City's General Plan and would remain consistent with the site's designated land use and zoning, with the City's approval. These measures collectively ensure the Project aligns with local and regional GHG reduction policies and growth assumptions.

The Project would also follow applicable provisions of the 2022 CARB Scoping Plan, which establishes sector-specific regulations and actions necessary to achieve carbon neutrality by 2045, including emissions reductions from building energy, transportation, waste, and land use. The Project would implement all mandatory measures in effect at the time of construction and operation, including compliance with the California Building Standards Code (Title 24), which incorporates the California Energy Code and CALGreen Code.

The Project site lies within the SCAG region and is subject to the regional planning framework outlined in the SCAG 2020–2045 RTP/SCS. As a residential development consisting of 26 two-story townhome units, the Project would not generate population or employment growth beyond what is anticipated in the City's General Plan and would be consistent with the site's land use and zoning designations. Therefore, the Project would align with the growth assumptions used in the 2020–2045 RTP/SCS and would not conflict with SCAG's regional planning framework or projections. A detailed discussion of consistency with the 2022 CARB Scoping Plan is provided in the following sections.

Project Consistency with the 2022 CARB Scoping Plan

CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets California's GHG emission reduction target for 2045 at 85 percent below 1990 levels, which was codified by SB 32.[14] Table 9, *2022 Scoping Plan Consistency Summary*, demonstrates that the Project would comply with all applicable actions intended to reduce GHG emissions.

Table 9: 2022 Scoping Plan Consistency Summary

Action	Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40% Below 1990 levels by 2030.	**Consistent.** The Project would comply with Title 24, Part 6 building energy requirements and other applicable local and State initiatives. Compared with the existing use, the Project would result in a reduction of GHG emissions and

14 California Air Resources Board. (2022). *California's 2022 Climate Change Scoping Plan Table 2-1: Actions for the Scoping Plan Scenario: AB 32 GHG Inventory Sectors*. Referenced at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

Action	Consistency
	contribute toward the statewide goal of 40 percent below 1990 levels by 2030. The Project would also result in a net reduction of GHG emissions which would further the State's GHG reduction goals
Smart Growth/Vehicle Miles Traveled VMT	
VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045.	**Consistent.** As previously discussed, the Project would be consistent with the growth and land use assumptions in the 2020–2045 RTP/SCS, and would not interfere with the analysis completed for the RTP/SCS report outlining VMT reduction targets and measures. The Project is located in a VMT area below the County's average and proposes increased housing density, which encourages walking, biking, transit use, and other non-driving travel by placing residents closer to destinations and transit options.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100% of LDV sales are ZEV by 2035.	**Consistent.** While the Project is a residential development and does not involve the sale of vehicles, the homes will be constructed with electric vehicle (EV) hookups to support the transition to 100% ZEV by 2035.
Truck ZEVs	
100% of medium-duty (MDV)/HDC sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies [ITS] report).	**Not Applicable.** The proposed Project is a residential development and does not propose the sale of trucks.
Aviation	
20% of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. Sustainable aviation fuel meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries.	**Not Applicable.** The proposed Project is a residential development and would not utilize aviation fuel.
Ocean-Going Vessels (OGV)	
2020 OGV At-Berth regulation fully implemented, with most OGVs utilizing shore power by 2027. 25% of OGVs utilize hydrogen fuel cell electric technology by 2045.	**Not Applicable.** The proposed Project is a residential development and would not utilize any OGVs.
Port Operations	
100% of cargo handling equipment is zero-emission by 2037. 100% of drayage trucks are zero emission by 2035.	**Not Applicable.** The proposed Project is a residential development and would not impact any operations at any ports.
Freight and Passenger Rail	
100% of passenger and other locomotive sales are ZEV by 2030. 100% of line haul locomotive sales are ZEV by 2035. Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity.	**Not Applicable.** The proposed Project is a residential development and would not involve any freight or passenger rail operations.
Oil and Gas Extraction	
Reduce oil and gas extraction operations in line with petroleum demand by 2045.	**Not Applicable.** The proposed Project is a residential development and would not involve oil and gas extraction operations.

Action	Consistency
Petroleum Refining	
CCS on majority of operations by 2030, beginning in 2028. Production reduced in line with petroleum demand.	**Not Applicable.** The proposed Project is a residential development and would not involve any petroleum refining.
Electricity Generation	
Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035. Retail sales load coverage13420 gigawatts (GW) of offshore wind by 2045. Meet increased demand for electrification without new fossil gas-fired resources.	**Consistent.** The proposed Project would install solar energy systems in compliance with Title 24 requirements to meet the demand for electrification without relying on new fossil gas-fired resources.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed project would comply with Title 24, Part 6 energy efficiency requirements, including the installation of electrical wiring for all built-in appliances. As a residential development, the project would not use natural gas on-site and would rely entirely on electricity to meet its energy needs.
Existing Residential Buildings	
80% of appliance sales are electric by 2030 and 100% of appliance sales are electric by 2035. Appliances are replaced at end of life such that by 2030 there are 3 million all-electric and electric-ready homes—and by 2035, 7 million homes—as well as contributing to 6 million heat pumps installed statewide by 2030.	**Not Applicable.** The Project site does not contain any existing residential buildings. Conversely, the proposed Project will introduce residential on the site which would be 100% electric.
Existing Commercial Buildings	
80% of appliance sales are electric by 2030, and 100% of appliance sales are electric by 2045. Appliances are replaced at end of life, contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The Project site is currently occupied by three buildings, including a church and two structures used for preschool/daycare and office uses. While the proposed residential townhomes and multifamily units would not sell appliances, they would consume energy; however, the Project is fully electric and does not propose any natural gas, ensuring consistency with the applicable requirements. The three existing buildings would be demolished to accommodate the new fully electric residential development.
Food Products	
7.5% of energy demand electrified directly and/or indirectly by 2030; 75% by 2045.	**Not Applicable.** The Project is a residential development and would not involve mass food production.
Construction Equipment	
25% of energy demand electrified by 2030 and 75% electrified by 2045.	**Consistent.** The proposed Project would be required to use construction equipment that is registered by CARB and meet CARB's standards. CARB sets its standards to be in line with the goal of reducing energy demand by 25 percent in 2030 and 75 percent in 2045.
Chemicals and Allied Products; Pulp and Paper	
Electrify 0% of boilers by 2030 and 100% of boilers by 2045.	**Not Applicable.** The proposed Project is a residential development and would not involve the production and/or storage of chemicals and allied products like pulp and paper.

Action	Consistency
Hydrogen for 25% of process heat by 2035 and 100% by 2045. Electrify 100% of other energy demand by 2045.	
Stone, Clay, Glass, and Cement	
CCS on 40% of operations by 2035 and on all facilities by 2045. Process emissions reduced through alternative materials and CCS.	**Not Applicable.** The proposed Project is a residential development and would not involve the production and/or storage of stone, clay, glass, and/or cement.
Other Industrial Manufacturing	
0 percent energy demand electrified by 2030 and 50% by 2045.	**Not Applicable.** The proposed Project is a residential development and does not include any industrial manufacturing uses.
Combined Heat and Power	
Facilities retire by 2040.	**Not Applicable.** The proposed Project is a residential development and would not involve any existing combined heat and power facilities.
Agriculture Energy Use	
25% energy demand electrified by 2030 and 75% by 2045.	**Not Applicable.** The proposed Project is a residential development and would not involve any agricultural uses.
Low Carbon Fuels for Transportation	
Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	**Not Applicable.** The proposed Project is a residential development and would not involve any production of biofuels.
Low Carbon Fuels for Buildings and Industry	
In 2030s, biomethane135 blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040. In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	**Not Applicable.** The proposed Project is a residential development and would not involve any production of fuels for buildings and industry.
Non-Combustion Methane Emissions	
Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies. Moderate adoption of enteric strategies by 2030. Divert 75% of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50% by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand	**Not Applicable.** The proposed Project is a residential development and would not involve any production of non-combustion methane emissions or organic waste.
High GWP Potential Emissions	
Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions.	**Consistent.** The proposed residential development would include refrigerators in each home and would comply with Title 24 Part 6 (Energy Code) and Part 11 (CALGreen) requirements.

Source: CARB. (2022). *California's 2022 Climate Change Scoping Plan Table 2-1: Actions for the Scoping Plan Scenario: AB 32 GHG Inventory Sectors*. Referenced at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

Table 10, *Local Action Policies (Appendix D of the 2022 Scoping Plan)*, identifies GHG reduction measures for implementation by local governments. These local policies focus on climate action planning and approval of new land use development projects. The Project is consistent with these measures and would not conflict with any plan, policy, or regulation adopted for the purpose of reducing GHG emissions within the 2022 Scoping Plan.

Table 10: Local Actions Policies (Appendix D of the 2022 Scoping Plan)

Action	Consistency
VMT Reduction	
Adopt and implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	**Consistent.** The proposed Project would maintain the existing sidewalks and include sidewalks throughout the site to provide pedestrian circulation within the Project and connections to adjacent off-site areas, enhancing existing conditions and supporting the CARB's Complete Streets goals.
Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).	**Consistent.** The proposed Project site at 9822 Russell Avenue is situated in a developed urban area with existing sidewalks along all adjacent roadways. The Project would provide ADA-compliant sidewalks throughout the site, connecting to the existing sidewalk network along Russell Avenue and a new sidewalk along Kerry Street to be constructed as part of the Project. The nearest public transit access is provided by bus stops on Brookhurst Street (Stop IDs 2187 and 2208) along Line 35.
Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).	**Consistent.** The Project requests approval of a General Plan Amendment to change the land use designation from LDR to LMR, allowing residential densities of 11 to 21 dwelling units per acre, therefore increasing residential density. The Project also includes a zone change from R-1 to PUD for small-lot subdivisions, using the R-2 designation as the base guiding standard, therefore increasing residential density.
Building Decarbonization	
Adopt all-electric new construction reach codes.	**Consistent.** The proposed Project is fully electric, does not propose any natural gas, and would comply with Title 24 Parts 6 and 11, including the installation of EV charging infrastructure in garages, electric heat pumps and electric hookups for all appliances.
Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).	**Consistent.** The proposed Project would be constructed in accordance with Title 24 CALGreen requirements, which includes installation of Energy Star equipment and appliances in new buildings.
Facilitate deployment of renewable energy production and distribution and energy storage.	**Consistent.** The proposed Project would be constructed in accordance with the California Energy Code (Title 24 Part 6) to meet all requirements related to solar energy production and the CALGreen Building Energy Efficiency Standards (Title 24 Part 11) to meet efficiency standards.

Source: California Air Resources Board. (2022). *California's 2022 Climate Change Scoping Plan Table 2-1: Actions for the Scoping Plan Scenario: AB 32 GHG Inventory Sectors*. Referenced at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

Conclusion

The proposed Project's construction and operational GHG emissions would total 234 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. When compared to emissions from the existing buildings, the Project

would result in a net decrease of 180 $MTCO_2e$ per year, which remains below the SCAQMD significance threshold of 3,000 $MTCO_2e$ per year. Additionally, as shown in Tables 9 and 10, the Project is consistent with the applicable policies of the 2022 CARB Scoping Plan and applicable local action policies. The Project is also consistent with the SCAG 2020–2045 RTP/SCS. The Project would implement measures to reduce greenhouse gas emissions, including compliance with the California Building Standards Code (Title 24), which incorporates the California Energy Code and CALGreen Code. The Project would not conflict with the actions or goals established in these plans and would be consistent with regional growth and land use assumptions. Overall, the Project's GHG emissions impacts would be less than significant.

Attachment A – CalEEMod Output Sheets

25-142 9822 Russell Ave Garden Grove Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	25-142 9822 Russell Ave Garden Grove
Construction Start Date	9/1/2027
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.8
Precipitation (days)	18
Location	9822 Russell Ave, Garden Grove, CA 92844, USA
County	Orange
City	Garden Grove
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5887
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	26	Dwelling Unit	0.64	27,798	16,278	—	77	Residential units

Parking Lot	33	Space	0.13	0.00	0.00	—	—	Open parking spaces
Other Asphalt Surfaces	0.53	Acre	0.53	0.77	0.00	—	—	—
City Park	0.27	Acre	0.27	0.00	0.00	0.00	—	Open Space
Parking Lot	10	1000sqft	0.24	0.00	0.00	—	—	Garage Spaces

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Unmit.	14	18	21	0.04	5.2	1.8	5,782
Daily, Winter (Max)	—	—	—	—	—	—	—
Unmit.	2.2	20	24	0.04	3.9	2.0	5,365
Average Daily (Max)	—	—	—	—	—	—	—
Unmit.	1.0	4.3	6.2	0.01	0.46	0.17	1,192
Annual (Max)	—	—	—	—	—	—	—
Unmit.	0.18	0.79	1.1	< 0.005	0.08	0.03	197
Exceeds (Daily Max)	—	—	—	—	—	—	—
Threshold	75	100	550	150	150	55	—
Unmit.	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—

Threshold	75	100	550	150	150	55	—
Unmit.	No	No	No	No	No	No	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—
2027	2.2	18	21	0.04	5.2	1.8	5,782
2028	14	12	18	0.03	0.67	0.40	3,299
Daily - Winter (Max)	—	—	—	—	—	—	—
2027	2.2	20	24	0.04	3.9	2.0	5,365
2028	1.3	11	16	0.03	0.60	0.37	3,064
Average Daily	—	—	—	—	—	—	—
2027	0.36	3.2	4.1	0.01	0.46	0.17	935
2028	1.0	4.3	6.2	0.01	0.23	0.14	1,192
Annual	—	—	—	—	—	—	—
2027	0.06	0.59	0.75	< 0.005	0.08	0.03	155
2028	0.18	0.79	1.1	< 0.005	0.04	0.03	197

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—
2027	2.2	18	21	0.04	5.2	1.8	5,782
2028	14	12	18	0.03	0.67	0.40	3,299
Daily - Winter (Max)	—	—	—	—	—	—	—
2027	2.2	20	24	0.04	3.9	2.0	5,365
2028	1.3	11	16	0.03	0.60	0.37	3,064

Average Daily	—	—	—	—	—	—	—
2027	0.36	3.2	4.1	0.01	0.46	0.17	935
2028	1.0	4.3	6.2	0.01	0.23	0.14	1,192
Annual	—	—	—	—	—	—	—
2027	0.06	0.59	0.75	< 0.005	0.08	0.03	155
2028	0.18	0.79	1.1	< 0.005	0.04	0.03	197

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Unmit.	1.3	0.50	6.1	0.01	1.3	0.34	1,634
Mit.	1.3	0.39	6.1	0.01	1.3	0.33	1,500
% Reduced	< 0.5%	21%	1%	—	1%	3%	8%
Daily, Winter (Max)	—	—	—	—	—	—	—
Unmit.	1.1	0.52	4.3	0.01	1.3	0.34	1,577
Mit.	1.1	0.41	4.3	0.01	1.3	0.33	1,442
% Reduced	1%	21%	1%	—	1%	3%	9%
Average Daily (Max)	—	—	—	—	—	—	—
Unmit.	1.2	0.49	5.0	0.01	1.2	0.30	1,475
Mit.	1.2	0.39	5.0	0.01	1.1	0.30	1,341
% Reduced	1%	22%	1%	—	1%	3%	9%
Annual (Max)	—	—	—	—	—	—	—
Unmit.	0.22	0.09	0.92	< 0.005	0.21	0.06	244
Mit.	0.21	0.07	0.91	< 0.005	0.21	0.05	222
% Reduced	1%	22%	1%	6%	1%	3%	9%
Exceeds (Daily Max)	—	—	—	—	—	—	—
Threshold	55	55	550	150	150	55	—

Unmit.	No	No	No	No	No	No	—
Mit.	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—
Threshold	55	55	550	150	150	55	—
Unmit.	No	No	No	No	No	No	—
Mit.	No	No	No	No	No	No	—
Exceeds (Annual)	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	3,000
Unmit.	—	—	—	—	—	—	No
Mit.	—	—	—	—	—	—	No

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Mobile	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Area	0.78	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0
Energy	0.01	0.11	0.05	< 0.005	0.01	0.01	245
Water	—	—	—	—	—	—	16
Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.3	0.50	6.1	0.01	1.3	0.34	1,634
Daily, Winter (Max)	—	—	—	—	—	—	—
Mobile	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Area	0.65	—	—	—	—	—	—
Energy	0.01	0.11	0.05	< 0.005	0.01	0.01	245
Water	—	—	—	—	—	—	16

Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.1	0.52	4.3	0.01	1.3	0.34	1,577
Average Daily	—	—	—	—	—	—	—
Mobile	0.44	0.38	4.0	0.01	1.1	0.30	1,176
Area	0.74	0.01	1.0	< 0.005	< 0.005	< 0.005	2.7
Energy	0.01	0.11	0.05	< 0.005	0.01	0.01	245
Water	—	—	—	—	—	—	16
Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.2	0.49	5.0	0.01	1.2	0.30	1,475
Annual	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.72	< 0.005	0.21	0.05	195
Area	0.13	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	41
Water	—	—	—	—	—	—	2.6
Waste	—	—	—	—	—	—	6.0
Refrig.	—	—	—	—	—	—	0.03
Total	0.22	0.09	0.92	< 0.005	0.21	0.06	244

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Mobile	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Area	0.78	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	110
Water	—	—	—	—	—	—	16

Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.3	0.39	6.1	0.01	1.3	0.33	1,500
Daily, Winter (Max)	—	—	—	—	—	—	—
Mobile	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Area	0.65	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	110
Water	—	—	—	—	—	—	16
Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.1	0.41	4.3	0.01	1.3	0.33	1,442
Average Daily	—	—	—	—	—	—	—
Mobile	0.44	0.38	4.0	0.01	1.1	0.30	1,176
Area	0.74	0.01	1.0	< 0.005	< 0.005	< 0.005	2.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	110
Water	—	—	—	—	—	—	16
Waste	—	—	—	—	—	—	36
Refrig.	—	—	—	—	—	—	0.20
Total	1.2	0.39	5.0	0.01	1.1	0.30	1,341
Annual	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.72	< 0.005	0.21	0.05	195
Area	0.13	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45
Energy	0.00	0.00	0.00	0.00	0.00	0.00	18
Water	—	—	—	—	—	—	2.6
Waste	—	—	—	—	—	—	6.0
Refrig.	—	—	—	—	—	—	0.03
Total	0.21	0.07	0.91	< 0.005	0.21	0.05	222

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.3	12	14	0.02	0.47	0.43	2,502
Demolition	—	—	—	—	3.7	0.56	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.68	0.79	< 0.005	0.03	0.02	137
Demolition	—	—	—	—	0.20	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.14	< 0.005	< 0.005	< 0.005	23
Demolition	—	—	—	—	0.04	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.62	0.00	0.16	0.04	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	3.5	1.6	0.02	0.84	0.26	3,117
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005	8.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.20	0.09	< 0.005	0.05	0.01	171
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005	28

3.2. Demolition (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.3	12	14	0.02	0.47	0.43	2,502
Demolition	—	—	—	—	3.7	0.56	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.68	0.79	< 0.005	0.03	0.02	137
Demolition	—	—	—	—	0.20	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.14	< 0.005	< 0.005	< 0.005	23
Demolition	—	—	—	—	0.04	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.62	0.00	0.16	0.04	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	3.5	1.6	0.02	0.84	0.26	3,117

Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005	8.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.20	0.09	< 0.005	0.05	0.01	171
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005	28

3.3. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	2.1	18	20	0.03	0.88	0.81	3,347
Dust From Material Movement	—	—	—	—	2.1	0.92	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	2.1	18	20	0.03	0.88	0.81	3,347
Dust From Material Movement	—	—	—	—	2.1	0.92	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.11	< 0.005	< 0.005	< 0.005	18
Dust From Material Movement	—	—	—	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	3.0
Dust From Material Movement	—	—	—	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.06	0.07	1.1	0.00	0.29	0.07	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.06	0.07	0.96	0.00	0.29	0.07	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Off-Road Equipment	2.1	18	20	0.03	0.88	0.81	3,347
Dust From Material Movement	—	—	—	—	2.1	0.92	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	2.1	18	20	0.03	0.88	0.81	3,347
Dust From Material Movement	—	—	—	—	2.1	0.92	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.11	< 0.005	< 0.005	< 0.005	18
Dust From Material Movement	—	—	—	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	3.0
Dust From Material Movement	—	—	—	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.06	0.07	1.1	0.00	0.29	0.07	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.06	0.07	0.96	0.00	0.29	0.07	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.5

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.9	17	18	0.03	0.91	0.84	3,005
Dust From Material Movement	—	—	—	—	2.3	0.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.20	< 0.005	0.01	0.01	33
Dust From Material Movement	—	—	—	—	0.02	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	5.5
Dust From Material Movement	—	—	—	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.53	0.00	0.16	0.04	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	2.6	1.1	0.01	0.59	0.19	2,206
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	4.0

3.6. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.9	17	18	0.03	0.91	0.84	3,005
Dust From Material Movement	—	—	—	—	2.3	0.94	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.20	< 0.005	0.01	0.01	33
Dust From Material Movement	—	—	—	—	0.02	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	5.5
Dust From Material Movement	—	—	—	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.53	0.00	0.16	0.04	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	2.6	1.1	0.01	0.59	0.19	2,206
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	24
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	4.0

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.3	11	15	0.03	0.37	0.34	2,749
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—

Off-Road Equipment	0.21	1.9	2.5	< 0.005	0.06	0.06	452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.46	< 0.005	0.01	0.01	75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.05	0.06	0.80	0.00	0.24	0.06	231
Vendor	< 0.005	0.09	0.04	< 0.005	0.02	0.01	89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.04	0.01	39
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	6.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.3	11	15	0.03	0.37	0.34	2,749
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.9	2.5	< 0.005	0.06	0.06	452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.46	< 0.005	0.01	0.01	75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.05	0.06	0.80	0.00	0.24	0.06	231
Vendor	< 0.005	0.09	0.04	< 0.005	0.02	0.01	89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.04	0.01	39
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	6.4
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.2	11	15	0.03	0.33	0.30	2,750
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.2	11	15	0.03	0.33	0.30	2,750
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.2	5.9	0.01	0.13	0.12	1,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.77	1.1	< 0.005	0.02	0.02	176
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.05	0.05	0.87	0.00	0.24	0.06	236
Vendor	< 0.005	0.08	0.04	< 0.005	0.02	0.01	87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.05	0.06	0.75	0.00	0.24	0.06	227
Vendor	< 0.005	0.09	0.04	< 0.005	0.02	0.01	87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	0.02	0.02	0.30	0.00	0.09	0.02	89
Vendor	< 0.005	0.03	0.02	< 0.005	0.01	< 0.005	34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.02	< 0.005	15
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	5.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.2	11	15	0.03	0.33	0.30	2,750
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	1.2	11	15	0.03	0.33	0.30	2,750
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.2	5.9	0.01	0.13	0.12	1,060
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.77	1.1	< 0.005	0.02	0.02	176
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.05	0.05	0.87	0.00	0.24	0.06	236
Vendor	< 0.005	0.08	0.04	< 0.005	0.02	0.01	87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.05	0.06	0.75	0.00	0.24	0.06	227
Vendor	< 0.005	0.09	0.04	< 0.005	0.02	0.01	87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	0.02	0.02	0.30	0.00	0.09	0.02	89
Vendor	< 0.005	0.03	0.02	< 0.005	0.01	< 0.005	34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.02	< 0.005	15
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	5.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	0.52	4.9	7.2	0.01	0.19	0.18	1,106
Paving	0.24	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.20	< 0.005	0.01	< 0.005	30
Paving	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	5.0
Paving	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.53	0.00	0.16	0.04	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	< 0.005	< 0.005	4.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Off-Road Equipment	0.52	4.9	7.2	0.01	0.19	0.18	1,106
Paving	0.24	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.20	< 0.005	0.01	< 0.005	30
Paving	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.04	< 0.005	< 0.005	< 0.005	5.0
Paving	< 0.005	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—
Worker	0.04	0.04	0.53	0.00	0.16	0.04	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	< 0.005	< 0.005	4.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.1	1.5	< 0.005	0.02	0.02	179
Architectural Coatings	12	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.06	< 0.005	< 0.005	< 0.005	7.3
Architectural Coatings	0.51	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	1.2

Architectural Coatings	0.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.05	0.01	47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.1	1.5	< 0.005	0.02	0.02	179
Architectural Coatings	12	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.06	< 0.005	< 0.005	< 0.005	7.3

Architectural Coatings	0.51	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	1.2
Architectural Coatings	0.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.05	0.01	47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Annual	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.07	0.72	< 0.005	0.21	0.05	195
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.08	0.07	0.72	< 0.005	0.21	0.05	195

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.38	4.6	0.01	1.3	0.33	1,334
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.41	4.3	0.01	1.3	0.33	1,280
Annual	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.07	0.72	< 0.005	0.21	0.05	195
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.08	0.07	0.72	< 0.005	0.21	0.05	195

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	95
Parking Lot	—	—	—	—	—	—	14
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	109

Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	95
Parking Lot	—	—	—	—	—	—	14
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	109
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	2.2
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	18

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	97
Parking Lot	—	—	—	—	—	—	14
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	110
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	97
Parking Lot	—	—	—	—	—	—	14
Other Asphalt Surfaces	—	—	—	—	—	—	0.00

City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	110
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	2.2
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	18

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.11	0.05	< 0.005	0.01	0.01	136
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.11	0.05	< 0.005	0.01	0.01	136
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.11	0.05	< 0.005	0.01	0.01	136
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.11	0.05	< 0.005	0.01	0.01	136
Annual	—	—	—	—	—	—	—
Apartments Low Rise	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	23

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	23

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Consumer Products	0.60	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—
Landscape Equipment	0.13	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0
Total	0.78	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0
Daily, Winter (Max)	—	—	—	—	—	—	—
Consumer Products	0.60	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—
Total	0.65	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Consumer Products	0.11	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45
Total	0.13	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Consumer Products	0.60	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—
Landscape Equipment	0.13	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0
Total	0.78	0.01	1.5	< 0.005	< 0.005	< 0.005	4.0

Daily, Winter (Max)	—	—	—	—	—	—	—
Consumer Products	0.60	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—
Total	0.65	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Consumer Products	0.11	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45
Total	0.13	< 0.005	0.18	< 0.005	< 0.005	< 0.005	0.45

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	16
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	16

Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	2.6
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	2.6

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	16
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	16
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	16
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	2.6
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00

City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	2.6

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	36
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	36
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	36
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	36
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	6.0
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.01
Total	—	—	—	—	—	—	6.0

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	36
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	36
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	36
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	36
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	6.0
Parking Lot	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	0.00
City Park	—	—	—	—	—	—	0.01
Total	—	—	—	—	—	—	6.0

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.20
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	0.20
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.20
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	0.20
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.03
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	0.03

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.20
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	0.20
Daily, Winter (Max)	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.20
City Park	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	0.20
Annual	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	0.03
City Park	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	0.03

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	9/1/2027	9/29/2027	5.0	20	—
Site Preparation	Site Preparation	9/30/2027	10/2/2027	5.0	2.0	—
Grading	Grading	10/3/2027	10/8/2027	5.0	4.0	—
Building Construction	Building Construction	10/9/2027	7/15/2028	5.0	200	—
Paving	Paving	10/9/2027	10/22/2027	5.0	10.0	—
Architectural Coating	Architectural Coating	7/1/2028	7/22/2028	5.0	15	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.0	33	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.0	8.0	84	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	0.00	8.0	84	0.37
Site Preparation	Crawler Tractors	Diesel	Average	2.0	8.0	87	0.43
Site Preparation	Graders	Diesel	Average	1.00	8.0	148	0.41
Site Preparation	Trenchers	Diesel	Average	1.00	8.0	40	0.50
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.0	16	0.38
Site Preparation	Excavators	Diesel	Average	1.00	8.0	36	0.38
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.0	71	0.37
Site Preparation	Plate Compactors	Diesel	Average	1.00	8.0	8.0	0.43
Grading	Graders	Diesel	Average	1.00	8.0	148	0.41

Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	0.00	8.0	84	0.37
Grading	Crawler Tractors	Diesel	Average	3.0	8.0	87	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.0	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.0	14	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.0	8.0	84	0.37
Building Construction	Welders	Diesel	Average	3.0	8.0	46	0.45
Paving	Pavers	Diesel	Average	1.00	8.0	81	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.0	89	0.36
Paving	Rollers	Diesel	Average	1.00	8.0	36	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.0	10.0	0.56
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.0	84	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.0	37	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.0	33	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.0	8.0	84	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	0.00	8.0	84	0.37
Site Preparation	Crawler Tractors	Diesel	Average	2.0	8.0	87	0.43
Site Preparation	Graders	Diesel	Average	1.00	8.0	148	0.41

Site Preparation	Trenchers	Diesel	Average	1.00	8.0	40	0.50
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.0	16	0.38
Site Preparation	Excavators	Diesel	Average	1.00	8.0	36	0.38
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.0	71	0.37
Site Preparation	Plate Compactors	Diesel	Average	1.00	8.0	8.0	0.43
Grading	Graders	Diesel	Average	1.00	8.0	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	0.00	8.0	84	0.37
Grading	Crawler Tractors	Diesel	Average	3.0	8.0	87	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.0	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.0	14	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.0	8.0	84	0.37
Building Construction	Welders	Diesel	Average	3.0	8.0	46	0.45
Paving	Pavers	Diesel	Average	1.00	8.0	81	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.0	89	0.36
Paving	Rollers	Diesel	Average	1.00	8.0	36	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.0	10.0	0.56
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.0	84	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	13	19	LDA,LDT1,LDT2

Demolition	Vendor	—	10	HHDT,MHDT
Demolition	Hauling	44	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	23	19	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	13	19	LDA,LDT1,LDT2
Grading	Vendor	—	10	HHDT,MHDT
Grading	Hauling	31	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	19	19	LDA,LDT1,LDT2
Building Construction	Vendor	2.8	10	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	13	19	LDA,LDT1,LDT2
Paving	Vendor	—	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	3.7	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	13	19	LDA,LDT1,LDT2
Demolition	Vendor	—	10	HHDT,MHDT

Demolition	Hauling	44	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	23	19	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	13	19	LDA,LDT1,LDT2
Grading	Vendor	—	10	HHDT,MHDT
Grading	Hauling	31	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	19	19	LDA,LDT1,LDT2
Building Construction	Vendor	2.8	10	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	13	19	LDA,LDT1,LDT2
Paving	Vendor	—	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	3.7	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	56,291	18,764	0.00	0.00	2,350

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,527	0.00
Site Preparation	—	0.00	4.0	0.00	0.00
Grading	—	1,000	10.0	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.90

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Apartments Low Rise	—	0%
Paving	Parking Lot	0.13	100%
Paving	Other Asphalt Surfaces	0.53	100%
Paving	City Park	0.00	0%
Paving	Parking Lot	0.24	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	161	118	100	53,496	1,797	1,316	1,117	595,249
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	161	118	100	53,496	1,797	1,316	1,117	595,249
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Low Rise	Wood Fireplaces	0	0
Apartments Low Rise	Gas Fireplaces	0	0
Apartments Low Rise	Propane Fireplaces	0	0
Apartments Low Rise	Electric Fireplaces	0	0
Apartments Low Rise	No Fireplaces	0	0
Apartments Low Rise	Conventional Wood Stoves	0	0
Apartments Low Rise	Catalytic Wood Stoves	0	0
Apartments Low Rise	Non-Catalytic Wood Stoves	0	0
Apartments Low Rise	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0

City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	56,291	18,764	0.00	0.00	2,350

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	99,711	346	0.0330	0.0040	423,948
Parking Lot	5,075	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	9,082	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	101,399	346	0.0330	0.0040	0.00
Parking Lot	5,075	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	9,082	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	975,667	257,851
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	975,667	257,851
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	19	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.02	0.00
Parking Lot	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	19	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.02	0.00
Parking Lot	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.9	annual days of extreme heat
Extreme Precipitation	3.6	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	43
AQ-PM	72
AQ-DPM	79
Drinking Water	58
Lead Risk Housing	78
Pesticides	0.00
Toxic Releases	89
Traffic	91
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	2.1
Haz Waste Facilities/Generators	30
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	38
Cardio-vascular	50
Low Birth Weights	82
Socioeconomic Factor Indicators	—
Education	79
Housing	57
Linguistic	94
Poverty	47
Unemployment	13

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	21.62196843
Employed	38.39343
Median HI	40.89567561
Education	—
Bachelor's or higher	27.48620557
High school enrollment	25.49724111
Preschool enrollment	17.40023098
Transportation	—
Auto Access	49.51879892
Active commuting	32.09290389
Social	—
2-parent households	65.03272167
Voting	10.39394328

Neighborhood	—
Alcohol availability	30.80970101
Park access	14.84665726
Retail density	64.8659053
Supermarket access	72.55229052
Tree canopy	17.92634416
Housing	—
Homeownership	47.09354549
Housing habitability	20.39009367
Low-inc homeowner severe housing cost burden	26.53663544
Low-inc renter severe housing cost burden	5.119979469
Uncrowded housing	14.8209932
Health Outcomes	—
Insured adults	32.65751315
Arthritis	51.7
Asthma ER Admissions	62.8
High Blood Pressure	26.8
Cancer (excluding skin)	71.8
Asthma	58.2
Coronary Heart Disease	47.4
Chronic Obstructive Pulmonary Disease	31.1
Diagnosed Diabetes	19.9
Life Expectancy at Birth	93.8
Cognitively Disabled	80.8
Physically Disabled	83.0
Heart Attack ER Admissions	36.2
Mental Health Not Good	37.4
Chronic Kidney Disease	45.1

Obesity	83.6
Pedestrian Injuries	68.0
Physical Health Not Good	30.9
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	95.9
Current Smoker	30.4
No Leisure Time for Physical Activity	12.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	61.3
English Speaking	19.1
Foreign-born	95.8
Outdoor Workers	35.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	26.1
Traffic Density	90.9
Traffic Access	23.0
Other Indices	—
Hardship	70.6
Other Decision Support	—
2016 Voting	29.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	63

Healthy Places Index Score for Project Location (b)	26
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Adjusted based on the site plan.
Construction: Construction Phases	Adjusted based on the provided info by the applicant.
Construction: Off-Road Equipment	Added typical equipment used for trenching under the Site Preparation phase. Assumed all construction will be utilized 8 hours per workday. Replaced Tractors/Loaders/Backhoes with Crawler Tractors in the Site Preparation and Grading Phases.
Operations: Vehicle Data	Adjusted rates for Weekday Trips (based on ITE 12th Edition), Saturday Trips, and Sunday Trips to match ITE trip rates for 220-Multifamily Housing (Low-Rise).
Operations: Hearths	Fireplaces and Wood Stoves are removed in accordance with SCAQMD Rule 445.

Attachment B – Detailed Calculation Sheets

Construction Emissions

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
2027 (Year 1)						
Demolition	**1.43**	**15.96**	**16.61**	**0.04**	**5.20**	**1.30**
Off-Road	1.34	12.43	14.44	0.02	0.47	0.43
Demolition					3.73	0.56
Off-Site (Worker Trip)	0.04	0.04	0.62	0.00	0.16	0.04
Off-Site (Hauling Trip)	0.05	3.49	1.56	0.02	0.84	0.26
Site Preparation	**2.17**	**18.44**	**20.90**	**0.03**	**3.30**	**1.80**
Off-Road	2.11	18.37	19.78	0.03	0.88	0.81
Dust From Material Movement					2.12	0.92
Off-Site (Worker Trip)	0.06	0.07	1.11	0.00	0.29	0.07
Grading	**1.98**	**17.04**	**18.36**	**0.03**	**3.33**	**1.81**
Off-Road	1.94	17.00	17.83	0.03	0.91	0.84
Dust From Material Movement					2.26	0.94
Off-Site (Worker Trip)	0.04	0.04	0.53	0.00	0.16	0.04
Hauling	0.03	2.57	1.11	0.01	0.59	0.19
Building Construction	**1.35**	**11.60**	**16.07**	**0.03**	**0.64**	**0.40**
Off-Road	1.30	11.46	15.23	0.03	0.37	0.34
Off-Site (Worker Trip)	0.05	0.06	0.80	0.00	0.24	0.06
Off-Site (Vendor Trip)	0.00	0.09	0.04	0.00	0.02	0.01
Maximum Daily Emissions (2027)	***2.17***	***18.44***	***20.90***	***0.04***	***5.20***	***1.81***
2028(Year 2)						
Building Construction	**1.30**	**11.09**	**16.12**	**0.03**	**0.60**	**0.37**
Off-Road	1.25	10.95	15.21	0.03	0.33	0.30
Off-Site (Worker Trip)	0.05	0.06	0.87	0.00	0.24	0.06
Off-Site (Vendor Trip)	0.00	0.09	0.04	0.00	0.02	0.01
Paving	**0.79**	**4.92**	**7.74**	**0.01**	**0.36**	**0.22**
Off-Road	0.52	4.88	7.21	0.01	0.19	0.18
Paving	0.24					
Off-Site (Worker Trip)	0.04	0.04	0.53	0.00	0.16	0.04
Architectural Coating	**12.48**	**1.09**	**1.67**	**0.00**	**0.07**	**0.03**
Off-Road	0.14	1.08	1.49	0.00	0.02	0.02
Architectural Coating	12.33					
Off-Site (Worker Trip)	0.01	0.01	0.17	0.00	0.05	0.01
Maximum Daily Emissions (2028)	***12.48***	***11.09***	***16.12***	***0.03***	***0.60***	***0.37***
Maximum Daily Emissions	**12.48**	**18.44**	**20.90**	**0.04**	**5.20**	**1.81**
SCAQMD Thresholds	*75*	100	*550*	150	150	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SOx = sulfur oxides, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter

Source: CalEEMod Output Sheets.

Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Mobile	0.49	0.38	4.62	0.01	1.28	0.33
Area	0.78	0.01	1.48	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total Operational Emissions	**1.27**	**0.39**	**6.10**	**0.01**	**1.28**	**0.33**
Existing Operational Emissions	1.55	0.96	9.57	0.02	2.08	0.55
Net Operational Emissions	**(0.28)**	**(0.56)**	**(3.47)**	**(0.01)**	**(0.79)**	**(0.22)**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

<0.01

Construction Equipment Modeled in CalEEMod and Acres Disturbed Per Day

Activity	Equipment Type	Equipment Quantity	Operating Hours per Day	Acres Disturbed per Piece of Equipment per Day	Acres Disturbed per Day
Demolition	Concrete/Industrial Saws	1	8	0.5	0.5
	Rubber Tired Dozers	1	8	0	0
	Tractors/Loaders/Backhoes	3	8	0	0
				Total Acres Disturbed Per Day	**0.5**
Site Preparation	Rubber Tired Dozers	1	8	0.5	0.5
	Crawler Tractors	2	8	0.5	1
	Graders	1	8	0	0
	Trenchers	1	8	0	0
	Dumpers/Tenders	1	8	0	0
	Excavators	1	8	0	0
	Skid Steer Loaders	1	8	0	0
	Plate Compactors	1	8	0	0
				Total Acres Disturbed Per Day	**1.5**
Grading	Graders	1	8	0.5	0.5
	Rubber Tired Dozers	1	8	0.5	0.5
	Crawler Tractors	3	8	0.5	1.5
				Total Acres Disturbed Per Day	**2.5**
				Maximum Acres Disturbed Per Day	**2.5**

Source: CalEEMod Output Sheets.

Localized Construction Emission Estimates

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
2027 (Year 1)				
Demolition	12.43	14.44	4.20	1.00
Site Preparation	18.37	19.78	0.88	0.81
Grading	17.00	17.83	0.91	0.84
Building Construction	11.46	15.23	0.37	0.34
Maximum On-site Emission (2027)	***18.37***	***19.78***	***4.20***	***1.00***
2028 (Year 2)				
Building Construction	10.95	15.21	0.33	0.30
Paving	4.88	7.21	0.19	0.18
Architectural Coating	1.08	1.49	0.02	0.02
Maximum On-site Emission (2028)	***10.95***	***15.21***	***0.33***	***0.30***
Maximum Daily Emissions	**18.37**	**19.78**	**4.20**	**1.00**
SCAQMD Screening Thresholds	108.50	671.30	5.60	3.80
Threshold Exceeded?	**No**	**No**	**No**	**No**

Construction Equipment Fuel Usage (Off-Road)

Activity	Equipment	Number	Hours per day	Horse-power	Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)	
Demolition	Concrete/Industrial Saws	1	8	33	0.73	20	3,854	0.04190267	162	
	Rubber Tired Dozers	1	8	367	0.4	20	23,488	0.05079664	1,193	
	Tractors/Loaders/Backhoes	3	8	84	0.37	20	14,918	0.05298396	790	
Site Preparation	Rubber Tired Dozers	1	8	367	0.4	2	2,349	0.05079664	119	
	Crawler Tractors	2	8	87	0.43	2	1,197	0.05097346	61	
	Graders	1	8	148	0.41	2	971	0.05073945	49	
	Trenchers	1	8	40	0.5	2	320	0.05280441	17	
	Dumpers/Tenders	1	8	16	0.38	2	97	0.43708279	43	
	Excavators	1	8	36	0.38	2	219	0.05144523	11	
	Skid Steer Loaders	1	8	71	0.37	2	420	0.05548087	23	
	Plate Compactors	1	8	8	0.43	2	55	0.05129226	3	
Grading	Graders	1	8	148	0.41	4	1,942	0.05073945	99	
	Rubber Tired Dozers	1	8	367	0.4	4	4,698	0.05079664	239	
	Crawler Tractors	3	8	87	0.43	4	3,591	0.05097346	183	
Building Construction	Cranes	1	8	367	0.29	200	170,288	0.05071774	8,637	0.152509545
	Forklifts	1	8	82	0.2	200	26,240	0.05291564	1,389	0.255803101
	Generator Sets	1	8	14	0.74	200	16,576	0.06897961	1,143	0.259320763
	Tractors/Loaders/Backhoes	3	8	84	0.37	200	149,184	0.05298396	7,904	
	Welders	3	8	46	0.45	200	99,360	0.03020615	3,001	
Paving	Pavers	1	8	81	0.42	10	2,722	0.05163103	141	
	Paving Equipment	1	8	89	0.36	10	2,563	0.05116527	131	
	Rollers	1	8	36	0.38	10	1,094	0.05224824	57	
	Cement and Mortar Mixers	1	8	10	0.56	10	448	0.05129226	23	
	Tractors/Loaders/Backhoes	1	8	84	0.37	10	2,486	0.05298396	132	
Architectual Coating	Air Compressors	1	8	37	0.48	10	1,421	0.02936797	42	
Architectual Coating	Air Compressors	1	8	37	0.48	5	710	0.02936797	21	
								Total	**23,468**	

Source: Fuel Calculation Sheets (see Attachment C)

Model Output: OFFROAD2021 (v1.0.9) Emissions Inventory
Region Type: Sub-Area
Region: Orange (SC)
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower B	Fuel	Fuel Consu	Horsepower_Hours_	Fuel Rate	
Orange (SC)		2027 Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	266266.49	5249968.008	0.050718	
Orange (SC)		2027 Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	785253.95	15405154.13	0.050973	
Orange (SC)		2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	Aggregate	Diesel	41468.567	817724.9747	0.050712	
Orange (SC)		2027 Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	2470438.2	48020741.49	0.051445	
Orange (SC)		2027 Construction and Mining - Graders	Aggregate	Aggregate	Diesel	357109.67	7038106.857	0.050739	
Orange (SC)		2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	4915.95	117318.3	0.041903	
Orange (SC)		2027 Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	159123.79	3081940.86	0.051631	
Orange (SC)		2027 Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	175723.61	3434431.654	0.051165	
Orange (SC)		2027 Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	417724.01	7994986.435	0.052248	
Orange (SC)		2027 Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	98400.825	1937152.268	0.050797	
Orange (SC)		2027 Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	1001101.3	19792036.37	0.050581	
Orange (SC)		2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	2406307.5	45415770.98	0.052984	
Orange (SC)		2027 Industrial - Forklifts	Aggregate	Aggregate	Diesel	1253630	23691104.2	0.052916	
Orange (SC)		2027 Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Diesel	99117.897	3375034.55	0.029368	
Orange (SC)		2027 Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	417947.23	6058996.35	0.06898	
Orange (SC)		2027 Light Commercial - Misc - Pumps	Aggregate	Aggregate	Diesel	233144.14	3546142.9	0.065746	46352.02
Orange (SC)		2027 Construction and Mining - Trenchers	Aggregate	Aggregate	Diesel	83991.224	1590610.14	0.052804	
Orange (SC)		2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	7791.7	17826.6	0.437083	
Orange (SC)		2027 Construction and Mining - Skid Steer Loaders	Aggregate	Aggregate	Diesel	847719.06	15279484.99	0.055481	
Orange (SC)		2027 Construction and Mining - Other Construction Equipment	Aggregate	Aggregate	Diesel	509341.22	9930177.797	0.051292	
Orange (SC)		2027 Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	499746.49	16544530.2	0.030206	

Construction On-Road Fuel Consumption

Construction Source	Total Trips	VMT	Fuel Rate (Gallons/Miles)	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	339.1	6782.5	6.3	1,069	-
Vendor Trucks	1111.8	11340.5	8.9	1,273	
Worker Vehicles	8465.6	156613.0	24.6		6,369
			Total	2,342	6,369

Source: CalEEMod Output Sheets (see Attachment A)

5.3. Construction Vehicles
5.3.1 Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition				
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor		10.2	HHDT,MHDT
Demolition	Hauling	44.1	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Preparation	Worker	22.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor		10.2	HHDT,MHDT
Site Preparation	Hauling	0	20	HHDT
Site Preparation	Onsite truck			HHDT
Grading				
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor		10.2	HHDT,MHDT
Grading	Hauling		20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Construction	Worker	18.72032214	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.779525711	10.2	HHDT,MHDT
Building Construction	Hauling	0	20	HHDT
Building Construction	Onsite truck			HHDT
Paving				
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor		10.2	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectural Coating Phase	Worker	3.744064428	18.5	LDA,LDT1,LDT2
Architectural Coating Phase	Vendor		10.2	HHDT,MHDT
Architectural Coating Phase	Hauling	0	20	HHDT
Architectural Coating Phase	Onsite truck			HHDT
Architectural Coating Phase	Worker		18.5	LDA,LDT1,LDT2
Architectural Coating Phase	Vendor		10.2	HHDT,MHDT
Architectural Coating Phase	Hauling	0	20	HHDT
Architectural Coating Phase	Onsite truck			HHDT

Construction Schedule	Days per phase
Demolition	20
Site Prep	2
Grading	4
Building Construction	200
Paving	10
Coating	5

3,527 Tons 2713 CY

	CalEEMod Daily Trucks	CY/per truck	CY	Total Truck	Miles	Truck Miles
Demo	0	16	2713	170	20.0	6782.5
				170		6782.5

Source: EMFAC2025 (v2.0.0) Emissions Inventory
Region Type: Sub-Area
Region: Orange (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Units: miles/year for Combustion VMT and Electric VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption, kWh/year for Energy Consumption, kg/year for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Total VMT	Fuel Consumption	Fuel Rate	Trip %
Orange (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	5.67E+08	89344.86464	6.345930964	100%
Orange (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	2.03E+08	9741.049618	20.81287394	
Orange (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	2.16E+08	11724.225	18.41860547	
Orange (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	2.59E+08	29073.09221	8.908937835	100%
Orange (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	7.54E+09	284716.4141	26.46986964	50%
Orange (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	8.85E+08	38859.17461	22.77906172	25%
Orange (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	6.08E+09	268737.7085	22.63465382	25%
					50/25/25 Splits	24.58836			

Operational Energy Consumption

Operational Source	Energy Usage		Countywide Energy Consumption	Percentage Increase
Electricity (Kilowatt-Hour)				
Proposed Project	106,474.3		18,759,000,000	0.001%
Existing Project	167,551.2		18,759,000,000	0.001%
Net Electricity	(61,076.9)		18,759,000,000	0.000%
Petroleum (Gasoline) Consumption				
	Annual VMT	Gallons of Gasoline Fuel		
Proposed Project	595,249.0	24,208.6	863,917,364.2	0.003%
Existing Project	916,420.0	37,270.5	863,917,364.2	0.004%
Net Petroleum (Gasoline)	(321,171.0)	(13,061.9)	863,917,364.2	-0.002%

Source: CalEEMod Output Sheets (see Attachment A)

Proposed Project

CalEEMod Output

Land Use Type	Trips/Weekday	Trips/Saturday	VMT/Year
Apartments Low Rise	161.4600002	118.300000	595249.0497
Parking Lot	0	0	0
Other Asphalt Surface	0	0	0
City Park	0	0	0
Parking Lot	0	0	0

5.11. Operational Energy Consumption

5.11.1 mitigated

Land Use	Electricity (kWh/yr)	Natural Gas (kBTU/yr)
Apartments Low Rise	101399.2461	0
Parking Lot	5075.08848	0
Other Asphalt Surface	0	0
City Park	0	0
Parking Lot	0	0

Existing Project

CalEEMod Output

Land Use Type	Trips/Weekday	Trips/Saturday	VMT/Year
Day-Care Center	112.9874999	112.9874999	561667.7044
Place of Worship	105.7137599	174.6303998	354752.3237
Other Non-Asphalt Surfaces	0	0	0

5.11. Operational Energy Consumption

5.11.1 Unmitigated

Land Use	Electricity (kWh/yr)
Day-Care Center	17981.24415
Place of Worship	149569.9406
Other Non-Asphalt Surfaces	0

Source: EMFAC2025 (v2.0.0) Emissions Inventory
Region Type: County
Region: Orange
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Units: miles/year for Combustion VMT and Electric VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption, kWh/year for Energy Consumption, kg/year for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Fuel Consumption
Orange (SC)	2027	HHDT	Aggregate	Aggregate	Gasoline	90.89088158
Orange (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	89344.86464
Orange (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	284716.4141
Orange (SC)	2027	LDA	Aggregate	Aggregate	Diesel	448.6543753
Orange (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	38859.17461
Orange (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	4.970185034
Orange (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	268737.7085
Orange (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	400.6386689
Orange (SC)	2027	LHDT1	Aggregate	Aggregate	Gasoline	29293.65156
Orange (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	9741.049618
Orange (SC)	2027	LHDT2	Aggregate	Aggregate	Gasoline	7365.227423
Orange (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	11724.225
Orange (SC)	2027	MCY	Aggregate	Aggregate	Gasoline	2564.739092
Orange (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	200054.2241
Orange (SC)	2027	MDV	Aggregate	Aggregate	Diesel	5193.845905
Orange (SC)	2027	MH	Aggregate	Aggregate	Gasoline	3981.6606
Orange (SC)	2027	MH	Aggregate	Aggregate	Diesel	972.5217674
Orange (SC)	2027	MHDT	Aggregate	Aggregate	Gasoline	24925.81356
Orange (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	29073.09221
Orange (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	1530.690092
Orange (SC)	2027	OBUS	Aggregate	Aggregate	Diesel	919.1854926
Orange (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	646.0762361
Orange (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	533.3043266
Orange (SC)	2027	UBUS	Aggregate	Aggregate	Gasoline	1151.093392

Fuel	Sum	Annual Consumption
Diesel	148356.3522	148,356,352
Gasoline	863917.3642	863,917,364

Construction Fuel Consumption Summary

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
On-road Construction Vehicles	2,342	6,369
Off-Road Construction Equipment	23,468	-
Total	25,810	6,369
On-road Countywide	148,356,352	863,917,364
Off-road Countywide	14,243,342	980,232
onroad percentage	0.002%	0.001%

Model Output: Off-Road Web Query (v1.1.2) Emissions Inventory
Region Type: County
Region: Orange
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: Off-Road Web Query Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Yea	Horsepow	Fuel	Fuel Consumption
Orange	2027	Construction and Mining - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	305157.8947
Orange	2027	Construction and Mining - Bucket	Aggregate	Aggregate	Diesel	7124.31712
Orange	2027	Construction and Mining - Compactor	Aggregate	Aggregate	Diesel	11593.60747
Orange	2027	Construction and Mining - Concrete Mixer	Aggregate	Aggregate	Diesel	1074.759072
Orange	2027	Construction and Mining - Concrete Pump	Aggregate	Aggregate	Diesel	10937.344
Orange	2027	Construction and Mining - Crane less than 3	Aggregate	Aggregate	Diesel	5265.789068
Orange	2027	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	266266.4904
Orange	2027	Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	785253.9487
Orange	2027	Construction and Mining - Crushing/Process	Aggregate	Aggregate	Diesel	41468.5673
Orange	2027	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	2470438.161
Orange	2027	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	357109.666
Orange	2027	Construction and Mining - Hopper Tractor T	Aggregate	Aggregate	Diesel	701.1846962
Orange	2027	Construction and Mining - Misc - Bore/Drill R	Aggregate	Aggregate	Diesel	86.6
Orange	2027	Construction and Mining - Misc - Cement An	Aggregate	Aggregate	Diesel	125.5
Orange	2027	Construction and Mining - Misc - Concrete/I	Aggregate	Aggregate	Diesel	4915.95
Orange	2027	Construction and Mining - Misc - Dumpers/T	Aggregate	Aggregate	Diesel	10.2
Orange	2027	Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	72.4
Orange	2027	Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	270
Orange	2027	Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	19.1
Orange	2027	Construction and Mining - Misc - Paving Equ	Aggregate	Aggregate	Diesel	32.3
Orange	2027	Construction and Mining - Misc - Plate Comp	Aggregate	Aggregate	Diesel	90.4
Orange	2027	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	555
Orange	2027	Construction and Mining - Misc - Rubber Tir	Aggregate	Aggregate	Diesel	13.3
Orange	2027	Construction and Mining - Misc - Signal Boar	Aggregate	Aggregate	Diesel	3570.8
Orange	2027	Construction and Mining - Misc - Skid Steer	Aggregate	Aggregate	Diesel	3710
Orange	2027	Construction and Mining - Misc - Tractors/Lo	Aggregate	Aggregate	Diesel	347
Orange	2027	Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Diesel	466
Orange	2027	Construction and Mining - Nurse Rig Other	Aggregate	Aggregate	Diesel	65.61681695
Orange	2027	Construction and Mining - Off-Highway Trac	Aggregate	Aggregate	Diesel	444744.4552
Orange	2027	Construction and Mining - Off-Highway Truc	Aggregate	Aggregate	Diesel	1065051.138
Orange	2027	Construction and Mining - Other Constructio	Aggregate	Aggregate	Diesel	509341.2234
Orange	2027	Construction and Mining - Other Material H	Aggregate	Aggregate	Diesel	156713.4201
Orange	2027	Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	159123.7919
Orange	2027	Construction and Mining - Paving Equipmen	Aggregate	Aggregate	Diesel	175723.6124
Orange	2027	Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	417724.0068
Orange	2027	Construction and Mining - Rough Terrain Fo	Aggregate	Aggregate	Diesel	518943.7341
Orange	2027	Construction and Mining - Rubber Tired Doz	Aggregate	Aggregate	Diesel	98400.82464
Orange	2027	Construction and Mining - Rubber Tired Loa	Aggregate	Aggregate	Diesel	1814872.72
Orange	2027	Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	1001101.293
Orange	2027	Construction and Mining - Skid Steer Loader	Aggregate	Aggregate	Diesel	847719.058
Orange	2027	Construction and Mining - Spray Truck	Aggregate	Aggregate	Diesel	10436.87011
Orange	2027	Construction and Mining - Spreader Tractor	Aggregate	Aggregate	Diesel	1320.232061
Orange	2027	Construction and Mining - Spreader Truck	Aggregate	Aggregate	Diesel	8158.779479
Orange	2027	Construction and Mining - Surfacing Equipm	Aggregate	Aggregate	Diesel	84091.63144
Orange	2027	Construction and Mining - Tank Truck	Aggregate	Aggregate	Diesel	17762.85028
Orange	2027	Construction and Mining - Tanker Truck Trai	Aggregate	Aggregate	Diesel	1351.100606
Orange	2027	Construction and Mining - Telescopic Handl	Aggregate	Aggregate	Diesel	35432.26614
Orange	2027	Construction and Mining - Tractors/Loaders	Aggregate	Aggregate	Diesel	2406307.457
Orange	2027	Construction and Mining - Trenchers	Aggregate	Aggregate	Diesel	83991.22375
Orange	2027	Construction and Mining - Vacuum Truck	Aggregate	Aggregate	Diesel	27132.00254
Orange	2027	Construction and Mining - Water Truck	Aggregate	Aggregate	Diesel	81155.9431
Orange	2027	Construction and Mining - Misc - Asphalt Pa	Aggregate	Aggregate	Gasoline	19927.3
Orange	2027	Construction and Mining - Misc - Bore/Drill R	Aggregate	Aggregate	Gasoline	12871.95
Orange	2027	Construction and Mining - Misc - Cement An	Aggregate	Aggregate	Gasoline	74736
Orange	2027	Construction and Mining - Misc - Concrete/I	Aggregate	Aggregate	Gasoline	95872.05
Orange	2027	Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	10650.7
Orange	2027	Construction and Mining - Misc - Crushing/P	Aggregate	Aggregate	Gasoline	474
Orange	2027	Construction and Mining - Misc - Dumpers/T	Aggregate	Aggregate	Gasoline	7791.7
Orange	2027	Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	16206
Orange	2027	Construction and Mining - Misc - Paving Equ	Aggregate	Aggregate	Gasoline	140863.7
Orange	2027	Construction and Mining - Misc - Plate Comp	Aggregate	Aggregate	Gasoline	51224
Orange	2027	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	67420.75
Orange	2027	Construction and Mining - Misc - Rough Terr	Aggregate	Aggregate	Gasoline	75087.8
Orange	2027	Construction and Mining - Misc - Rubber Tir	Aggregate	Aggregate	Gasoline	39803.25
Orange	2027	Construction and Mining - Misc - Surfacing E	Aggregate	Aggregate	Gasoline	62248
Orange	2027	Construction and Mining - Misc - Tampers/R	Aggregate	Aggregate	Gasoline	8554
Orange	2027	Construction and Mining - Misc - Tractors/Lo	Aggregate	Aggregate	Gasoline	25517.15
Orange	2027	Construction and Mining - Misc - Signal Boar	Aggregate	Aggregate	Gasoline	1452.2
Orange	2027	Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Gasoline	123652.9
Orange	2027	Construction and Mining - Misc - Skid Steer	Aggregate	Aggregate	Gasoline	145878.35

Project Construction GHG Emissions

Activity	CO2e
2027	155
2028	197
Total Emissions	352
Total Emissions Amortized Over 30 Years	12

Source: CalEEMod Output Sheets

Total Project GHG Emissions

Activity	CO2e
Project Operation	
Mobile	195
Area	0
Energy	18
Water	3
Waste	6
Refrig.	0
Total Project Gross Operation Emissions	222
Project Construction	
Amortized Construction Emissions	12
Project Construction and Operation	
Project Total Emissions	234
Existing Emissions	414
Net New Emissions	-180
Significance Threshold	3,000
Threshold Exceeded?	No

Notes: 1. Numbers may vary due to rounding.

Source: CalEEMod Output Sheets

Attachment C – Demo Calculation Sheet

25-142 9822 Russell Ave Garden Grove

Estimates of Demolition Debris

Building Demolition

Building	Height(ft)	Area (ft2)	Volume (ft3)	Demo Building Volume (cy)
1	14	21520	301280	3682
			0	0
			0	0
			0	0
Total		21520	301280	3682

Weight of the Building Demolition Debris (ton/cy): 0.5

Total Weight of Building Debris 1841 tons
Tons

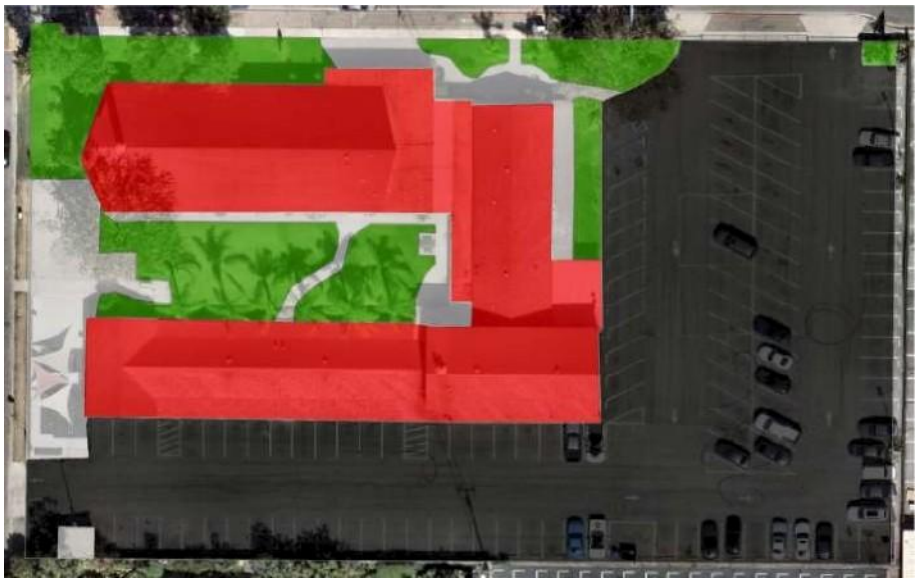
Note 1: Total square footage of existing school buildings contained in the project description
Note 2: FEMA Debris Estimating Field Guide, FEMA 329. September 2010
Note 3: CalEEMod User Guide

Hardscape Demolition

Weight of Hardscape 145 lb/ft3

	Area	Height (ft)	Area (ft2)	Volume (cf)	Weight (lbs)	Weight (tons)
Concrete	1	0.5	7229	3615	524103	262
Asphalt	2	0.5	39264	19632	2846640	1423
	3	0		0	0	0
	Total		46493	23247	3370743	1685

Total Demolition Weight 3527 tons



Building
Concrete
Landscape

To:	City of Garden Grove
From:	Maryam Javanmardi, Simon Lin, EIT, Meghan Macias, TE EPD Solutions, Inc.
Date:	3/17/2026
Site:	9822 Russell Ave, Garden Grove, CA
Subject:	Level of Service (LOS) Screening Analysis for 9822 Russell Ave, Garden Grove Project EPD Project Number 25-142



Project Overview

This technical memorandum provides an evaluation of the proposed residential project (the Project) located at 9822 Russell Avenue in the central portion of the City of Garden Grove. The site is approximately 0.12 miles north of State Route 22 (SR-22) and one block west of Brookhurst Street, both of which provide regional access to the site. Local and direct access to the site is provided by Russell Avenue to the north and Kerry Street to the west. The purpose of this analysis is to determine if a Traffic Impact Analysis (TIA) to analyze level of service (LOS) (for non-CEQA purposes) would be required for the Project. This memo evaluates the Project using the City of Garden Grove *Traffic Impact Analysis (TIA) Guidelines for Vehicles Miles Traveled and Level of Service Assessment* (May 2020).

Project Description

The Project site is identified as Assessor's Parcel Number (APN) 098-081-19 and is located within the United States Geologic Survey (USGS) Anaheim 7.5 Minute Series Topographic Quadrangle and within Section 5, Township 5 South, Range 10. The 1.81-acre Project site is currently developed with a church, preschool, daycare facility, parking lot, and landscaping areas. The church sanctuary is 7,700 square feet, the office and meeting rooms used by the church total 7,892 square feet, and the preschool/daycare is 2,875 square feet, which totals 18,467 square feet of building space on the site. The existing preschool/daycare facility (Orangefield Child Development Center) is for children ages 2 to 6 years and has a licensed capacity for 60 students.[1]

The Project requests approval from the City of Garden Grove to demolish the existing church, preschool, and daycare facility building and associated improvements on the Project site and construct 26 two-story townhome residences with open space/recreation and parking. Each residential unit would have three or four bedrooms, ranging in size from approximately 1,442 square feet to 1,800 square feet, and each unit would have a two-car garage. The 26 residences on the 1.81-acre site would result in a density of 14.4 units per acre. Development of the Project would include parking, open space, ornamental landscaping, and associated infrastructure.

The Project requests the approval of a General Plan Amendment to change the land use from Low-Density Residential (LDR) to Low-Medium Density Residential (LMR), which allows residential densities between 11 and 21 dwelling units per acre. The Project also includes a zone change to change the site zoning from R-1 to Planned Unit Development (PUD) with a general R-2 (Limited Multiple Residential) zoning designation used

[1] California Department of Social Services. (2025). *Facility Detail: Orangefield Child Development Center*. Accessed: https://www.ccld.dss.ca.gov/carefacilitysearch/FacDetail/304371054

as the base guiding standards. The proposed Project Site Plan is shown in Figure 1, included at the end of this document.

Project Trip Generation

The proposed Project trip generation was calculated using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition* (2025). The existing church building was analyzed using the Church land use (ITE Land Use Code 560), the preschool/daycare facility was analyzed using the Day Care Center land use (ITE Land Use Code 565), and the proposed Project was analyzed using the Multifamily Housing land use (ITE Land Use Code 220).

Table 1 presents the trip generation estimates for the existing uses and the proposed Project. The existing uses are estimated to generate approximately 219 daily trips, including 37 trips during the AM peak hour and 38 trips during the PM peak hour. The proposed Project is anticipated to generate approximately 161 daily trips, with 11 trips during the AM peak hour and 14 trips during the PM peak hour. Overall, the Project would result in 58 fewer daily trips, including 26 fewer trips during the AM peak hour and 24 fewer trips during the PM peak hour.

Level of Service Screening Results

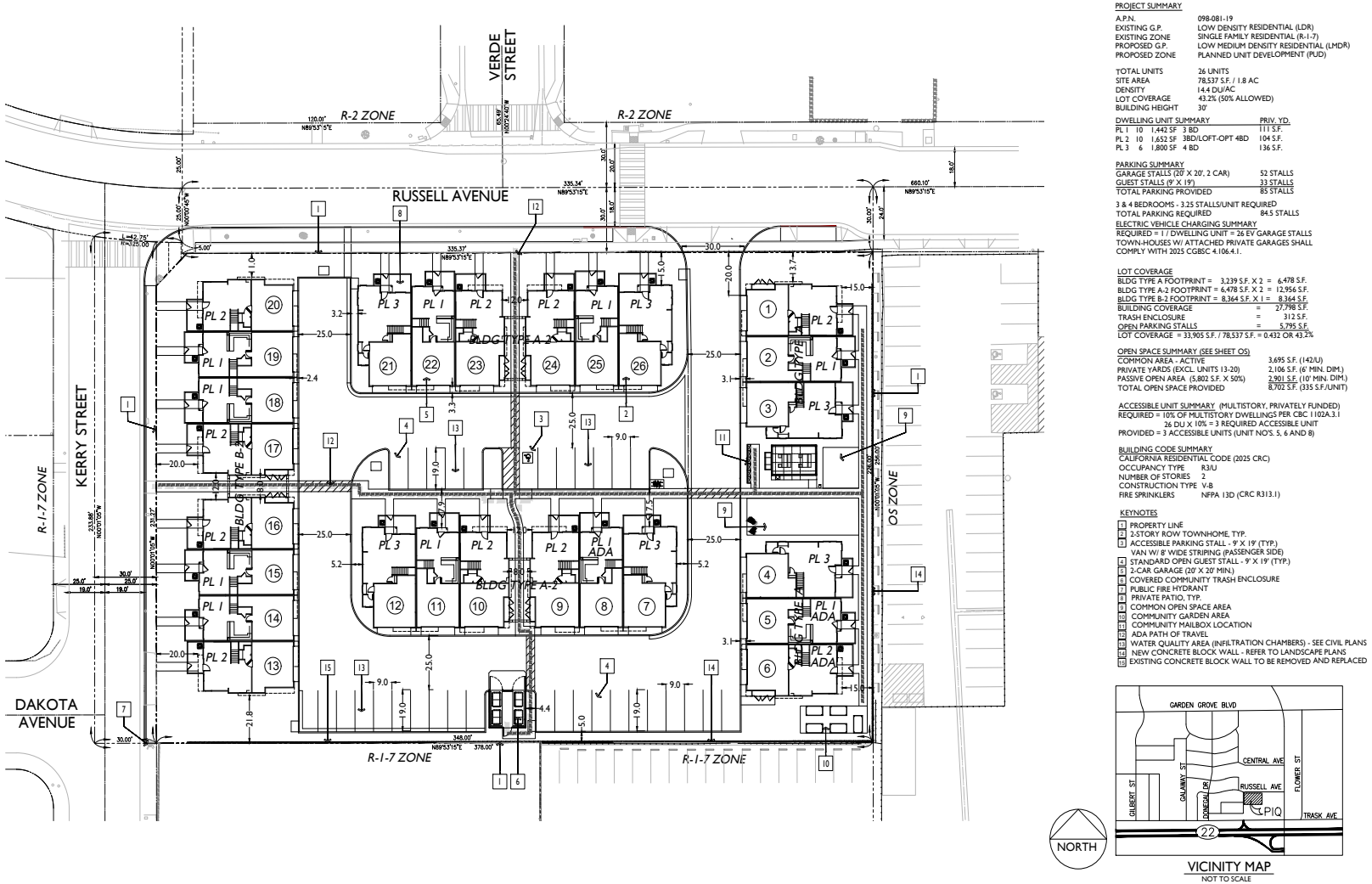
As detailed in the 'Introduction' Section (page 8) of the City's *TIA Guidelines for Vehicles Miles Traveled and Level of Service Assessment*, a TIA that includes a level of service (LOS) analysis is not required for projects that generate less than 50 vehicle trips during either the AM or PM peak hour. As shown in Table 1, the Project would result in 11 trips during the AM peak hour and 14 trips during the PM peak hour, resulting in 26 fewer trips during the AM peak hour and 24 fewer trips during the PM peak hour. Therefore, the proposed Project would not generate 50 or more vehicle trips during the peak hour. A TIA that includes LOS analysis is therefore not required.

TIA Screening Results

The Project was evaluated using the City's *TIA Guidelines for Vehicles Miles Traveled and Level of Service Assessment* to determine if the project would require an LOS analysis (for non-CEQA purposes). The Project would result in 26 fewer trips during the AM peak hour and 24 fewer trips during the PM peak hour. Therefore, the Project would not result in a 50 peak hour increase in trips from the site and does not require preparation of a TIA LOS analysis.

If you have any questions about this analysis, please contact us at (949) 796-1180 or techservices@epdsolutions.com.

Figure 1: Proposed Project Site Plan



PROJECT SUMMARY

A.P.N.	098-081-19
EXISTING G.P.	LOW DENSITY RESIDENTIAL (LDR)
EXISTING ZONE	SINGLE FAMILY RESIDENTIAL (R-1-7)
PROPOSED G.P.	LOW MEDIUM DENSITY RESIDENTIAL (LMDR)
PROPOSED ZONE	PLANNED UNIT DEVELOPMENT (PUD)
TOTAL UNITS	26 UNITS
SITE AREA	78,537 S.F. / 1.8 AC
DENSITY	14.4 DU/AC
LOT COVERAGE	43.2% (50% ALLOWED)
BUILDING HEIGHT	30'

DWELLING UNIT SUMMARY

				PRIV. YD.
PL 1	10	1,442 SF	3 BD	111 S.F.
PL 2	10	1,652 SF	3BD/LOFT-OPT 4BD	104 S.F.
PL 3	6	1,800 SF	4 BD	136 S.F.

PARKING SUMMARY

GARAGE STALLS (20' X 20', 2 CAR)	52 STALLS
GUEST STALLS (9' X 19')	33 STALLS
TOTAL PARKING PROVIDED	85 STALLS

3 & 4 BEDROOMS - 3.25 STALLS/UNIT REQUIRED
TOTAL PARKING REQUIRED 84.5 STALLS

ELECTRIC VEHICLE CHARGING SUMMARY
REQUIRED = 1 / DWELLING UNIT = 26 EV GARAGE STALLS
TOWN-HOUSES W/ ATTACHED PRIVATE GARAGES SHALL COMPLY WITH 2025 CGBSC 4.106.4.1.

LOT COVERAGE

BLDG TYPE A FOOTPRINT =	3,239 S.F. X 2 =	6,478 S.F.
BLDG TYPE A-2 FOOTPRINT =	6,478 S.F. X 2 =	12,956 S.F.
BLDG TYPE B-2 FOOTPRINT =	8,364 S.F. X 1 =	8,364 S.F.
BUILDING COVERAGE	=	27,798 S.F.
TRASH ENCLOSURE	=	312 S.F.
OPEN PARKING STALLS	=	5,795 S.F.

LOT COVERAGE = 33,905 S.F. / 78,537 S.F. = 0.432 OR 43.2%

OPEN SPACE SUMMARY (SEE SHEET OS)

COMMON AREA - ACTIVE	3,695 S.F. (142/U)
PRIVATE YARDS (EXCL. UNITS 13-20)	2,106 S.F. (6' MIN. DIM.)
PASSIVE OPEN AREA (5,802 S.F. X 50%)	2,901 S.F. (10' MIN. DIM.)
TOTAL OPEN SPACE PROVIDED	8,702 S.F. (335 S.F./UNIT)

ACCESSIBLE UNIT SUMMARY (MULTISTORY, PRIVATELY FUNDED)
REQUIRED = 10% OF MULTISTORY DWELLINGS PER CBC 1102A.3.1
26 DU X 10% = 3 REQUIRED ACCESSIBLE UNIT
PROVIDED = 3 ACCESSIBLE UNITS (UNIT NO'S. 5, 6 AND 8)

BUILDING CODE SUMMARY
CALIFORNIA RESIDENTIAL CODE (2025 CRC)

OCCUPANCY TYPE	R3/U
NUMBER OF STORIES	2
CONSTRUCTION TYPE	V-B
FIRE SPRINKLERS	NFPA 13D (CRC R313.1)

KEYNOTES
1 PROPERTY LINE
2 2-STORY ROW TOWNHOME, TYP.
3 ACCESSIBLE PARKING STALL - 9' X 19' (TYP.) VAN W/ 8' WIDE STRIPING (PASSENGER SIDE)
4 STANDARD OPEN GUEST STALL - 9' X 19' (TYP.)
5 2-CAR GARAGE (20' X 20' MIN.)
6 COVERED COMMUNITY TRASH ENCLOSURE
7 PUBLIC FIRE HYDRANT
8 PRIVATE PATIO, TYP.
9 COMMON OPEN SPACE AREA
10 COMMUNITY GARDEN AREA
11 COMMUNITY MAILBOX LOCATION
12 ADA PATH OF TRAVEL
13 WATER QUALITY AREA (INFILTRATION CHAMBERS) - SEE CIVIL PLANS
14 NEW CONCRETE BLOCK WALL - REFER TO LANDSCAPE PLANS
15 EXISTING CONCRETE BLOCK WALL TO BE REMOVED AND REPLACED

GARDEN GROVE — 9822 RUSSELL - 2 STORY TOWNHOMES — SITE PLAN

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

0 20 40 60

JAN 12, 2026

SUMMA ARCHITECTURE
5256 S. Mission Road, Ste. 404
Bonsall, CA 92003
www.summarch.com p.760.724.1198

SP

Table 1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
560 Church[1]		1000 Sq. Ft. GFA	6.78	0.23	0.14	0.37	0.18	0.25	0.43
565 Day Care Center[2]		1000 Sq. Ft. GFA	39.3	5.77	5.11	10.88	5.05	5.7	10.75
220 Multifamily Housing (Low-Rise)[3]		Dwelling Units	6.21	0.1	0.31	0.41	0.32	0.2	0.52
Project Trip Generation									
Existing Uses Trip Generation									
Church[1]	15.59	1000 Sq. Ft. GFA	106	4	2	6	3	4	7
Day Care Center[2]	2.88	1000 Sq. Ft. GFA	113	16	15	31	15	16	31
Proposed Project Trip Generation									
Multifamily Housing (Low-Rise)[3]	26	Dwelling Units	161	3	8	11	9	5	14
Total Existing Trip Generation			**219**	**20**	**17**	**37**	**18**	**20**	**38**
Total Project Trip Generation			**161**	**3**	**8**	**11**	**9**	**5**	**14**
Total Net New Trip Generation			-58	-17	-9	-26	-9	-15	-24

[1] Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 560 - Church (Average Rate)

[2] Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 565 - Day Care Center (Average Rate)

[3] Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 220 - Multifamily Housing (Low-Rise) (Average Rate)

CULTURAL RESOURCES STUDY FOR THE 9822 RUSSELL AVENUE PROJECT

CITY OF GARDEN GROVE, ORANGE COUNTY, CALIFORNIA

APN 098-081-19

Lead Agency:

City of Garden Grove
11222 Acacia Parkway
Garden Grove, California 92840

Preparer:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

Project Proponent:

RE Consulting
5742 Calle Polvorosa
San Clemente, California 92673

December 24, 2025

BFSA Environmental Services
A Perennial Company

Archaeological Database Information

Authors:	Kathleen A. Krogh, M.A., RPA and Tracy A. Stropes, M.A., RPA
Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 484-0915
Client/Project Proponent:	RE Consulting 5742 Calle Polvorosa San Clemente, California 92673
Report Date:	December 24, 2025
Report Title:	Cultural Resources Study for the 9822 Russell Avenue Project, City of Garden Grove, Orange County, California (APN 098-081-19)
Type of Study:	Phase I Cultural Resources Survey
New Site(s):	None
Updated Site(s):	P-30-177530
USGS Quadrangle:	*Anaheim, California* (7.5-minute)
Acreage:	Approximately 1.8 acres
Key Words:	Archaeological survey; historic Site P-30-177530 relocated; Site P-30-177530 not CRHR-eligible; no archaeological resources identified; no additional studies recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request from the project applicant, BFSA Environmental Services, a Perennial Company (BFSA), conducted a cultural resources study for the proposed 9822 Russell Avenue Project (Assessor's Parcel Numbers [APN] 098-081-19). The approximately 1.8-acre project is located at 9822 Russell Avenue in the city of Garden Grove, Orange County, California. The project is situated within Township 5 South, Range 10 West of the San Bernardino Baseline and Meridian, as shown on the United States Geological Survey (USGS) *Anaheim, California* (7.5-minute) topographic quadrangle map. The project consists of a proposal to demolish and replace the existing 9822 Russell Avenue church and preschool buildings and the surrounding parking lot with a multi-family residential development, which includes associated parking and infrastructure.

The purpose of this investigation was to locate and record any cultural resources present within the project and subsequently to evaluate any resources as part of the City of Garden Grove's environmental review process, conducted in compliance with the California Environmental Quality Act (CEQA). The subject property contains three church and preschool buildings located at 9822 Russell Avenue.

The archaeological investigation of the project also included a review of an archaeological records search performed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project or in the immediate vicinity. The SCCIC archaeological records search identified 14 historic resources within one mile of the project, one of which is located within the subject property (P-30-177530). Site P-30-177530 was recorded as the 9822 Russell Avenue church buildings. In 2014, Crawford evaluated the buildings as not eligible for the National Register of Historic Places (NRHP) (Crawford 2014). However, Site P-30-177530 was not evaluated under California Register of Historical Resources (CRHR) eligibility criteria. The records search also identified 28 previous studies conducted within one mile of the proposed project, three of which overlap the subject property (Padon et al. 1995; Bonner and Crawford 2013, 2014). The Bonner and Crawford (2013, 2014) studies directly addressed the property, resulting in the recordation and the evaluation of Site P-30-177530 for the NRHP. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC), which was returned with negative results.

The archaeological survey was an intensive reconnaissance consisting of a series of survey transects across the project. Ground visibility was limited due to the existing 9822 Russell Avenue buildings and parking lot. During the survey, Site P-30-177530, which consists of the existing 9822 Russell Avenue church and preschool buildings, was relocated within the northwest portion of the project. Site P-30-177530 was evaluated as not eligible for the CRHR. No archaeological resources or additional historic resources were identified within the project limits as a result of the survey.

Based upon the results of the current survey and a review of historic data, no potential impacts to significant buried cultural resources are anticipated with the proposed development of

the project. Furthermore, the records search results indicated that no prehistoric resources have ever been identified within the vicinity of the project. Therefore, due to the disturbed nature of the property as a result of previous development, clearing, and grading, coupled with the records search results, there is little to no potential for any significant archaeological deposits to be present within the project boundaries. No further cultural resources study or mitigation measures are recommended. A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the BFSA archaeological laboratory in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

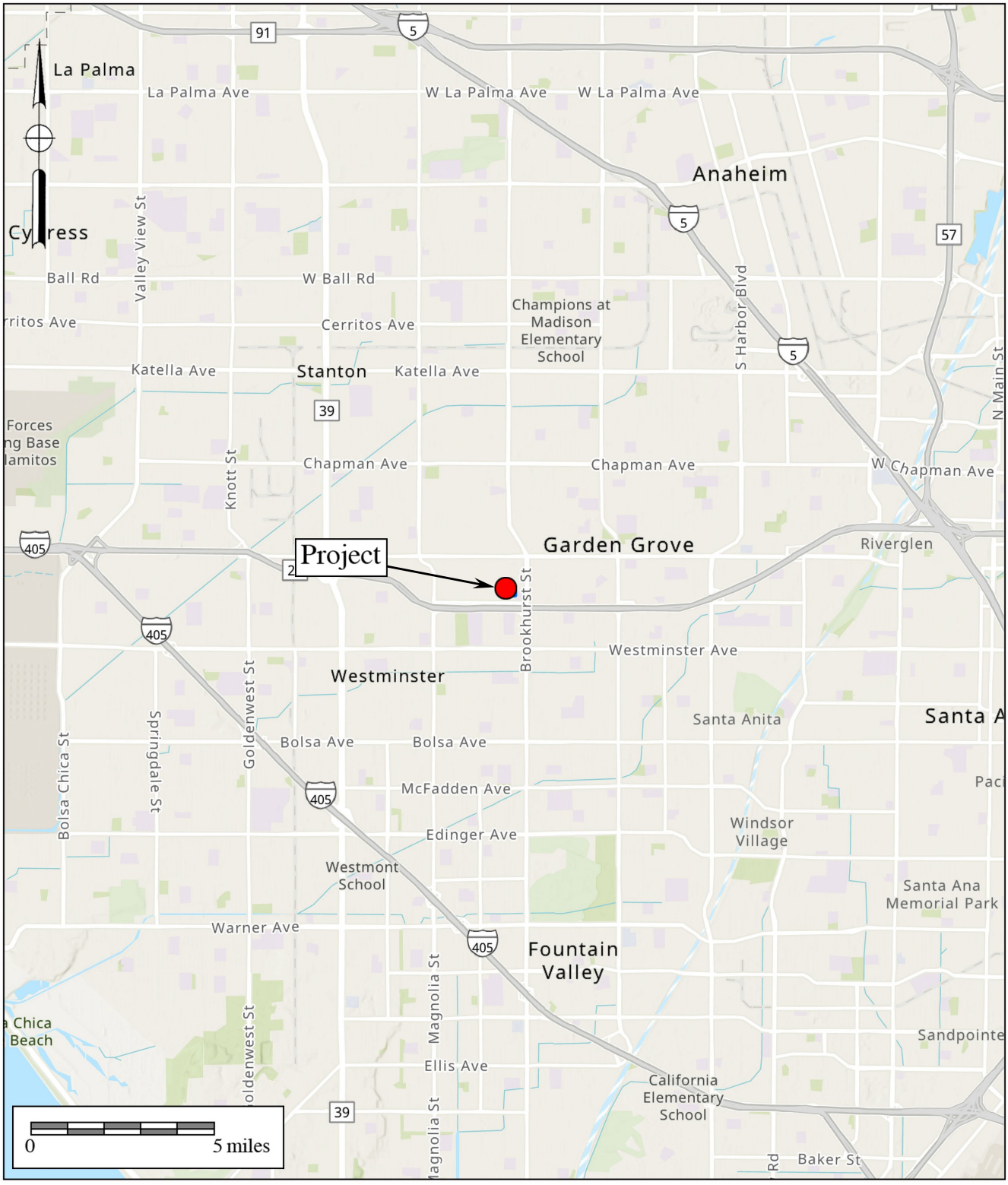
The cultural resources study program for the 9822 Russell Avenue Project was conducted in compliance with CEQA and City of Garden Grove environmental requirements. The approximately 1.8-acre project (APN 098-081-19) is located at 9822 Russell Avenue in the city of Garden Grove, Orange County, California (Figure 1.1–1). The project is situated within Township 5 South, Range 10 West of the San Bernardino Baseline and Meridian, as shown on the USGS *Anaheim, California* topographic quadrangle map (Figure 1.1–2). The project proposes to demolish and replace the existing 9822 Russell Avenue church and preschool buildings and the surrounding parking lot with a multi-family residential development, including associated parking and infrastructure (Figure 1.1–3).

The decision to request the current investigation was based upon the cultural resource sensitivity of the locality, as suggested by known site density and predictive modeling. Sensitivity for prehistoric resources in a given area is usually indicated by known settlement patterns, which, in Orange County, were focused around freshwater resources and a food supply, and sensitivity for historic resources in the area tends to be associated with the early twentieth-century agricultural or residential development of the region.

1.2 Environmental Setting

The 9822 Russell Avenue Project is generally situated within the Peninsular Ranges Geologic Province of southern California. The range, which lies in a northwest-to-southeast trend through the county, extends some 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The current path of the Santa Ana River lies approximately three miles southeast of the project. The Pacific Ocean is approximately seven miles southwest of the subject property, and the Santa Ana Mountains are located to the southeast. Geologically, the project is mapped as Holocene and late Pleistocene deposits (Morton and Miller 2006; Langenheim et al. 2006). Additionally, the property is relatively flat with an average elevation of approximately 72 feet above mean sea level. Specific soils within the property consist of Metz loamy sand (NRCS 2019).

The entire property is currently developed with three church and preschool buildings (9822 Russell Avenue) and a surrounding parking lot. The 9822 Russell Avenue buildings are located within the northwest corner of the property and were originally constructed between 1953 and 1963. A southeast addition to one of the buildings was constructed between 1963 and 1973. Further, additional modifications have occurred to the buildings since their initial construction. The remainder of the property consists of an asphalt parking lot. Vegetation within the property includes commercial landscaping surrounding the 9822 Russell Avenue buildings. Vegetation during prehistoric times most likely consisted of coastal/inland sage/scrub and chaparral in the nearby foothills.



BFSA Environmental Services
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Figure 1.1–1

General Location Map

The 9822 Russell Avenue Project

ESRI World Topographic Map

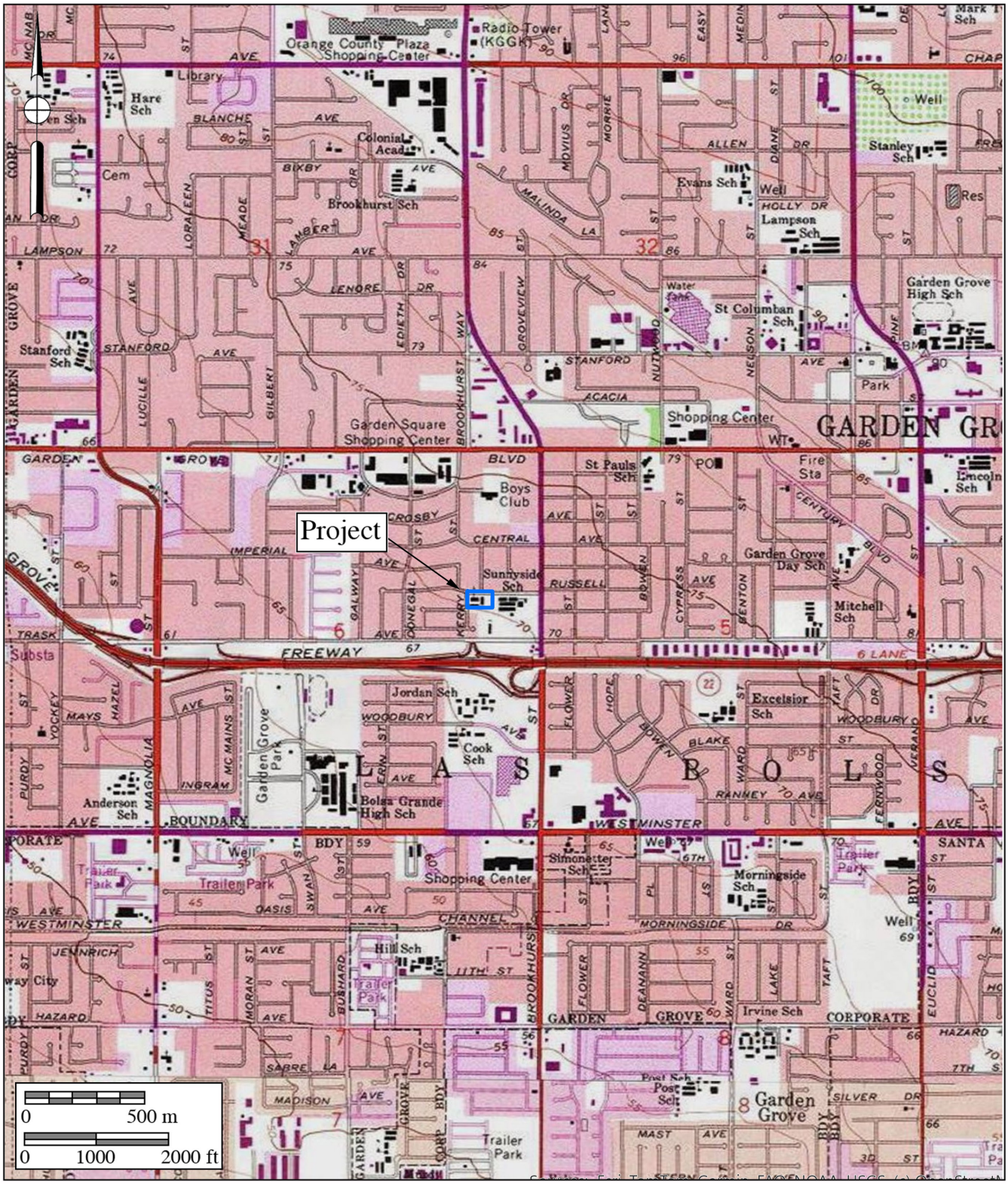

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Figure 1.1–2
Project Location Map

The 9822 Russell Avenue Project

USGS *Anaheim* and *Newport Beach* Quadrangles (7.5-minute series)

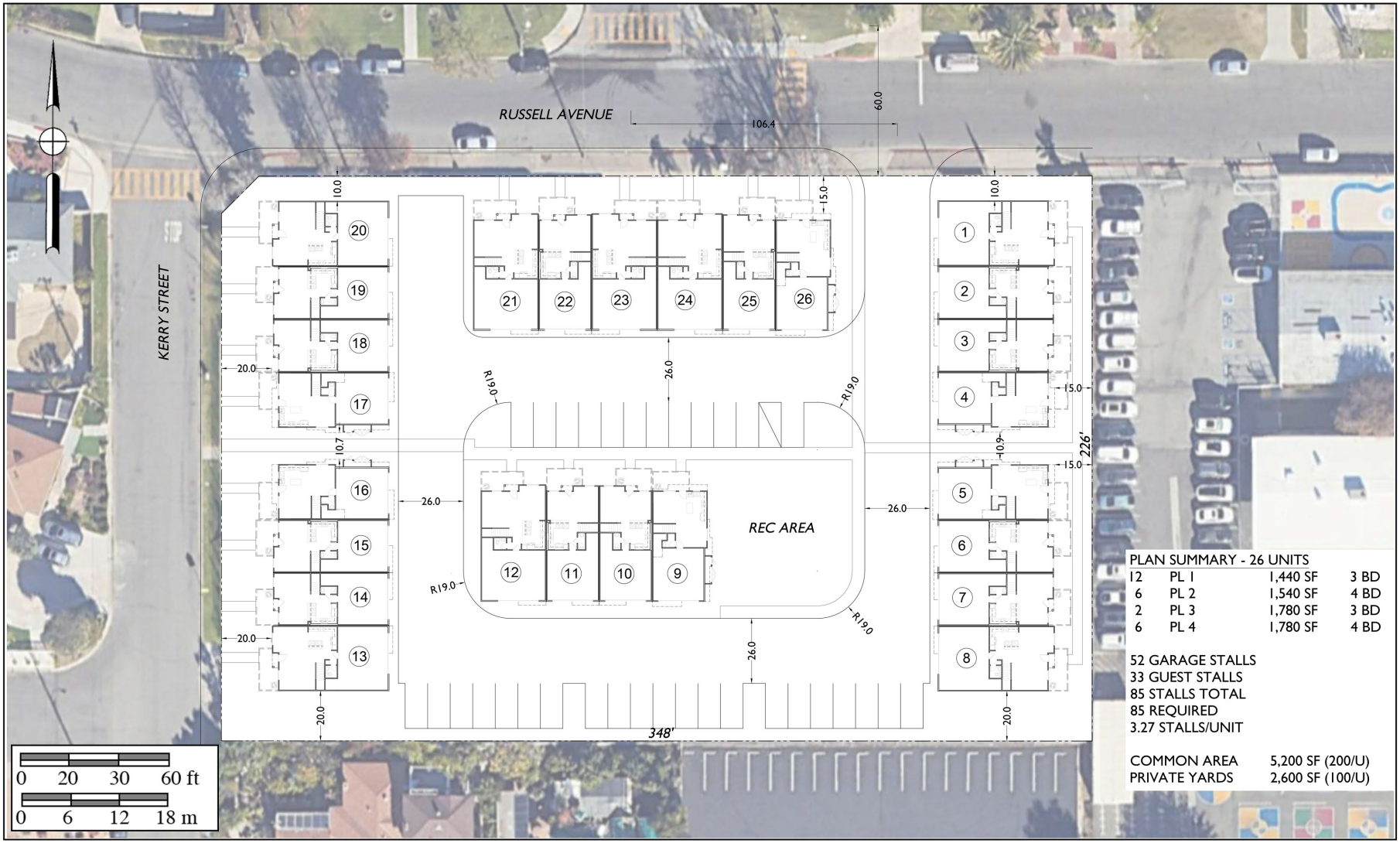

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Figure 1.1–3
Project Development Map
The 9822 Russell Avenue Project

1.3 Cultural Setting

1.3.1 Prehistoric Period

Archaeological investigations in southern California have documented a diverse and rich record of human occupation spanning the past 10,000 years. In northern San Diego, Orange, and Riverside counties, most researchers organize prehistory into the Paleo Indian, Archaic, and Late Prehistoric Periods and history into the Mission, Rancho, and American Settlement periods. The San Dieguito Complex, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex are the archaeological manifestations that have been used to describe the Archaic and Late Prehistoric periods in the region.

Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

The San Dieguito Complex/Paleo Indian Period is associated with the terminus of the late Pleistocene (11,500 to 9,000 years before the present [YBP]). The term "San Dieguito Complex" is a cultural distinction used to describe a group of people that occupied sites in the region between 11,500 and 7,000 YBP. Initially believed to have been big game hunters, the San Dieguito are better typified as wide-ranging hunter/gatherers. The earliest evidence of San Dieguito Complex sites is known from San Diego County, the Colorado Desert, and further north along the California coast. These people abandoned the drying inland lakes of the present California desert and arrived in San Diego County circa 9,000 YBP, as documented at the Harris (SDI-149; Warren 1966), Rancho Park North (SDI-4392; Kaldenberg 1982), and Agua Hedionda (SDI-210/UCLJ-M-15 and SDI-10,965/SDM-W-131 [Moriarty 1967; Gallegos and Carrico 1984; Gallegos 1991]) sites.

A San Dieguito component appears to have been present in the lower strata, "Malaga Cove I," at the Malaga Cove Site (LAN-138) in the city of Palos Verdes Estates in Los Angeles County (Walker 1951). Other Paleo Indian Period sites containing San Dieguito components in the coastal region of southern California have been identified at the Irvine (ORA-64 [Drover et al. 1983; Macko 1998]), Ballona Creek, Angeles Mesa, and Rancho La Brea (Wallace 1955: 215–218) sites.

Diagnostic San Dieguito artifacts include finely crafted scraper planes, choppers, scrapers, crescentics, elongated bifacial knives, and intricate leaf-shaped points (Rogers 1939; Warren 1967). This tool assemblage resembles those of the Western Lithic Co-Tradition (Davis et al. 1969) and the Western Pluvial Lakes Tradition (Bedwell 1970; Moratto 1984). Typical San Dieguito sites lack ground stone tools. The San Dieguito Complex is the least understood of the cultures that occupied the southern California region and debate continues as to whether the San Dieguito sites are actually different activity areas of the early Encinitas Tradition peoples (Bull 1987; Gallegos 1987), or whether the San Dieguito Complex peoples had a separate origin and culture from the Encinitas Tradition (Hayden 1987; Moriarty 1987; Smith 1987). According to this second scenario, the San Dieguito Complex peoples may have been assimilated into the dominant Encinitas Tradition culture (Kaldenberg 1982; Moriarty 1967). A third possibility is that the San Dieguito Complex gave rise to the Encinitas Tradition (Koerper et al. 1991).

Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

The Archaic Period begins with the onset of the Holocene circa 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America (Antevs 1953; Van Devender and Spaulding 1979). In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and rising sea levels. The warming trend and rising sea levels generally continued until the late Holocene. Archaeological research indicates that southern California was occupied between 9,000 and 1,300 YBP by a population(s) that utilized a wide range of both marine and terrestrial resources. A number of different archaeological manifestations based upon geographical setting, tool kit, and/or chronology are recognized during the Archaic Period, including the Milling Stone Horizon and San Dieguito, La Jolla, Encinitas, and Pauma complexes. Archaic sites generally contain milling tools, especially manos and metates, cobble and flake tools, dart projectile points and the concomitant use of the atlatl, crescents, shell, fish bone, and animal bone representing large and small game. Additionally, Archaic groups buried their dead as flexed inhumations, a religious and cultural practice that is distinct from the succeeding Late Prehistoric groups.

The La Jolla Complex is regionally associated with the Encinitas Tradition (Warren 1968) and shared cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex, which focused upon coastal resources and development of deeply stratified shell middens primarily located around bays and lagoons, appeared in the southern California coastal areas. Some of the older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of more than 7,000 years in this region, beginning more than 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing, which suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

By 5,000 YBP, an inland expression of the La Jolla Complex, which exhibits influences from the Campbell Tradition from the north, is evident in the archaeological record. These inland Milling Stone Horizon sites have been termed “Pauma Complex” (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have a greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary

lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples.

Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

The Late Prehistoric Period, sometimes referred to as San Luis Rey I and II, began approximately 1,300 YBP. Cremation, ceramics, the bow and arrow, small triangular points, the use of Obsidian Butte obsidian, and the reliance upon the acorn as a main food staple are the defining characteristics of the Late Prehistoric Period (Chartkoff and Chartkoff 1984; Gallegos 2002; Moratto 1984). These characteristics are thought to represent the movement of Shoshonean-speaking groups into northern San Diego, Orange, Riverside, and Los Angeles counties. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the cremation of the dead, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, milling technologies such as the bedrock mortar for use in acorn processing.

Protohistoric Period (Late Holocene: 1790 to Present)

This period begins with the Hispanic intrusion into southern California and the founding of the Mission San Juan Capistrano near what is currently the Lake Forest area in 1776. Ethnohistorical and ethnographic evidence indicates that three Shoshonean-speaking groups that occupied the southern and eastern portions of Orange County were the Luiseño, Gabrielino, and Acjachemem (Juaneño), each of which is culturally similar but possesses slight dialectic differences. Along the coast, the groups made use of the available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for these groups. The elaborate kinship and clan systems between these groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian, resources from the eastern deserts, and steatite from the Channel Islands. All three groups also shared a distinct world view that stemmed from the use of the hallucinogen datura and an elaborate religion that included ritualized sand paintings of the sacred being Chingichngish (Bean and Shipek 1978; Kroeber 1976). Some notable differences, however, can be seen in the material culture between the three groups. For example, the Gabrielino used containers made from steatite, a soapstone material from the Santa Catalina Islands, instead of pottery, which was the preferred material for the Juaneño and the Luiseño (Kroeber 1976).

The Luiseño, Gabrielino, and Juaneño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were composed of areas that were both publicly and privately, or family, owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were

utilized, particularly from January to March, when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. For the remainder of the year, most would remain at the village sites, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The Aliso Creek watershed has been reported to be the ethnohistoric boundary between the Luiseño, Gabrielino, and Juaneño. The Gabrielino occupied territory northwest of Aliso Creek, the Juaneño occupied territory to the south, and the Luiseño occupied territory to the southeast and east. However, there is evidence indicating that the Juaneño territory actually extended farther north, possibly past the Santa Ana River into modern-day Huntington Beach (Boscana 1978 [1933]).

1.3.2 Historic Period

The historic period began on July 16, 1769, when the first Spanish exploring party commanded by Gaspar de Portolá (with Father Junípero Serra in charge of religious conversion of the native populations) arrived in San Diego to secure California for the Spanish (Palou 1926). The natural attraction of the harbor at San Diego and the establishment of a military presence in the area solidified the importance of San Diego to the Spanish colonization of the region and the growth of the civilian population. Missions were constructed from San Diego to as far north as San Francisco. The mission locations were based upon a number of important territorial, military, and religious considerations. Grants of land were made to those who applied, but many tracts reverted back to the government due to lack of use. As an extension of territorial control by the Spanish, each mission was placed so as to command as much territory and as large a population as possible.

Mission San Juan Capistrano, located near the present Lake Forest area, exerted much influence over the Acjachemem (Juaneño), who either adapted to mission life, rebelled and ran away, or died from European diseases. While primary access to California during the Spanish Period was by sea, the route of El Camino Real served as the land route for transportation, commercial, and military activities. This route was considered to be the most direct path between the missions (Rolle 1969). As increasing numbers of Spanish and Mexican people, and later Americans during the Gold Rush, settled in the area, the Native populations diminished as they were displaced or decimated by disease (Carrico and Taylor 1983).

By 1821, Mexico had gained independence from Spain, and the northern territories were subject to political repercussions. By 1834, all of the mission lands had been removed from the control of the Franciscan Order under the Acts of Secularization. Without proper maintenance, the missions quickly began to disintegrate, and after 1836, missionaries ceased to make regular visits inland to minister to the Native peoples (Engelhardt 1921). Large tracts of land continued to be granted to those who applied or had gained favor with the Mexican government. Grants of land were also made to settle government debts.

The Rancho Period represents the time between 1821 and 1848. By 1821, Mexico had gained independence from Spain, and the northern territories were subject to political

repercussions. By 1834, all of the mission lands had been removed from the control of the Franciscan Order under the Acts of Secularization (Engelhardt 1921). Numerous Mexican land tracts, or rancheros, were established throughout coastal and interior California.

California was invaded by United States troops during the Mexican-American War of 1846 to 1848. The acquisition of strategic Pacific ports and California land was one of the principal objectives of the war (Price 1967). At the time, the inhabitants of California were practically defenseless, and they quickly surrendered to the United States Navy in July 1847 (Bancroft 1886).

In 1848, the Treaty of Guadalupe Hidalgo granted sovereignty over Alta California, New Mexico, and Arizona to the United States, which began the American Settlement Period. The new colonial order soon seized power in California with disastrous results for the native people (Castillo 1978). European control over Alta California had been concentrated along the coast, but with the great influx of American colonists seeking land and mineral resources, the inland became more populated and native populations were displaced from more of their lands. Conflicts between the Native Americans and the intruding white colonists led to the establishment of reservations for some villages by executive order.

The cattle ranchers of the "counties" of southern California prospered during the cattle boom of the early 1850s. However, raising cattle soon declined, contributing to the expansion of agriculture. The completion of the transcontinental railroad in 1869 encouraged developers, land speculators, and colonists to invest and live in southern California. Orange County's economy changed from stock raising to farming, and growing grain or citrus crops replaced the raising of cattle in many of the county's inland valleys (Blick 1976; Elliott 1965).

General History of the Garden Grove Area

In 1784, Manuel Nieto received the Spanish land grant Rancho Los Nietos, which encompassed much of modern-day Los Angeles and Orange counties (Britannica Editors 2025). After the division of Rancho Los Nietos following Mexican independence from Spain, portions of Garden Grove became a part of former ranchos Los Alamitos, Las Bolsas, and Los Coyotes (Britannica Editors 2025).

Following the Mexican-American War and the inclusion of the State of California in the union, Southern California began to be divided and settled by Americans. In 1874, Garden Grove's founding father, Alonzo Cook, acquired 160 acres in the region, eventually donating land located north of Garden Grove Boulevard and Main Street to be used as the location for the community's first post office and schoolhouse (City of Garden Grove n.d.). By 1905, the Pacific Electric Railroad provided rail access to the community, introducing even more individuals to the region (City of Garden Grove n.d.).

During the late nineteenth and early twentieth centuries, agriculture dominated as the community's primary economy (City of Garden Grove n.d.). However, after World War II, the rural character of the area changed as the population increased (City of Garden Grove n.d.). In 1956, Garden Grove was incorporated as a city, and by the following year, it became the third largest city in Orange County (Brigandi 2019). Since 1958, the City of Garden Grove has annually

hosted the Strawberry Festival on Memorial Day weekend (City of Garden Grove n.d.). In recent years, the population of Garden Grove has grown to over 170,000 people and has become a large suburban development (City of Garden Grove n.d.).

1.4 Results of the Archaeological Records Search

BFSA conducted an archaeological records search for the project and the surrounding area within a one-mile radius at the SCCIC at CSU Fullerton. The archaeological records search results identified 14 resources, all historic, located within a one-mile radius of the project, one of which was recorded within the project (P-30-177530). Site P-30-177530 consists of the current 9822 Russell Avenue church and preschool buildings located within the northwest portion of the subject property. The site record form indicates that the three 9822 Russell Avenue buildings were constructed circa 1966 (Crawford 2014). At the time the buildings were recorded, the buildings were occupied by the Cross Country Vietnamese Christian Church (Crawford 2014). At present, the 9822 Russell Avenue buildings function as a church and preschool. The 9822 Russell Avenue buildings were evaluated as not eligible for the NRHP; however, Crawford (2014) notes that the buildings were not assessed under CRHR eligibility criteria. The remaining historic resources recorded within the search radius include six trash scatters, four resources associated with the built environment, a railway berm with an associated trash deposit, a concrete foundation with an associated trash scatter, and concrete foundations with an associated trash scatter and deposit (Table 1.4–1). The complete records search results can be found in Appendix D.

Table 1.4–1
Cultural Resources Recorded Within One Mile of the Project

Site(s)	Site Type
P-30-001260	Historic railway berm and possibly associated trash deposit
P-30-001261, P-30-001263, P-30-001264, P-30-001265, P-30-001266, P-30-001269	Historic trash scatter
P-30-001262	Historic trash scatter and concrete foundation
P-30-001267	Historic trash scatter, trash deposit, and concrete foundations
P-30-001307	Historic school
P-30-157399	Historic single-family property
P-30-176774	Historic commercial building
P-30-177530*	Historic church
P-30-177538	Historic education building

**Recorded within the project*

The SCCIC records search also identified 28 previous studies conducted within one mile of the proposed project, three of which overlap the subject property (Padon et al. 1995; Bonner

and Crawford 2013, 2014). The Padon et al. (1995) study consists of a large-scale overview for the City of Garden Grove that does not directly address the subject property or Site P-30-177530. The Bonner and Crawford (2013, 2014) studies consisted of a cultural resources assessment and a historic architectural assessment of the 9822 Russell Avenue property and church buildings. Bonner and Crawford (2013, 2014) identified and recorded the 9822 Russell Avenue buildings within the subject property as Site P-30-177530 and determined that the property was not eligible for the NRHP. However, Bonner and Crawford (2013, 2014) did not evaluate the buildings under CRHR eligibility criteria.

BFSA also reviewed the following sources to help facilitate a better understanding of the historic use of the property:

- The National Register of Historic Places index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The Bureau of Land Management General Land Office records
- The OHP, Built Environment Resource Directory
- Historic USGS topographic maps
- Historic aerial photographs (1938 to 2025)

These sources demonstrated that the property has been impacted by past agricultural use and the present development. The 1938 and 1947 historic aerial photographs illustrate that the entire property consisted of cultivated fields during this period. Between 1953 and 1960, two buildings were constructed within the northeast portion of the property. These buildings consist of the 9822 Russell Avenue church buildings that were recorded by Crawford (2014) as Site P-30-177530. By 1963, a third building was constructed within the northwest corner of the property to form a total of three buildings associated with the address 9822 Russell Avenue. The three buildings originally formed a U-shaped complex comprised of a separate northern, eastern, and southern wing. The remainder of the subject property consisted of a parking lot. Between 1963 and 1972, a southeast addition was constructed along the south façade of the easternmost building. Subsequent aerial photographs highlight that additional modifications occurred to the buildings over the next several decades. For example, a breezeway was constructed to connect the east façade of the northernmost building and the west façade of the easternmost building between 1972 and 1987. Further, in 2003, additional modifications occurred to the northern and eastern buildings. At present, the 9822 Russell Avenue buildings and the parking lot remain extant in the northwest portion of the subject property, and the signs outside the building indicate that the building currently operates as a church and preschool.

BFSA also requested a SLF search from the NAHC. The SLF search results were negative for any recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity. All correspondence is provided in Appendix E.

1.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Orange County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA and City of Garden Grove environmental requirements provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term "historical resource" includes the following:

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (Public Resources Code SS5024.1, Title 14 CCR. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Public Resources Code SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    b) Is associated with the lives of persons important in our past;
    c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the California Register of Historical Resources , not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2) The significance of an historical resource is materially impaired when a project:

    a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historical Resources; or
    b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
    c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

1. When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
2. If a lead agency determines that the archaeological site is an historical resource, it shall

refer to the provisions of Section 21084.1 of the Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

3. If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21803.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code 21083.2(c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4. If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Sections 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
2) The requirements of CEQA and the Coastal Act.

2.0 RESEARCH DESIGN

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is northwest Orange County. The scope of work for the cultural resources study conducted for the 9822 Russell Avenue Project included the survey of an approximately 1.8-acre area. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal is not necessarily to answer wide-reaching theories regarding the development of early southern California but to investigate the role and importance of identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions take into account the size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for valley environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify cultural resources occurring within the project;
2) To determine, if possible, site type and function, context of the resource(s), and

chronological placement of each cultural resource identified;

3) To place each cultural resource identified within a regional perspective; and
4) To provide recommendations for the treatment of each cultural resources identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project consisted of an institutional records search, an intensive cultural resources survey of the entire approximately 1.8-acre project, and the preparation of this technical report. This study was conducted in conformance with City of Garden Grove environmental requirements, Section 21083.2 of the California Public Resources Code, and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately five to 10 meters apart, when not obstructed by the present development. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

BFSA archaeologist Mary Chitjian conducted the archaeological survey for the 9822 Russell Avenue Project on December 11, 2025, under the direction of Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological survey of the property was an intensive reconnaissance consisting of a series of survey transects across the subject property. Ground visibility within the survey area was limited due to the existing church and preschool buildings (9822 Russell Avenue) and hardscape (Plates 3.2–1 to 3.2–4). Nevertheless, landscaped areas found within the property were carefully inspected for any archaeological materials. Vegetation within the property primarily consisted of landscaped trees and plants surrounding the 9822 Russell Avenue buildings and a grass lawn within the northwest corner of the property.

No prehistoric archaeological resources were identified within the project limits as a result of the archaeological survey. However, Site P-30-177530, which consists of the 9822 Russell Avenue buildings, was relocated within the northwest portion of the property (Figure 3.2-1). At present, the 9822 Russell Avenue buildings function as a church (Iglesia de Cristo de Restauracion) and a preschool (Orangefield Child Development Center). No additional historic resources were identified during the survey. Further discussion of Site P-30-177530 is provided in Section 3.2.1.



Plate 3.2–1: Overview of the 9822 Russell Avenue buildings from the northwest corner of the project, facing southeast.



Plate 3.2–2: Overview of the 9822 Russell Avenue buildings from the southwest corner of the project, facing northeast.



Plate 3.2–3: Overview of the 9822 Russell Avenue buildings from the southeast corner of the project, facing northwest.



Plate 3.2–4: Overview of the 9822 Russell Avenue buildings from the northeast corner of the project, facing southwest.

Figure 3.2–1
Cultural Resource Location Map

(Deleted for Public Review; Bound Separately)

3.2.1 Site P-30-177530

Site P-30-177530 was identified by Environmental Assessment Specialists, Inc. (EAS) in 2014 while conducting a cultural resources survey of the property (Bonner and Crawford 2013, 2014). Site P-30-177530 consists of the historic-age 9822 Russell Avenue church buildings that currently function as the Iglesia de Cristo de Restauracion church and the Orangefield Child Development Center preschool. Following the identification of the 9822 Russell Avenue buildings, EAS conducted a historic architectural assessment for the property and determined that the 9822 Russell Avenue buildings were not eligible for the NRHP (Bonner and Crawford 2014). Crawford (2014) noted that the property was not associated with any historic events or significant persons and does not reflect a notable example of a particular architectural style or the workmanship of a specific architect or craftsman. At the time, the resource was not evaluated for eligibility under CRHR criteria (Crawford 2014).

Historic aerial photographs indicate that the 9822 Russell Avenue buildings were constructed between 1953 and 1963. The three buildings originally formed a U-shaped church building complex comprised of separate northern, eastern, and southern wings. A southeast addition was constructed along the south façade of the easternmost building between 1963 and 1972. Additionally, between 1972 and 1987, a breezeway was constructed connecting the east façade of the northernmost building to the west façade of the easternmost building. Building permit records provided in the Environmental Site Assessment report also indicate that several additional modifications have occurred to the buildings (Vaughn 2025; Appendix B). This includes the remodeling of one of the buildings into an elementary school facility in 1981 and the construction of a new roof in 1989 (Partner Engineering and Science, Inc. 2025). Further, in 2003, it is evident that additional alterations to the roofs of the northern and eastern buildings occurred.

A review of directory information of occupants of the property and a historic newspaper search of the 9822 Russell Avenue property did not identify any information linking the property to significant individuals or events. During the period in which the buildings were constructed, the Church of Christ occupied the buildings (*The Daily News* 1959). However, over the next several decades, several different churches and preschools have occupied the buildings (Partner Engineering and Science, Inc. 2025). At the time the property was recorded, the buildings were occupied by the Cross Country Vietnamese Christian Church (Crawford 2014). At present, the buildings are occupied by the Iglesia de Cristo de Restauracion church and the Orangefield Child Development Center preschool.

None of the structures associated with Site P-30-177530 embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual, or possess high artistic values. Further, additions and modifications to the 9822 Russell Avenue buildings have reduced the buildings' integrity of design and materials. As such, the buildings associated with Site P-30-177530 are not significant or eligible for the CRHR.

4.0 RECOMMENDATIONS

The cultural resources study for the 9822 Russell Avenue Project, which was completed in accordance with City of Garden Grove environmental requirements and CEQA significance evaluation criteria, identified one previously recorded historic resource (Site P-30-177530). Site P-30-177530 consists of the 9822 Russell Avenue church and preschool buildings located within the northwest portion of the property. In 2014, Site P-30-177530 was evaluated as ineligible for the NRHP. Likewise, the present study also determined that the resource is not eligible for the CRHR and is therefore not considered a Historical Resource under CEQA criteria.

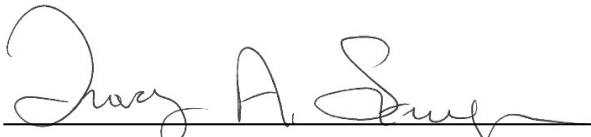
As Site P-30-177530 within the project is evaluated as not CRHR-eligible, potential project-related impacts to the remnants of the resource within the property are not considered significant. Therefore, no site-specific mitigation measures are recommended. Further, based upon the results of the current survey and a review of historic data, no potential impacts to significant buried cultural resources are anticipated with the proposed development of the project. The records search results indicated that no prehistoric resources have ever been identified within the vicinity of the project. Additionally, neither the previously conducted archaeological survey of the property (Bonner and Crawford 2013) nor BFSA identified any archaeological resources within the property. Although the present development hindered ground visibility during the survey, the disturbed nature of the property as a result of previous development, clearing, and grading, coupled with the records search results, indicates that there is little to no potential for any significant archaeological deposits to be present within the project boundaries. Therefore, no further cultural resources study or mitigation measures are recommended. A copy of this report will be submitted to the SCCIC at CSU Fullerton.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The Phase I cultural resources study for the 9822 Russell Avenue Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological fieldwork was conducted by BFSA archaeologist Mary Chitjian, and the report text was prepared by Kathleen Krogh and Tracy Stropes. Report graphics were also provided by Kathleen Krogh. Technical editing and report production were conducted by Danielle Del Castillo. The archaeological records search was conducted by Kathleen Krogh at the SCCIC at CSU Fullerton.

5.1 Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria as defined in Section 15064.5.



December 24, 2025

Tracy A. Stropes, M.A., RPA — Date
Principal Investigator

6.0 REFERENCES CITED

Antevs, Ernst
1953 The Postpluvial or the Neothermal. Berkeley: *University of California Archaeological Survey Reports* 22:9–23.

Bancroft, Hubert Howe
1886 *History of California* (Vol. V); 1846-1848. The History Company, San Francisco, California.

Bean, Lowell John and Florence C. Shipek
1978 Luiseño. In *Handbook of North American Indians*, Volume 8: California, edited by R.F. Heizer. Smithsonian Institution, Washington, D.C.

Bedwell, S. F.
1970 *Prehistory and Environment of the Pluvial Fork Rock Lake Area of South Central Oregon*. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Oregon, Eugene.

Blick, James D.
1976 Agriculture in San Diego County. In *San Diego – An Introduction to the* Area, edited by Philip J. Pryde, pp. 121–135. Kendall/Hunt Publishing Company, Dubuque, Iowa.

Bonner, Wayne H. and Kathleen A. Crawford
2013 Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02354A (SM055 Cross Country Christ) 9822 Russell Avenue, Garden Grove, Orange County, California. Environmental Assessment Specialists, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2014 Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate LA02354A (SM055 Cross Country Christ) 9822 Russell Avenue, Garden Grove, Orange County, California. Environmental Assessment Specialists, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Boscana, Geronimo
1978 *Chinigchinich: A Revised and Annotated Version of Alfred Robinson's Translation of Father Geronimo Boscana's Historical Account of the Beliefs, Usages, Customs, and Extravagancies of the Indians of this Mission San Juan Capistrano Called the Acagchemem Tribe (1846).* Edited by P.T. Hanna. Originally published in 1933, Fine Arts Press, Santa Ana, California. Reprinted by Malki Museum Press, Banning, California.

Brigandi, Phil
2019 *The Incorporation of Garden Grove*. OC Historyland. Electronic document, https://www.ochistoryland.com/gginc, accessed December 17, 2025.

Britannica Editors
2025 *Garden Grove*. Encyclopedia Brittanica. Electronic document, https://www.britannica.com/place/Garden-Grove, accessed December 17, 2025.

Bull, Charles S.
1987 A New Proposal: Some Suggestions for San Diego Prehistory. In *San Dieguito-La Jolla: Chronology and Controversy*, San Diego County Archaeological Society Research Paper (1), edited by Dennis R. Gallegos.

Carrico, Richard L. and Clifford V. F. Taylor
1983 Excavation of a Portion of Ystagua: A Coastal Valley Ipai Settlement. On file at the City of San Diego Planning Department, Environmental Quality Division, San Diego, California.

Castillo, Edward D.
1978 The Impact of Euro-American Exploration and Settlement. In *Handbook of North American Indians,* Vol 8, edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C.

Chartkoff, Joseph L. and Kerry Kona Chartkoff
1984 *The Archaeology of California*. Stanford University Press, Stanford, California.

City of Garden Grove
N.d. *History*. Electronic document, https://ggcity.org/history, accessed December 17, 2025.

Crawford, Kathleen A.
2014 Site P-30-177530. Site record form on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Davis, E.L., C.W. Brott, and D.L. Weide
1969 The Western Lithic Co-Tradition. *San Diego Museum Papers* (6). San Diego Museum of Man, San Diego, California.

Drover, Christopher E., Henry C. Koerper, and Paul E. Langenwalter II
1983 Early Holocene Human Adaptation on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport Bay, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 19(3&4):1–84.

Elliott, Wallace W.
1965 *History of San Bernardino and San Diego Counties with Illustrations.* Riverside Museum Press, Riverside, California. Originally published 1883, W.W. Elliott, San Francisco, California.

Engelhardt, Zephyrin
1921 *San Diego Mission*. James M. Barry Company, San Francisco, California.

Gallegos, Dennis R.
1987 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*. Editor. San Diego County Archaeological Society Research Paper No. 1.

1991 Antiquity and Adaptation at Agua Hedionda, Carlsbad, California. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by Jon M. Erlandson and Roger H. Colten. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.Gallegos, Dennis R. and Richard Carrico.

2002 Southern California in Transition: Late Holocene Occupation of Southern San Diego County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast,* Edited by Jon M. Erlandson and Terry Jones. Institute of Archaeology, University of California, Los Angeles.

Gallegos, Dennis R. and Richard Carrico
1984 Windsong Shores Data Recovery Program for Site W-131, Carlsbad, California. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, California.

Hayden, Julian D.
1987 Notes on the Apparent Course of San Dieguito Development. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Susan M. Hector. San Diego County Archaeological Society Research Paper (1).

Kaldenberg, Russell L.
1982 Rancho Park North: A San Dieguito-La Jolla Shellfish Processing Site in Coastal Southern California. In *Occasional Paper* (6). Imperial Valley College Museum Society, El Centro, California.

Koerper, Henry C., Paul E. Langenwalter II, and Adella B. Schroth
1991 Early Holocene Adaptations and the Transition Phase Problem: Evidence from the Allan O. Kelly Site, Agua Hedionda Lagoon. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by Jon M. Erlandson and Roger H. Colten, pp. 43–62. Cotsen Institute of Archaeology, University of California, Los Angeles.

Koerper, Henry, C., Jonathan E. Ericson, Christopher E. Drover, and Paul E. Langenwalter II
1986 Obsidian Exchange in Prehistoric Orange County. *Pacific Coast Archaeological Society Quarterly* 22 (1):33–69.

Kroeber, A.L.
1976 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78,

1976 Dover Publications Edition, Dover Publications, Inc., New York.

Langenheim, V.E., Tien-Chang Lee, Shawn Biehler, A.C. Jachens, and D.M. Morton,
2006 Isostatic gravity map with geology of the Santa Ana 30' x 60' quadrangle, southern California: U.S. Geological Survey Scientific Investigations Map SIM-2951, scale 1:100,000.

Macko, Michael E.
1988 Neolithic Newport: Executive Summary – Results of Implementing Mitigation Measures Specified in the Operation Plan and Research Design for the Proposed Newporter North Residential Development at ORA-64. Macko, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Meighan, Clement W.
1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2).

Moratto, Michael J.
1984 *California Archaeology.* Academic Press, New York.

Moriarty, James R., III
1967 Transitional Pre-Desert Phase in San Diego County. *Science* 155.

1987 A Separate Origins Theory for Two Early Man Cultures in California. Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos. San Diego County Archaeological Society Research Paper 1:49–60.

Morton, D.M. and Miller, F.K.
2006 Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey Open-File Report 06-1217, scale 1:100,000.

Natural Resources Conservation Service (NRCS)
2019 Web Soil Survey. Electronic document, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed January 5, 2022.

Padon, Beth, Deborah K.B. McLean, Ivan H. Strudwick, and Bradley L. Sturm
1995 Cultural Resource Assessment for the City of Garden Grove. LSA Associates, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Palou, Fray Francisco
1926 *Historical Memoirs of New California*, edited by Herbert Eugene Bolton (4 Volumes). University of California Press, Berkeley.

Price, Glenn W.
1967 *Origins of the War with Mexico*. University of Texas Press, Austin.

Rogers, Malcolm
1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. In *San Diego Museum Papers* (No. 3 – 1989 printing). San Diego Museum of Man, San Diego, California.

Rolle, Andrew F.
1969 *California: A History* (Second Edition). Thomas Y. Crowell Company, New York.

Shumway, George, Carl L. Hubbs, and James R. Moriarty III
1961 Scripps Estate Site, San Diego, California: A La Jollan Site Dated 5,460-7,370 Years Before the Present. *Annals of the New York Academy of Sciences* 93(3).

Smith, Brian F.
1987 The Excavations at Site CA-SDI-9956/W-3376. On file at the County of San Diego Planning and Development Services Department, San Diego, California.

Smith, Brian F. and James R. Moriarty III
1985 An Archaeological Reconnaissance of San Diego Motor Racing Park, Otay Mesa, San Diego. Unpublished report on file at the City of San Diego Environmental Analysis Division, San Diego, California.

State Historic Preservation Office (SHPO)
1995 *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento.

The Daily News
1959 Church of Christ (Christian). 20 March. Garden Grove, California.

True, Delbert L.
1958 An Early Complex in San Diego County, California. *American Antiquity* 23(3).

1980 The Pauma Complex in Northern San Diego County. *Journal of New World Archaeology* 3(4):1–39

Vaughn, Robert
2025 Phase I Environmental Site Assessment, 9822 Russell Avenue, Garden Grove, California 92844. Prepared for Melia Homes Irvine, California. Unpublished report on file at Partner Engineering and Science, Inc.

Van Devender, T.R. and W.G. Spaulding
1979 Development of Vegetation and Climate in the Southwestern United States. *Science* 204:701–710.

Walker, E.F.
1951 Five Prehistoric Sites in Los Angeles County, California. *Publications of the Frederick Webb Hodge Anniversary Publication Fund* 6:1–116.

Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230. Albuquerque.

Warren, Claude N.
1966 *The San Dieguito Type Site: Malcolm J. Rogers' 1938 Excavation on the San Dieguito River. San Diego Museum Papers* (6).

1967 The San Dieguito Complex: A Review and Hypothesis. In *American Antiquity* 32(2):168–185.

1968 Cultural Tradition and Ecological Adaptation on the Southern Coast. In Archaic Prehistory in the Western United States, C.I. Williams, ed. *Eastern New Mexico University Contributions in Anthropology* 1(3):1–14.

Warren, Claude N., D.L. True, and Ardith A. Eudey
1961 Early Gathering Complexes of Western San Diego County: Results and Interpretations of an Archaeological Survey. *Archaeological Survey Annual Report 1960-1961*. University of California, Los Angeles.

APPENDIX A

Resumes of Key Personnel

Tracy A. Stropes, MA, RPA

Vice President of Cultural Resources/ Principal Archaeologist
BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 484-0915 • Email: tstropes@bfsa.perennialenv.com

Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America
Association of Oregon Archaeologists

Experience

Vice President of Cultural Resources/Principal Archaeologist **March 2009–Present**
BFSA Environmental Services, a Perennial Company
Poway, California

Tracy A. Stropes has over 33 years of experience in cultural resource management, with experience in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and technical report editing for numerous projects throughout the western United States. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and CEQA compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single-day site visit to multiple years. Mr. Stropes is a Registered Professional Archaeologist (RPA) and is on the list of archaeological consultants qualified to conduct archaeological investigations in the city and county of San Diego, county of Riverside, State of Oregon, State of Arizona, and on Arizona and California BLM lands. He has served as project archaeologist for hundreds of projects and composed data recovery and preservation programs for sites throughout the western United States for both CEQA- and NEPA-level compliance.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, NRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Selected Reports/Papers

Principal Author

2023 A Section 106 (NHPA) Historic Resource Study for the Oak Creek Canyon Project, City of Wildomar, Riverside County, California. Prepared for Ambient Pacific OCC, LLC.

2023 A Section 106 (NHPA) Historic Resource Study for The Questhaven 76 Project, San Diego County, California (APNs 223-070-007, 223-070-008, and 223-080-046). Prepared for ColRich.

2023 A Phase I Cultural Resources Survey for the Bermuda Dunes Self Storage Project, PAR220053, Riverside County, California. Prepared for FAMA Dairy.

2023 A Cultural Resources Study for 4846 Pacifica Drive, City of San Diego. Prepared for Colliers International.

2023 A Section 106 (NHPA) Historical Resources Study for the Maison's Sierra Project, City of Lancaster, California (Tract No. 27099). Prepared for Ravello Holdings, Inc.

2023 Cultural Resource Survey and Evaluation Program for the Omni Hotel Driving Range/Parking Lot Project, City of Carlsbad, California. Prepared for TRT Holdings, Inc.

2022 A Class III Historic Resources Study for the Anna Avenue Project for Section 106 Compliance, City of San Diego, California. Prepared for John Smith Earthworks, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Grand Avenue Project, Riverside County, California (APN 379-060-005). Prepared for TriPointe Homes

2022 A Section 106 (NHPA) Historic Resources Study for the Boulder Springs North Project, Riverside County, California (TTMs 31243, 31244, and 31245; APNs 321-020-027, -028, -029, and -030 and 321-130-047 and -048). Prepared for KB Home.

2022 A Section 106 (NHPA) Historical Resources Study for the Alpine Rancho Palo Verde Project, San Diego County, California (SPL-219-00698-CJA). Prepared for Schindler Real Estate Services, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Cumming Ranch Project, San Diego County, California (APNs 282-010-08, -30, -34, and -43; 283-011-06; 283-021-01 and -02; 283-022-02; 283-041-25 and -26; and 283-051-01). Prepared for 805 Properties.

2021 A Section 106 (NHPA) Historic Resources Study for the Gatchell Road Project, San Diego County, California (Project No. 100203). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historic Resources Study for Site CA-SDI-11,934/H, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historical Resources Study for the Renaissance Ranch Project, Riverside County, California (SPL-2004-01431-JPL). Prepared for Richland Developers, Inc.

2021 A Phase I Cultural Resource Survey for the Coppel Remodel & Addition Project, La Jolla, California. Prepared for Marengo Morton Architects, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CAB-20-1, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 Cultural Resources Study for 7951 Paseo Del Ocaso, La Jolla, California. Prepared for Aidlin Darling Design.

2021 Cultural Resources Study for the Secret Hills Ranch Project, San Diego County, California (PDS2020-LDGRMJ-30253, APN 520-060-18)

2021 Cultural Resources Study for the UCLA Cedar Suites and Willow Creek Staff Housing Project, Lake Arrowhead, San Bernardino County, California. Prepared for T&B Planning, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CA-SDI-13,884, San Diego County, California (APN 532-520-13). Prepared for the National Park Service.

2021 A Cultural Resources Study for the UCLA Glamping Facility Project, Lake Arrowhead, San Bernardino County, California. Prepared for UCLA Capital Programs.

2021 Archaeological Test Results for 2596 Chalcedony Street, San Diego, California. Prepared for Colliers International.

2021 Cultural Resources Study for the 12247 Elliott Avenue Project, Los Angeles County, California. Prepared for EPD Solutions.

2021 A Section 106 (NHPA) Historic Resources Study for the Roquet Ranch Project, City of Colton, San Bernardino County, California (Tentative Tract Map No. 19983; APNs 116-701-101, -102, 116-702-101, -105, -121, -122, -123, and 116-703-118). Prepared for Sunmeadows, LLC.

2020 A Section 106 (NHPA) Historical Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California (SPL-2020-00176). Prepared for Ocean Breeze Ranch, LLC.

2020 Cultural Resource Monitoring Report for the Encinitas Beach Hotel Project, Encinitas, California. Prepared for JMI Realty, LLC

2020 A Section 106 (NHPA) Historic Resources Study for the Pacifica Estates Project, Fallbrook, San Diego County, California. Prepared for Jose Islas.

2020 A Section 106 (NHPA) Historic Resources Study for the Hidden Valley Ranch Project, SPL-2004-01124, City of Poway, California. Prepared for Barbara Malone.

2020 A Section 106 (NHPA) Historic Resource Study for The Farms in Poway Project, Poway, San Diego County, California (APNs 273-110-070, -080, and -180). Prepared for Kevin McNamara.

2020 A Phase I and II Cultural Resources Assessment for the Hansen Lot Split Project, TPM 37655, Riverside County, California. Prepared for Forest Hansen.

2020 Cultural Resources Study for the West Coast Cold Storage Project, City of Jurupa Valley, County of Riverside (APNs 178-140-010 and -018). Prepared for

2020 Cultural Resources Study for the 340 East Bradley Avenue Project, San Diego County, California (PDS2021-LDGRMJ-30346). Prepared for A N1-Mart, LLC.

2019 Archaeological Monitoring Report for the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California. Prepared for Pardee Homes.

2019 A Cultural Resource Assessment for the Glen Circle Project, Poway, California. Prepared for MDD Homes.

2019 Cultural Resources Survey for the Highlands at Warner Springs and Off-Site Fire Access Road Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2019 A Cultural Resources Assessment for the 8801 East Marginal Way Project, City of Tukwila, King County, Washington. Prepared for CenterPoint Properties Trust.

2019 Cultural Resource Monitoring Report for the 7980 Park Village Road Emergency Repair Project, San Diego, California. Prepared for Orion Construction Corporation.

2019 Mitigation Monitoring and Reporting Program for the Harmony Grove Village, San Diego County, California. Prepared for Lennar – San Diego Division.

2019 Cultural Resource Monitoring Report for the Price-Cohen Residence Project, 2045 Lowry Place, La Jolla, California 92037. Prepared for Lena Price and Thomas Cohen.

2019 A Section 106 (NHPA) Historic Resources Study for the Melrose Drive Widening Project, City of Oceanside, California. Prepared for California West Communities.

2019 A Cultural Resources Study for the Majestic Chino Heritage Project, City of Chino, San Bernardino County, California. Prepared for T&B Planning, Inc.

2019 Cultural Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California. Prepared for Ocean Breeze Ranch, LLC.

2019 Mitigation Monitoring and Reporting Program for the Arthofer Residence Project, 1890 Viking Way, La Jolla, California. Prepared for Frank and Sharon Arthofer.

2019 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, Riverside County, California. Prepared for T&B Planning, Inc.

2018 A Section 106 (NHPA) Historic Resources Study for the Escondido Country Club Project, SPL-2018-00135-CJA, City of Escondido, California. Prepared for New Urban West, Inc.

2018 A Phase I Cultural Resources Study for the North County Plaza Project, Carlsbad, California. Prepared for Planning Systems, Inc.

2018 Cultural Resources Addendum Report for the Ivey Palms Project, Thousand Palms, Riverside, California. Prepared for T&B Planning, Inc.

2017 Cultural Resource Monitoring Report for the Altman Residence Project, 9696 La Jolla Farms Road, La Jolla, California 92037. Prepared for Steve and Lisa Altman.

2017 Cultural Resources Study for the Escondido Country Club Project, City of Escondido, California. Prepared for New Urban West, Inc.

2017 A Class III Archaeological Study for the Tract 28859 Project for Section 106 Compliance. Prepared for Menifee 28859, LLC.

2016 A Section 106 (NHPA) Historic Resources Study for the Lake Ranch Project, TR 36730, Riverside County, California.

2016 Mitigation Monitoring and Reporting Program for the Imperial Beach Bikeway Village Project, 536 13th Street and 535 Florence Street, Imperial Beach, California. Prepared for Bikeway Village, LLC.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California. Prepared for Shea Homes.

2015 A Class III Historic Resource Study for the Miramar Clearwell Improvements Project, San Diego, California. Prepared for Global Environmental Permitting, Inc.

2015 A Class III Historic Resource Study for the College Boulevard Project, Carlsbad, California. Prepared for Bent West, LLC.

2015 A Class III Archaeological Study for the Parkside Project for Section 106 Compliance, Riverside County, California. Prepared for Lennar Corporation.

2015 A Cultural Resource Assessment for the Zhao Residence Project, Poway, California (275-240-66). Prepared for Pacific Sotheby's International Realty.

2014 Phase I Cultural Resources Survey for the Utah Trail Project, County of San Bernardino, California (APNs 621-281-22 through 621-281-25). Prepared for Ecos Energy, LLC.

2014 Phase I Archaeological Assessment for the Sky Canyon Project (PP25309), Riverside County, California. Prepared for Rocky Snider California Project Management Office.

2014 Phase I Cultural Resources Survey for the Shoshone Valley Road Project, County of San Bernardino, California (APNs 613-233-01, -02, -03, -04, -27, -28, -29, and -30). Prepared for Ecos Energy, LLC.

2014 Phase I Cultural Resources Survey for the Nuevo 055 Project, Community of Nuevo, County of Riverside. Prepared for Ecos Energy, LLC.

2014 A Phase I Cultural Resource Study for the Bourgeoios Project, Poway, California. Prepared for Bill Yen & Associates, Inc.

2014 A Cultural Resources Survey for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California. Prepared for Zephyr Partners.

2014 Cultural Resource Monitoring Report for the Sewer Group 723 Project, San Diego, California. Prepared for
Ortiz Corporation.

2013 A Phase I Cultural Resource Study for the Rogers Tierra Bonita Project, Poway, California. Prepared for John D. Fitch & Associates.

2013 A Cultural Resource Assessment Update for the Girard Townhome Project, TR 35477, Riverside County, California. Prepared for G8 Development, Inc.

2013 Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California. Prepared for Ambient Communities.

2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, Riverside County, California. Prepared for CV Communities.

2013 Phase I Archaeological Assessment for the Bixby Highgrove Project (TTM 36437), Riverside County, California. Prepared for T&B Planning, Inc.

2013 A Class III Cultural Resources Study for the Ramona Ranch Affordable Housing Project for Section 106 Compliance, San Diego County, California. Prepared for AMCAL Multi-Housing, Inc.

2013 Phase I Archaeological Assessment for the Yates Road Project (TTM 36437), Riverside County, California. Prepared for CV Communities, LLC.

2013 A Cultural Resources Survey and Evaluation Program for the Warner Ranch Project, San Diego County, California. Prepared for HP Warner Ranch, LP.

2013 A Phase I Cultural Resource Assessment for TPM 36585, Riverside County, California. Prepared for GF Real Estate Services.

2013 A Class III Cultural Resources Study for TR 31597 and TR 32627, Riverside County, California. Prepared for Standard Pacific Homes.

2013 Phase I Cultural Resources Survey for the Sunny Cal Project, City of Beaumont, County of Riverside. Prepared for CV Communities, LLC.

2013 A Class III Cultural Resources Study for The Sierra Bella Project for Section 106 Compliance, Riverside County, California. Prepared for Forestar Corona, LLC.

2013 A Class III Cultural Resources Study for the Moosa Creek Mitigation Bank Project. Prepared for a Creek LLC.

2013 Archaeological Survey of the Rohmiller Residence for a Bulletin 560 Permit Application, 2350 Calle De La Garza, La Jolla, California 92037 (APN 346-180-22). Prepared for Architect Mark D. Lyon, Inc.

2013 Cultural Resources Survey and Evaluation Program for the Oak Creek Project, City of Escondido, California. Prepared for New Urban West, Inc.

2013 Phase I Cultural Resources Survey for the Hope Harbor Project, Riverside County, California. Prepared for Medhat Rofael.

2013 Archaeological Survey of the Liske Residence, La Jolla, California. Prepared for ECEGC Inc.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps Nos. 36484 and 36485, Audie Murphy Ranch. Prepared for Brookfield Residential.

2013 A Phase I Cultural Resources Study For the 401 West Ash Street Project San Diego, California. Prepared for PierPoint Legacy Holdings, LLC.

2013 Cultural Resource Test Plan for the Ten on Columbia Project, San Diego, California. Prepared for InDev, Inc.

2013 Phase I Cultural Resources Survey for the Washington Avenue Project, City of Murrieta, California. Prepared for Coastal Land Solutions.

2012 Phase I Cultural Resources Survey for the Wildomar 23 Project, Riverside County, California. Prepared for Lennar.

2012 A Class III Cultural Resources Study for the USGS Creepmeter Project. Prepared for Bureau of Land Management, El Centro Office.

2012 Mitigation Monitoring Report for the for the Johnston Residence Project, La Jolla, California. Prepared for Heather Johnston.

2012 A Phase I Cultural Resource Study for the Howell Residence Project, Poway, California. Prepared for Cal Howell.

2012 Cultural Resource Monitoring Report for the Sewer and Water Group 799 Project. Prepared for Burtech Pipeline.

2012 A Phase I Cultural Resources Study For the Villa Hermosa Project San Diego, California. Prepared for David Chow.

2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California. Prepared for Landmark Engineering.

2012 A Phase I Cultural Resource Study for the El Camino Real Widening Project, Carlsbad, California. Prepared for Planning Systems.

2012 A Phase I Cultural Resource Study for the Encore Trust Project, La Jolla, California. Prepared for Metcalf Development and Consulting.

2012 A Phase I Cultural Resource Study for the Andres Residence Project, La Jolla, California. Prepared for Engineering Design Group.

2012 Phase I Cultural Resources Survey for the Diamond Springs Project, Riverside County, California. Prepared for Benjamin J. Stables III, B 3 Consulting.

2012 A Phase I Cultural Resource Study for the ActivCare at Mission Bay Project, San Diego, California. Prepared for ActivCare Living, Inc.

2012 Mitigation Monitoring Report for the Water Group 790 Project, City of San Diego, California. Prepared for Orion Construction Corporation.

2012 Results of the Mitigation Monitoring Program for the Mission Brewery Villas Project, City of San Diego, California. Prepared for Eilar Associates, Inc.

2012 Cultural Resource Monitoring Report for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Morton Architects Inc.

2012 Cultural Resource Monitoring Report for the Sunset Cliffs Trunk Sewer Project, City of San Diego, California. Prepared for KTA Construction.

2012 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for BRH Garver.

2012 Cultural Resource Monitoring Report for the Pelberg Residence Project, City of San Diego, California. Prepared for Linda and Art Pelberg.

2012 Cultural Resource Monitoring Report for the Rose Creek Bikeway Bridge Project, City of San Diego, California. Prepared for Flatiron West, Inc.

2011 Mitigation Monitoring Report for the South Mission Valley Trunk Sewer Project, City of San Diego, California. Prepared for HPS Mechanical, Inc.

2011 A Class III Cultural Resources Study for the La Dama de Oro Project, San Bernardino County, California. Prepared for Mohave Gold Mining & Exploration, Inc.

2011 Mitigation Monitoring Report for the Jacobs Health Care Facility Project, City of San Diego, California. Prepared for Jacobs Health Care, LLC.

2011 A Phase I Cultural Resources Study For the Rowland Auto Dismantling Project, City of San Diego, California. Prepared for David Rowland.

2011 A Phase I Cultural Resource Study for the Dye Residence Project, La Jolla, California. Prepared for Eric Dye.

2011 Phase I Cultural Resources Survey for the Santa Rosa Academy Project, Riverside County, California. Prepared for Santa Rosa Academy Charter School c/o Bradley Burke Competitive Edge Development, LLC.

2011 Cultural Resource Data Recovery Study for SDI-4606 Locus B for Saint Gabriel's Catholic Church, Poway, California. Prepared for Saint Gabriel's Catholic Church.

2011 A Phase I Cultural Resource Study for the Nooren Residence Project, La Jolla, California. Prepared for Jack Nooren.

2011 Mitigation Monitoring Report for the Sewer and Water Group 768 Project, City of San Diego, California. Prepared for Ortiz Corporation.

2011 Cultural Resource Test for the 10th Avenue Parking Lot Project, City of San Diego, California. Prepared for 11th and B Investment Associates, LLC.

2011 A Cultural Resources Study for the Ampudia Lot Project, City of San Diego, California. Prepared for Venture Pacific Commercial Services, Inc.

2011 A Phase I Cultural Resource Study for the Hyde Residence Project, La Jolla, California. Prepared for Paul and Denise Hyde.

2011 A Phase I Cultural Resource Study for the Fialko Residence Project, La Jolla, California. Prepared for Thomas Armstrong Construction, Inc.

2011 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for HTA Engineering & Construction Inc.

2011 A Phase I Cultural Resource Study for the Butterfield Residence Project, La Jolla, California. Prepared for Geotechnical Exploration, Inc.

2011 A Cultural Resource Monitoring Report for the Eichen Residence Project, San Diego, California. Prepared for Steigerwald-Dougherty, Inc.

2011 Phase I Cultural Resources Survey for the Galway Downs Project, Riverside County, California. Prepared for Trip Hord.

2011 Cultural Resource Monitoring Report for Rancho Bella Vista Phase IV (TR 31871), Riverside County, California. Prepared for Lennar Inland Division.

2011 Cultural Resource Monitoring Report for the Salvation Army Vehicle Storage Area Demolition Project. Prepared for The Salvation Army General Counsel.

2011 A Phase I Cultural Resource Study for the Kates Residence Project, La Jolla, California. Prepared for Brad and Shannon Kates.

2011 A Phase I Cultural Resource Study for the Kralik Residence Project, La Jolla, California. Prepared for John Kralik.

2010 An Archaeological Monitoring Report for the Cricket Cell Tower Project (Permit # 3399 06-032), San Diego County, California. Prepared for Ken Hayes.

2010 A Cultural Resources Study for the 47th Street Warehouse Project City of San Diego, California, Project No. 190957. Prepared for 47th Street Properties.

2010 A Cultural Resource Study for the Dickenson Ranch Project, San Bernardino County, California. Prepared for Dickenson and Son Property Management and Investments.

2010 A Phase I Cultural Resources Survey for the Young Family Trust Lot Split Project City of Escondido, California. Prepared for Young Family Trust.

2010 An Archaeological Monitoring Report for the Jamul Rural Fire Station Auxiliary Access Road Project, San Diego County, California. Prepared for TCB.

2010 Cultural Resource Survey and Evaluation Program for the Citracado Parkway Extension Project, City of Escondido, California. Prepared for AECOM.

2010 Phase I Cultural Resources Survey for the Sycamore Creek Specific Plan No. 256 Amendment No. 2, Riverside County, California. Prepared for T&B Planning.

2010 A Phase III Cultural Resource Data Recovery Program for CA-SDI-16,986, Hidden Meadows, San Diego County, California (TPM 20794). Tuscan Ridge, LLC.

2010 Historic Properties Treatment Plan for the Talega (64 Area) 12kV Conversion Project Marine Corps Base Camp Pendleton San Diego County California. Prepared for Synergy Electric Company, Inc.

2010 A Cultural Resources Survey and Evaluation Program for the Highlands at Warner Springs Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2010 A Cultural Resources Literature Review for the 11099 North Torrey Pines Road Project, San Diego, California. Prepared for Touchstone Investments.

2010 A Phase I Cultural Resources Survey for the San Jacinto Poultry Ranch Storage Building Project, San Jacinto, California. Prepared for Moark, LLC.

2010 A Phase III Cultural Resource Data Recovery Program for SDI-16986, Hidden Meadows, San Diego, California (TPM 20794). Prepared for Tuscan Ridge, LLC.

2010 Cultural Resources Study for the Dos Colinas Project, Carlsbad, California. Prepared for Dos Colinas, LLC.

2010 A Phase I Archaeological Survey of the Greater Alpine Fire Safe Council Horsethief Vegetation Management Project. Prepared for the Greater Alpine Fire Safe Council.

2010 A Phase I Cultural Resource Study for the Moses Residence Project, La Jolla, California. Prepared for Brian Moses.

2010 Pottery Canyon Site Archaeological Evaluation Project City of San Diego, California. Prepared for the City of San Diego Park and Recreation Department.

2010 A Phase I Cultural Resource Study for the Shabaz Residence Project, La Jolla, California. Prepared for Negar Shabaz.

2009 A Phase I Cultural Resources Study for the Kramer 453 Project, San Bernardino County, California. Prepared for LightSource Renewables LLC.

2009 A Cultural Resources Study for the Hronopoulus Residence Project, City of San Diego, California. Prepared for Andreas Hronopoulus.

2009 A Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project, San Diego, California. Prepared for Southern California Soil and Testing.

2009 A Cultural Resources Study for the McKean SDP Project. San Diego, California.

2009 An Archaeological Assessment for the Rivera-Placentia Project, City of Riverside, California.

Prepared for Riverside Construction Company.

2009 Cultural Resource Data Recovery Plan for the North Ocean Beach Gateway Project. Prepared for the City of San Diego and KTU+A.

2009 Cultural Resource Letter Report for the Borrego Substation Feasibility Study, Borrego Springs, California. Prepared for RBF Consulting.

2009 A Cultural Resource Study for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Martin Architects Inc.

2009 A Cultural Resource Report for the Central Feeder Connection Project, San Bernardino, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Clay Street Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Green Hills Project, San Diego County, California. Prepared for Atlas Investments, LLC.

2009 A Cultural Resource Report for the La Sierra Pipeline Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project. Prepared for Southern California Soil & Testing.

2009 A Cultural Resource Report for the Mockingbird Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Mesquite Lake Treatment Plan Project, Imperial County, California. Prepared for Albert A. Webb and Associates.

2008 Phase I Cultural Resource Survey for the 28220 Highridge Road Development Project, Rancho Palos Verdes, California. Prepared for REC Development.

2008 Wild Goose Expansion 3 Project Butte County, California Colusa County, California. Prepared for Niska Gas Storage LLC.

2008 Class III Cultural Resource Survey for the Burlington Northern Santa Fe Four Railway Bridge Renewal Project, San Bernardino County, California. Prepared for BNSF Railway Company.

2008 I-80 Colfax Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 I-80 Gold Run Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 Cultural Resource Monitoring at 31431 Camino Capistrano, San Juan Capistrano, California. Prepared for Herman Weissker, Inc.

2008 Cultural Resource Inventory for the Snow White Pumice Mine, Hinkley, California. Prepared for U.S. Mining and Minerals Corporation.

2007 Nodule Industries of North Coastal San Diego: Change and Stasis in 10,000 Years of Lithic

Technology. Masters thesis on file, San Diego State University.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2007 Phase I Archaeological Assessment for APN 104-200-09, Beaumont, California. Prepared for Mary Chan.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2006 Carlsbad Municipal Golf Course Data Recovery Program for CA-SDI-8694, and Indexing and Preservation Program Study for CA-SDI-8303 and CA-SDI-8797 Locus C, City of Carlsbad, California. Prepared for City of Carlsbad.

2005 Grand Pacific Resorts Data Recovery and Index Sample Program for CA-SDI-8797, Area A, City of Carlsbad, California. Prepared for Grand Pacific Resorts Inc.

2004 "Near the Harris Site Quarry" Cultural Resource Data Recovery and Preservation Program for CA-SDI-13028, San Diego County, California. Prepared for Harbrecht Development, L.P.

2004 Cultural Resource Survey and Boundary Test Report for the Lilac Ranch Project, San Diego County, California. Prepared for Empire Companies.

2003 Cultural Resource Data Recovery and Preservation Program for CA-SDI-12027, San Diego County, California. Prepared for Harbrecht Development Inc.

2002 Data Recovery Program for the Pacbell Site CA-SDI-5633, San Marcos, California. Prepared for Joseph Wong Design Associates.

2001 McCrink Ranch Cultural Resource Test Program Additional Information for Selected Sites, San Diego County, California. Prepared for Shapouri & Associates.

2001 The Quail Ridge Project Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning, Inc.

2000 Cultural Resource Survey and Evaluation for the North Sand Sheet Full Buildout Program, Owens Lake, California. Prepared for CH2MHill.

1995 Final Report: Archaeological Investigations Conducted for the Abalone Cove Dewatering Wells, City of Rancho Palos Verdes Los Angeles County, California. Prepared for the City of Rancho Palos Verdes, Environmental Services.

1995 Final Report: A Class III Intensive Survey of a 100-Acre Sand and Gravel Mining Area, Imperial County, California. Prepared for the Lilburn Corporation.

1994 Final Report: Data Recovery Excavations at Five Late Prehistoric Archaeological Sites Along the Los Trancos Access Road, Newport Coast Planned Community, Orange County, California. Prepared for the Coastal Community Builders, a division of The Irvine Company.

Contributing Author

2019 Cultural Resources Study for the 3868-3900 Sepulveda Boulevard Project, City of Culver City, Los Angeles County, California. Prepared for Sepulveda Suites, Inc.

2019 Final Archaeological Data Recovery and Mitigation Monitoring Program for the Westin Hotel and Timeshare Project, City of Carlsbad, California. Prepared for Grand Pacific Resorts, Inc.

2019 Cultural Resources Study for the Commerce Logistics Center Project, 5200 Sheila Street, Commerce, California 90040. Prepared for T&B Planning, Inc.

2019 A Section 106 (NHPA) Historic Resource Study for the McElwain Project (SPL-2019-00565), Murrieta, Riverside County, California. Prepared for Murrieta Development II, LLC.

2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Prepared for Murrieta Development II, LLC.

2018 A Phase I and II Cultural Resources Assessment for the Emerald Acres Project, Winchester, Riverside County. Prepared for T&B Planning, Inc.

2018 A Cultural Resources Monitoring Report for the Golden City Project, Tracts 28532-1, -2, -3, -4, and -5 and Tract 34445, City of Murrieta, California. Prepared for North Murrieta Community, LLC.

2018 An Archaeological/Historical Study for the Citracado Business Park West Project, City of Escondido. Prepared for Pacific Harmony Grove Development.

2015 Cultural Resource Survey and Evaluation Program for the Westin Hotel and Timeshare Project, City of Carlsbad, California. Prepared for Grand Pacific Resorts, Inc.

2015 A Class III Cultural Resource Study for the Habitat for Humanity Project, Perris, California. Habitat for Humanity Inland Valley.

2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California. Prepared for Prepared for Ecos Energy, LLC.

2014 An Extended Phase I Cultural Resource Assessment for the Belvedere-Webster Project, City of Poway, California (APN 323-010-26-00). Prepared for Webster Realty Group.

2014 Cultural Resources Study for the Brook Forest Conservation Bank Project, Valley Center, San Diego County, California. Prepared for Brook Forest, LLC.

2014 A Phase I Cultural Resource Study for the Crystal View Lane Project, Poway, California. Prepared for Mark Catrambone.

2014 Cultural Resource Assessment for the Muscat Project, Poway, California (TPM 13-002; APN 278-180-44). Prepared for Mr. Ed Muscat.

2014 An Extended Phase I Cultural Resource Assessment for the Mulholland Highway Improvement Project, Cities of Calabasas and Los Angeles, Los Angeles County, California. City of Calabasas Public Works Department.

2014 Mitigation Monitoring Report for the 9th and Broadway Project, City of San Diego. Prepared for Bridge Housing Corporation.

2013 Cultural Resource Test Plan for the Cisterra Sempra Tower Project San Diego, California. Prepared for Eilar Associates, Inc.

2013 A Section 106 (NHPA) Cultural Resources Study for the Toscana Project, Riverside County, California. Prepared for Forestar Toscana, LLC.

2013 Cultural Resource Test Plan for the Gaslamp Hotel Project. Prepared for The Robert Green Company.

2012 Cultural Resource Test Plan for the Pinnacle International 15th and Island Project. Prepared for Pinnacle International.

2012 Cultural Resource Test Plan for the Horton Plaza Park Improvement Project. Prepared for the City of San Diego.

2012 Mitigation Monitoring Report for the T-Mobile West, LLC Telecommunications Candidate SD02867C (Presidio Park). Prepared for Michael Brandman Associates.

2012 Cultural Resource Test Plan for the Old Police Headquarters Project. Prepared for Terramar Retail Centers.

2012 Cultural Resource Test Plan for the Knight Residence Project. Prepared for Mr. Dennis Knight.

2012 Cultural Resource Test Plan for the 9th and Broadway Project. Prepared for Bridge Housing Corporation.

2012 Cultural Resource Test Plan for the Blue Sky Project. Prepared for Gray Development.

2011 An Archaeological Study for 1887 Viking Way Project, La Jolla, California. Prepared for Island Architects.

2011 A Cultural Resource Evaluation Program for the Otay Hills Quarry Project, San Diego County, California, Log No. 93-19-006J; P04-004; RPO4-001. Prepared for EnviroMINE.

2010 A Cultural Resource Evaluation Program for the Batchelder Lot Split Project, San Diego County, California, TPM 21177; KIVA PROJECT 10-0125593; APNs 247-010-10, -13. Prepared for David Batchelder.

2010 A Cultural Resources Survey and Evaluation Program for the Butterfield Trails Ranch Project, Valley Center, San Diego County, California, TM 5551, P 08-028, GPA 06-007, REZ 06-010, LOG NO. 06-08-033. Prepared for Wayne B. Hilbig.

2008 Lithic Analysis for Thirteen Sites Along the Transwestern Phoenix Expansion Project, Loops A and B. Prepared for Transwestern Pipeline Company, LLC.

2005 Cultural Resource Survey and Testing for the Star Ranch Property, San Diego, California.

2004 Cultural Resource Test Report for the Palomar Point Project: Site CA-SDI-16205, Carlsbad, California. Prepared for Lanikai Management Corp.

2004 Cultural Resource Survey and Test Report for the Canyon View Project, Carlsbad, California. Prepared for Shapouri & Associates.

2004 Cultural Resource Test Report for the Yamamoto Property: Site SDM-W-2046, Carlsbad, California. Prepared for Cunningham Consultants, Inc.

2004 Historical Resources Report for the Kuta and Mascari Properties, Otay Mesa, California. Prepared for Centex Homes.

2004 Cultural Resource Monitor and Test Report for the Encina Power Plant Project, Carlsbad,

California. Prepared for Haley & Aldrich, Inc.

2004 Cultural Resource Test Report for Site CA-SDI-16788, Otay Mesa, California. Prepared for Otay Mesa Property, L.P.

2004 Cultural Resource Survey and Test Report for the Lonestar Project, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2003 Cultural Resource Mitigation Program for the Torrey Ranch Site CA-SDI-5325, San Diego, California. Prepared for Garden Communities.

2003 Cultural Resource Survey and Test Report for the Johnson Canyon Parcel, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2002 Cultural Resource Data Recovery Plan for the Shaw Project: Sites CA-SDI-13025 and CA-SDI-13067, San Diego County, California. Prepared for Shapouri & Associates.

2001 Archaeological Test Program for CA-SDI-14112 Mesa Norte Project, San Diego, California. Prepared for Hunsaker & Associates.

2001 The Vista-Oceanside Cultural Resource Survey and Test Program, Vista, California. Prepared for Shapouri & Associates.

2001 Cultural Resource Test Program for the Wilson Property, Carlsbad, California. Prepared for the City of Carlsbad.

2001 Cultural Resource Test Plan for the Oceanside-Escondido Project, County of San Diego, California. Prepared for Dudek & Associates.

2001 Cultural Resource Test Program for the Kramer Junction Expansion Project Adelanto, California. Prepared for AMEC.

2001 Cultural Resource Test Program for CA-SDI-12508 San Diego, California (LDR No. 99-1331). Prepared for Garden Communities.

2000 Archaeological Testing of Prehistoric Sites CASDI-14115 and CA-SDI-14116 for The Mesa Grande Project, San Diego, California. Prepared for Solana Mesa Partners, LLC.

2000 Cultural Resource Survey and Test Report for the Wetmore Property, Otay Mesa, San Diego County, California. Prepared for Mr. Andy Campbell.

2000 The Torrey Ranch Cultural Resource Test Program, San Diego County, California. Prepared for Garden Communities.

2000 Cultural Resource Test Results for the Otay Mesa Generating Project. Prepared for the California Energy Commission and Otay Mesa Generating Company, LCC.

2000 The Eternal Hills Cultural Resource Survey and Test Program, City of Oceanside, California. Prepared for Eternal Hills Memorial Park.

2000 The Quail Ridge Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning Inc.

2000 Cultural Resource Testing Program for CA-SDI-5652/H and CA-SDI-9474H SR 78/Rancho Del Oro

Interchange Project, Oceanside, California. Prepared for Tetratech Inc.

2000 Cultural Resource Test Results for a Portion of CA-SDI-8654 (Kuebler Ranch) Otay Mesa, San Diego County, California. Prepared for Shapouri & Associates.

2000 Historical/Archaeological Monitoring and Data Recovery Program for Prehistoric Site CA-SDI-48, Locus C Naval Base Point Loma, San Diego, California. Prepared for Department of the Navy, Southwest Division.

2000 Cultural Resource Evaluation Report for the Palomar College Science Building Project, San Marcos, California. Prepared for Parsons Engineering Science Inc.

1999 Cultural Resource Monitoring Report for the Village of Ystagua Water Main Break City of San Diego, California. Prepared for the City of San Diego Water Department.

1999 The Effect of Projectile Point Size on Atlatl Dart Efficiency in Lithic Technology Vol. 24, No 1 p (27-37).

1999 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project, San Marcos, California. Prepared for City of San Marcos.

1999 5000 Years of Occupation: Cultural Resource Inventory and Assessment Program for the Carlsbad Municipal Golf Course Project City of Carlsbad, California. Prepared or Cotton/Beland/Associates, Inc.

1999 Silver Oaks Estates Cultural Resource Enhanced Survey and Test Report for a Portion of CA-SDI-7202 San Diego, California. Prepared for Helix Environmental Planning Inc.

1999 Historical Archaeological Test of a portion of CA-SDI-8303 for the Faraday Road Extension Carlsbad, California. Prepared for the City of Carlsbad.

1999 Cultural Resource Literature Review for the North Coast Transportation Study Arterial Streets Alternative San Diego County, California. Prepared for MLF/San Diego Association of Govt.

1998 Archaeological Test Report for a Portion of CA-SDI-9115/SDM-W-122 Carlsbad, California. Prepared for Industrial Developments International.

1998 Rainforest Ranch Cultural Resource Survey and Significance Test for Prehistoric Sites CA-SDI-14932, CA-SDI-14937, CA-SDI-14938, and CA-SDI-14946 County of San Diego, California. Prepared for the Boys and Girls Club of Inland North County.

1998 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project San Marcos, California.

1998 Final Report: Cultural Resource Survey Report for the Sterling Property, Carlsbad, California. Prepared for SPT Holdings LCC.

1996 Final Report: Archaeological Survey and Test for the Huber Property Carlsbad, California. Prepared for Gene Huber.

1996 Final Report: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Nine Archaeological Sites Within the Newport Coast Planned Community Phase III Entitlement Area, San Joaquin Hills, Orange County, California. Prepared for Coastal Community Builders, a division of The Irvine Company.

1995 Preliminary Report: Phase II Test Results From Nine Prehistoric Archaeological Sites within the Proposed Upper Newport Bay Regional County Park. Prepared for EDAW, Inc.

1995 Final Report: A Phase II Test Excavation at CA-ORA-136, Block 800 City of Newport Beach, Orange County California. Prepared for the Irvine Apartment Communities.

APPENDIX B

Building Development Information

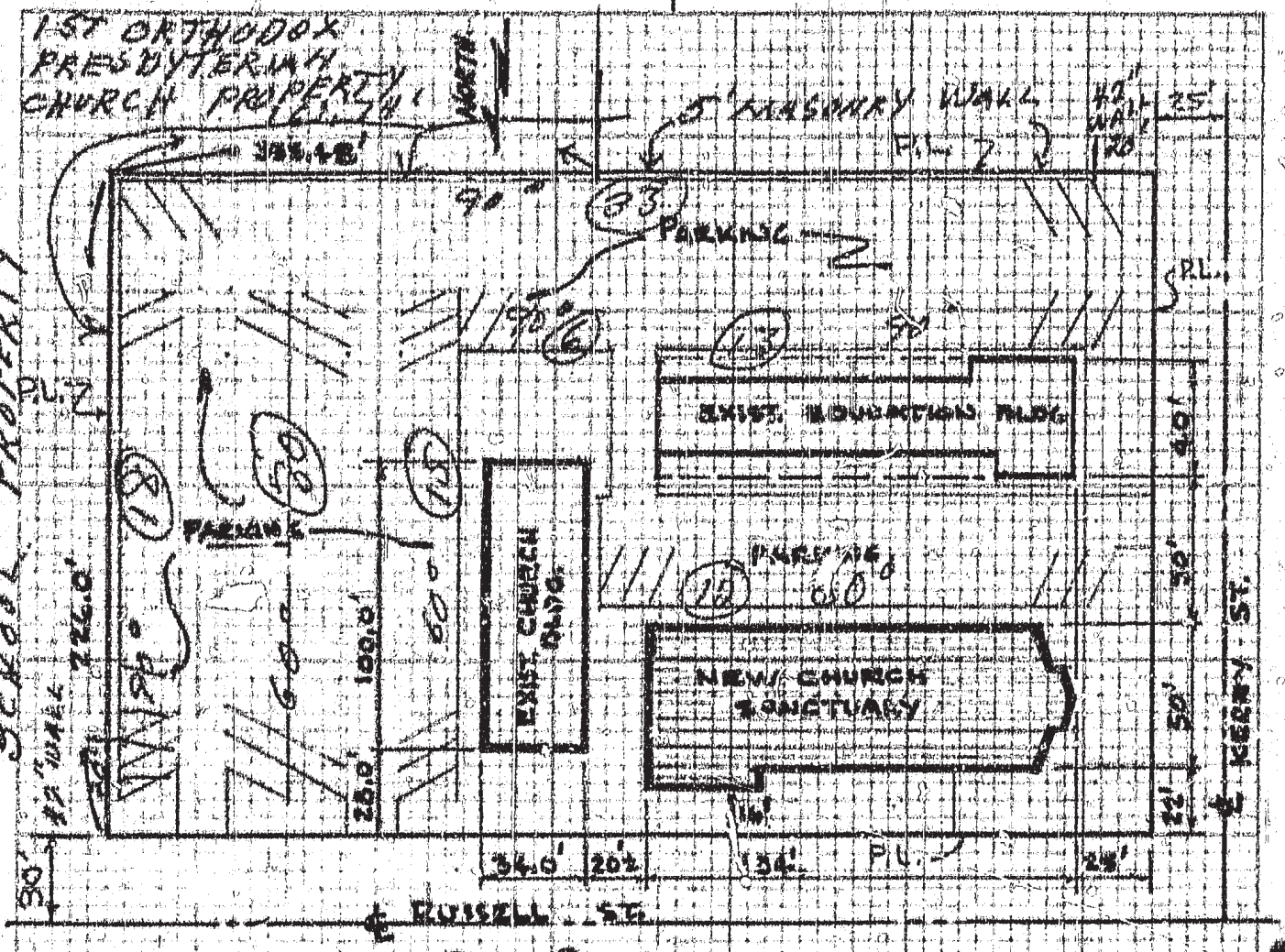
PLOT PLAN

Department of Building
B. C. Adams
Director

CITY OF
GARDEN GROVE

Job 9822	Permit Number 16931
Address RUSSELL	
Lot	Tract	B.R. PC 611

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE



I certify the information furnished hereon is complete and correct.

Routing: #1 Building Inspector #2 Office File #3 Owner By [signature] Date 9/21/61

APPLICATION FOR A

BUILDING PERMIT

DEPARTMENT OF BUILDING, GARDEN GROVE, CALIF.

INFORMATION PROVIDED BY BLDG. DEPT.

EXTERIOR WALL MATERIAL T-1-11 ROOF FRAMING MATERIAL

PARTITIONING MATERIAL WOOD ROOF COVERING MATERIAL COMPO

LOT WIDTH 226' LOT DEPTH 335' NO. OF EXISTING BLDGS ON LOT 3

USE ZONE R-1 FIRE ZONE 3 BLDG. PANEL C-3 TYPE V

BLDG. SET BACKS	FRONT	RIGHT SIDE	LEFT SIDE	REAR
	—	63'6"	—	—

SITE PLAN NO — USE PERMIT OR VARIANCE NO — PARK SPACES REQ'D —

Zoning Approved By Tom Date 6-8-65

Remarks: PLANS

PUBLIC WORKS

Street Address AC By JLJ

	REQUIRED	PROVIDED
Record of Survey		
R/W Dedication	Req'd	
Bonds		
Encroachment Permit	Req'd	

Remarks

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location	9-1-65 / 9-8-65	
Reinforcing		
Roof Shtg.	11-17-65	
Rough Frame	12-10-65	
Lath or Drywall	1-31-66	
Plas. Brown Ct.		
Other		
Land Use		
Final	3-11-66	
Utility Release	3-11-66	

VALUATION NOTE: WORK PERFORMED UNDER GRADE MAT $ 1,000

FEES

Plan Check	$82.75	Building Permit	$165.50
Bond	$	Expiration Date	

Permit Authorized By [signature] Date 8-23-65

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN. PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE. NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

Job Address 9822 RUSSEL ST. Permit No. 011351 A

Lot No. 77 & B Tract No. 1539 Blk No. PC-1258

CONTRACTOR A. C. MAHONEY STATE LIC. NO. 178001

MAILING ADDRESS 1651 E. LA PALMA ANAHEIM TEL. NO. 871-7993

ARCH. JAMES R. WILDE STATE LIC. NO. 1899

ENGR.

MAILING ADDRESS 12522 BROOKHURST TEL. NO. 539-8973

OWNER CHURCH OF CHRIST TEL. NO.

MAILING ADDRESS 9822 RUSSEL ST.

NEW ☐ ADD'N ☒ ALTER ☒ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) 5,162 NO. OF STORIES 2 NO. OF DWELLING UNITS

PRESENT BLDG. USE PROPOSED BLDG. USE

AUG 23 65 11 083 11 *** 165.50

Validation AUG 20 65 11 083 11 **** 82.75

DESCRIBE WORK TO BE DONE SOCIAL HALL plus INTERIOR ALTERATION TO EXISTING CLASSROOMS

OWNER BUILDER PERMIT RESTRICTIONS: An owner-builder must reside within the building for which this permit is issued, (accessory buildings excepted). Said building may not contain more than 3 dwelling units. Otherwise, this permit may be issued only to a contractor licensed in the State of California and a business license must be procured from the City of Garden Grove.

WORKMEN'S COMPENSATION INSURANCE REQUIREMENTS: A certificate or duplicate thereof of workmen's compensation insurance must be on file with the City of Garden Grove prior to the issuance of this permit unless: 1. This permit is for less than $100 valuation or, 2. The applicant qualifies as an owner-builder and signs the statement below.

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California.

SIGNATURE [signature]

PLUMBING CONTRACTOR'S LICENSE ON FILE

APPLICANT'S CERTIFICATION: I have carefully read and examined the above application and find the same to be true and correct. All provisions of the laws and ordinances of the City of Garden Grove and State of California will be complied with whether specified herein or not.

Signature of Permittee Date BUS. LIC. NO.

Address

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR ADDRESS

7-7-65
Footings on w end of Exist. Bldg + 2'4" footing inside
OK to Pour. A.D.

11-30-65
O.K.'d to wrap exterior of new building A.D.

12-6-65
OK to cover arcade sheathing O.K. A.D.

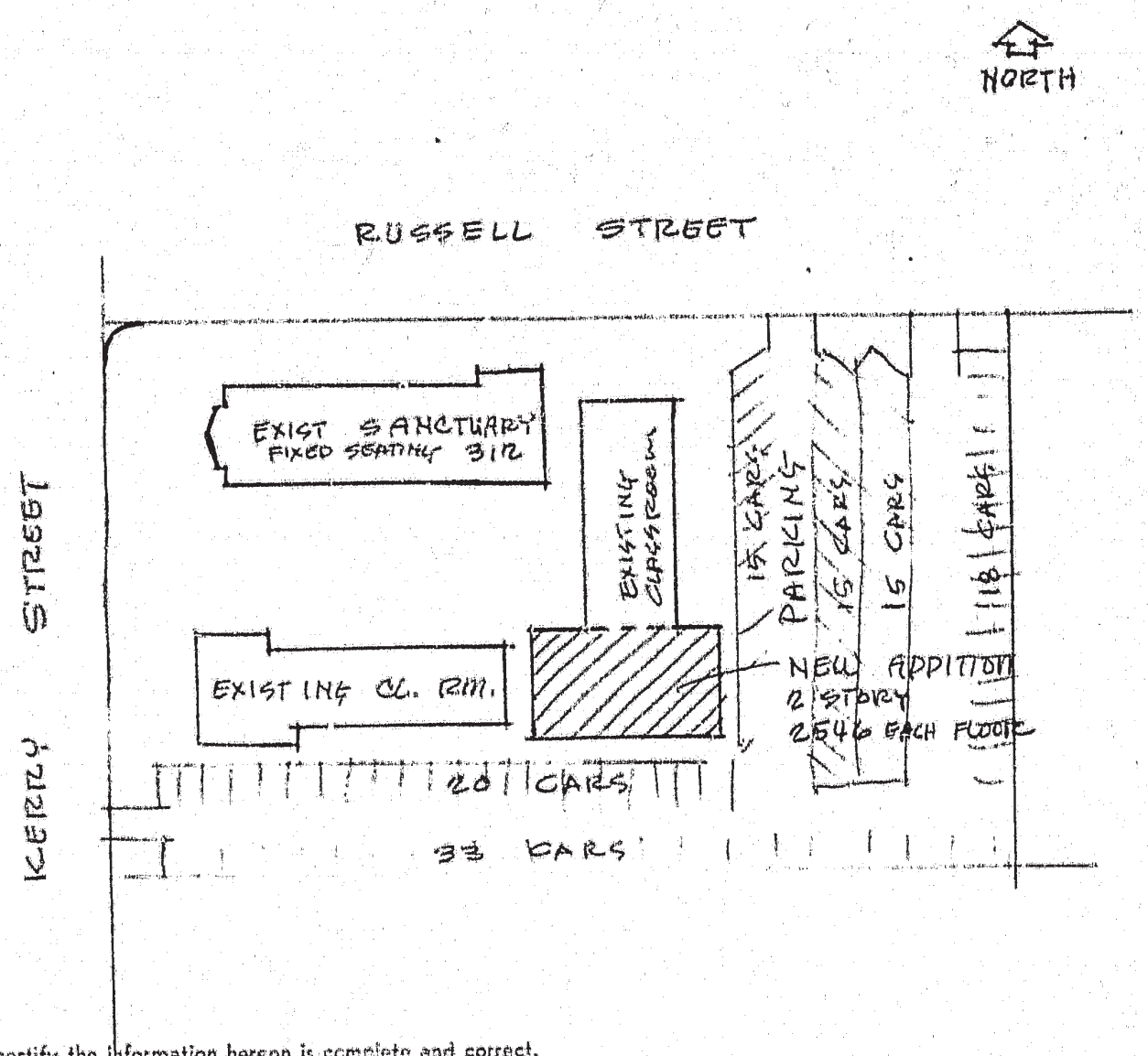
PLOT PLAN

Department of Building — **CITY OF GARDEN GROVE**

Job Address	Permit Number
9822 RUSSELL STREET	1135

Lot	Tract	Blk.
	1539	

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE



I certify the information hereon is complete and correct.

Routing: #1 Building Inspector 2 Office File #3 Owner

By _____ Date _____

ELECTRICAL PERMIT

[illegible]RTMENT OF BUILDING AND SAFETY

[illegible]ROVE, CALIFORNIA PHONE: 537-4200

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN, PRESS FIRMLY, BE SURE ALL COPIES ARE LEGIBLE, NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

JOB ADDRESS: 9822 Russell St

ELECTRIC PERMIT NO.: 011522 A

OWNER: Church of Christ

PHONE:

OWNER'S ADDRESS: Same

CITY:

NEW BUILDING OR ADDITION — AREA: 5160 SQ. FT.

EXISTING BUILDING REMODEL AREA: SQ. FT.

OCCUPANCY GROUP: Church

USE OF BUILDING AND OR NUMBER OF UNITS: Church Rm

ELECTRICAL CONTRACTOR: F S M Electric Co

PHONE: 535-6210

ADDRESS: 702 So Anaheim Blvd

CITY:

STATE LICENSE NO.: 415775

VALIDATION: AUG 31-65 11 003 M ****43.00

LOT NO. TRACT NO.

IF NOT LISTED BELOW SEE CODE	NUMBER	EACH	FEE
Residential (I & H) sq. ft.		.01	
Garage, Resid. (J) sq. ft.		.005	
Service, Single Phase	1	$1.00	1.00
Service, Three Phase		1.00	
Meters, Single Phase	1	1.00	1.00
Meters, Three Phase		1.00	
Pole, Power, Light, etc.		2.00	
Sub-Panels 1 ϕ	1	1.00	1.00
Sub-Panels 3 ϕ		1.00	
Outlets 1st 20	20	.20	4.00
Outlets Over 20	172	.10	17.20
Fixtures 1st 20	20	.20	4.00
Fixtures Over 20	72	.10	7.20
Fixtures, High Voltage Type		1.00	
Radiant Heat		1.00	
Washer		1.00	
Dryer		1.00	
Hot Water Heaters		1.00	
Dishwasher	1	1.00	1.00
Domestic Range or Oven		1.00	
Motors Not Over 1 HP Deep	2	1.00	2.00
Motors Over 1 Not Over 3 HP		1.50	
[illegible]	1	1.00	1.00
U.G. Pull Box	1	1.00	1.00
[illegible]			
Time Clock		1.00	
Sign Tran. or 1 Ballast		1.00	
Each Additional Tran. or Ballast		1.00	
Sign Hookup		1.00	
[illegible]			
ISSUANCE OF PERMIT			2.00
TOTAL FEE			43.00

PERMIT AUTHORIZED BY: [illegible]

DATE: [illegible] 011551 A

I HAVE CAREFULLY READ THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF STATE AND LOCAL LAWS COVERING THIS TYPE OF CONSTRUCTION WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. NO PERSON SHALL BE EMPLOYED IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA.

SIGNATURE OF PERMITTEE: X [illegible] DATE: Aug-31-65

BRANCH CIRCUIT PANEL: CIRCUITRY

CIR. NO.	BRKR. SIZE	WIRE SIZE	NOMENCLATURE	NO. OF OUTLET	WATTS L1	WATTS L2	WATTS L3
1							
2							
3							
4							
5							
6							

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Underground	[illegible]	
Conduit 11-15-65	12-3-65	[illegible]
Wiring	12-3-65	[illegible]
Ceiling Heat Cable		
Fixtures		
Service	3-[illegible]-66	[illegible]
Final	3-[illegible]-66	[illegible]
Utility Notified	3-17-66	[illegible]

SINGLE PHASE SERVICE SIZE: AMPS WIRE RIG CONDUIT

THREE PHASE SERVICE SIZE: 3 WIRE 3/4 WIRE AMPS WIRE RIG CONDUIT

BUILDING PERMIT NO. | SIGN PERMIT NO. | VENT, HEAT, AIR COND PERMIT NO.

FL-101

RUSSELL	009822			4
STREET NAME	ADDRESS	APT. NO.		CARD NO.

Identify mains & Battery switches
also sub Panel Breakers

3-2-66

PLUMBING PERMIT

Department of Building | CITY OF GARDEN GROVE

1

For Applicant to Fill In (Use ink)

Job Address 9822 Russell | Permit No. 011503

Lot No. | Tract No. | Blk. No.

Owner Church of Christ

Owner's Address 9822 Russell

Plumbing Contractor H. L. Burris

Contractor's Address 549 So. Anaheim Blvd.

Phone 535-4840 City Lic. No.

Use of Bldg. Church

New Bldg. ☒ Old Bldg. ☐

Validation 11-30-65 11 032 M ***24.50

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee H. L. Burris Date 5-30-65

Address

PERMIT FEES

NO.	TYPE OF FIXTURE OR ITEM	EACH	$ FEE
3	Water Closet (Toilet)	$1.50	4 50
	Bath Tub	1.50	
	Shower	1.50	
2	Lavatory (Wash Basin)	1.50	3 00
2	Kitchen Sink	1.50	3 00
2	Garbage Disposal	1.50	3 00
1	Laundry Tub or Tray	1.50	
1	Water Heater	1.50	1 50
1	Slop Sink	1.50	1 50
	Floor Sink	1.50	
	Floor Drain	1.50	
	Dish Washer	1.50	
2	Drinking Fountain	1.50	3 00
1	Urinal	1.50	1 50
1	Gas System — Outlets	1.50	1 50
	House Sewer	1.50	
	Lawn Sprinklers (Single Dwelling Only)	2.00	
	Swimming Pool Piping	1.50	
	Sand Traps	1.50	
	Automatic Washing Mach.	1.50	
	Water Softeners	1.50	
	Backwash — Trap	1.50	
	Water Lateral	1.50	
	Backflow Protective Devices	2.00	
	Issuance of Permit		2 00
	TOTAL FEE		$ 21 50

Permit Authorized By Date 5-30-65

APPROVALS	DATE	INSPECTOR
SOIL PIPING		
GROUND PLUMBING		
ROUGH PLUMBING	12-9-65	R
GAS PIPING		
GAS VENT		
SEPTIC TANK or Cesspool		
SEWER		
GAS TEST		
MAIN DRAIN AND VACUUM LINES		
WATER HEATER		
BACKWASH		
WATER LATERAL		
FINAL		
UTILITY CO. NOTIFIED	5-17-66	R

ROUTING: #1 Plumbing Inspector #2 Statistics #3 Owner #4 Office File Bldg. Permit #

HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING PERMIT

1

DEPARTMENT OF BUILDING
HARRY R. PEIRCE - DIRECTOR
537-4200

CITY OF
GARDEN GROVE

FOR APPLICANT TO FILL IN (USE INK)

JOB ADDRESS 9822 Burwell St. 01 | PERMIT NO. 2685 A

LOT NO. | TRACT NO.

OWNER Church of Christ

OWNER'S ADDRESS

CONTRACTOR Kinney Heating

CONTRACTOR'S ADDRESS 7941 S. Euclid CITY Anaheim

PHONE 774-8120 CITY LIC NO. 963

USE OF BUILDING Church

NEW BUILDING ☐ OLD BUILDING ☐

VALIDATION OCT 29-65 11 229 M ****19.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing. I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

SIGNATURE OF PERMITTEE Ellis Kinney DATE

ADDRESS

PERMIT FEES

NUMBER	TYPE OF FIXTURE OR ITEM		EACH	FEE
	FURNACE — RESIDENTIAL		$1.00	
	WARM AIR OUTLET		.25	
	FURNACE VENTS		1.00	
	GAS PIPING ____ OUTLETS		1.00	
3	COMMERCIAL HEATING		2.00	6 00
12	COMMERCIAL WARM AIR OUTLETS		.50	6 00
3	COMMERCIAL FURNACE VENTS		2.00	6 00
	EXHAUST OUTLETS		1.00	
	REPAIR, ALTERATION OR ADDITION TO HEATING SYSTEM	RES. OR COMM.	1.00	
	VENTILATION SYSTEM		3.00	
	RESTAURANT KITCHEN HOOD		3.00	
	CONDENSING UNIT	20 H.P. OR LESS	2.00	
	CONDENSING UNIT	TO 50 H.P.	5.00	
	CONDENSING UNIT	OVER 50 H.P.	10.00	
	REPAIR OR ALTERATION TO REFRIGERATION SYSTEM		3.00	
	EVAPORATIVE COOLERS		1.00	
	ISSUANCE OF PERMIT			1 00
	TOTAL FEE			$ 19 00

PERMIT AUTHORIZED BY CK DATE 11-2-65

ROUTING

#1 INSPECTOR #2 CITY CLERK #3 OWNER

BUILDING PERMIT NO.

APPROVALS	DATE	INSPECTOR
FURNACE		
REGISTER OUTLETS		
FURNACE VENTS		
GAS PIPING		
DUCTS 12 4"		
EXHAUST OUTLETS		
RESTAURANT KITCHEN HOOD		
VENTILATION SYSTEM		
CONDENSING UNIT 20 H.P. OR LESS		
CONDENSING UNIT 50 H.P.		
CONDENSING UNIT OVER 50 H.P.		
FINAL		
UTILITY CO. NOTIFIED		

HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING PERMIT

DEPARTMENT OF BUILDING
HARRY K. PIERCE - DIRECTOR
537-4200

CITY OF GARDEN GROVE

FOR APPLICANT TO FILL IN (USE INK) 013482 1

JOB ADDRESS 9822 Russell — PERMIT NO.

LOT NO. — TRACT NO.

OWNER Church of Christ

OWNER'S ADDRESS 9822 Russell St.

CONTRACTOR Kinney Heating

CONTRACTOR'S ADDRESS 1441 S. Anaheim, Anaheim

PHONE 774-8120 — CITY LIC. NO. 963

USE OF BUILDING

NEW BUILDING [1] — OLD BUILDING [ ]

VALIDATION DEC 21-65 11 033 M ******4.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing. I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

SIGNATURE OF PERMITTEE Bill Kinney — DATE

ADDRESS

PERMIT FEES

NUMBER	TYPE OF FIXTURE OR ITEM		EACH	FEE
	FURNACE — RESIDENTIAL		$1.00	
	WARM AIR OUTLET		.25	
	FURNACE VENTS		1.00	
	GAS PIPING ____ OUTLETS		1.00	
	COMMERCIAL HEATING		2.00	
	COMMERCIAL WARM AIR OUTLETS		.50	
	COMMERCIAL FURNACE VENTS		2.00	
	EXHAUST OUTLETS		1.00	
	REPAIR, ALTERATION OR ADDITION TO HEATING SYSTEM	RES. OR COMM.	1.00	
	VENTILATION SYSTEM		3.00	
1	RESTAURANT KITCHEN HOOD		3.00	3 00
	CONDENSING UNIT	20 H.P. OR LESS	2.00	
	CONDENSING UNIT	TO 50 H.P.	5.00	
	CONDENSING UNIT	OVER 50 H.P.	10.00	
	REPAIR OR ALTERATION TO REFRIGERATION SYSTEM		3.00	
	EVAPORATIVE COOLERS		1.00	
	ISSUANCE OF PERMIT			1 00
	TOTAL FEE			$ 4 00

PERMIT AUTHORIZED BY — DATE 12-21-65

ROUTING: #1 INSPECTOR #2 OFFICE FILE #3 OWNER

BUILDING PERMIT NO.

APPROVALS		DATE	INSPECTOR
FURNACE			
REGISTER OUTLETS			
FURNACE VENTS			
GAS PIPING			
DUCTS			
EXHAUST OUTLETS			
RESTAURANT KITCHEN HOOD			
VENTILATION SYSTEM			
CONDENSING UNIT	20 H.P. OR LESS		
CONDENSING UNIT	50 H.P.		
CONDENSING UNIT	OVER 50 H.P.		
FINAL			
UTILITY CO. NOTIFIED			

GARDEN GROVE

ZONING ADMINISTRATOR

DECISION NO. 870

CONDITIONAL USE PERMIT NO. CUP-114-81

GARDEN GROVE CHRISTIAN CHURCH

JUNE 26, 1981

This is a Conditional Use Permit application pertaining to property located on the southeast corner of Russell Avenue and Kerry Street.

A public hearing was held on June 17, 1981, and all testimony presented at the public hearing and all evidence applicable to this case have been considered.

The applicant is requesting approval of a Conditional Use Permit for the conversion and remodeling of an approximately 2,875 square foot existing one-story building to be used as an elementary school facility, located on the church site on an approximately 1.81 acre parcel. The City of Garden Grove has determined that this action is exempt from the preparation of an Environmental Impact Report pursuant to Section 15101 (Class I Existing Facilities) of the California Environmental Quality Act of 1970.

The applicant stated that this was a new use for the church. The church had decided that it would be in their best interest to provide some form of public education for youngsters in today's society. Therefore, the church was proposing to conduct public education classes in kindergarten through second grade. Their intent is to remodel part of their Sunday School classroom facilities to provide for this type of instructional use. The church has hired teachers who have state certificates to provide for this educational instruction for the students. They propose to commence with the instructional period this fall when school opens.

The subject building is a a single-story structure with a total area of approximately 2,875 square feet. The building is currently being used as a Sunday School facility. All remodeling will be interior and includes the removal and closing of three (3) doors and the removal of two (2) existing partitions to create adequate room for classroom No. 2. The proposed alteration shows three (3) classrooms, a nursery with a crib room, a storage room and an office. Access to the subject site is provided by two drive approaches from Russell Avenue and one from Kerry Street. The existing church site is well kept and has adequate parking and landscaping.

Zoning Administrator Decision No. 870
Conditional Use Permit No. CUP-114-81

In the review of the subject request, it would appear that the applicant has complied with the goals of the City of Garden Grove and Municipal Code Sections 9204 and 9219.4. Said criteria includes consideration of density, parking access, relationship to public facilities, public service requirements and design compatibility.

In consideration of the evidence submitted and after a review of the criteria established for the approval of conditional use permits, it is hereby determined that Conditional Use Permit No. CUP-114-81 should be and is hereby approved subject to the following conditions:

1. Fire extinguishers shall be provided to meet the requirements of the Fire Department.

2. A one-hour wall is required between classroom No. 1 and the forced air unit.

3. A manual pull alarm system is required. Plans shall be submitted to the Fire Department prior to installation.

4. The storage area is to be separated from the rest of the building with a one-hour separation wall.

5. Applicant shall verify that operable wall system does not cut off the required exit from area adjacent to classroom No. 1.

/s/ STEWART O. MILLER
ZONING ADMINISTRATOR

The appeal deadline for the subject case is July 3, 1981.

0146J/437A

Zoning Administrator minute excerpts

June 17, 1981

PUBLIC HEARING - CONDITIONAL USE PERMIT NO. CUP-114-81 - GARDEN GROVE CHRISTIAN CHURCH - SOUTHEAST CORNER OF RUSSELL AVENUE AND KERRY STREET - 9822 RUSSELL AVENUE

The Zoning Administrator announced that the subject application, initiated by the Garden Grove Christian Church requests Conditional Use approval for the conversion and remodeling of an approximately 2,875 square foot existing one-story building to be used as an elementary school facility, located on the church site on an approximately 1.81 acre parcel. The City of Garden Grove has determined that this action is exempt from the preparation of an Environmental Impact Report pursuant to Section 15101 (Class I, Existing Facilities) of the California Environmental Quality Act of 1970.

The Zoning Administrator asked for staff comments. deKoven James, Land Use Analyst, advised that the case had been properly advertised and staff had received no correspondence relative to the application. He then outlined the location of the property and explained that the property is zoned R-1 and is improved with the Garden Grove Christian Church. Existing land uses and zoning in the vicinity of the subject property were discussed.

The Zoning Administrator declared the public hearing on Conditional Use Permit No. CUP-114-81 open. Ron Colbert, 9822 Russell Avenue, Garden Grove, addressed the Zoning Administrator as a representative of the Church and as the Superintendent of the School Board for the Church's school. Ron Colbert noted that there is no kitchen facility for the school's use, but that milk would be provided for the children's sack lunch brought from home. There is a large fellowship hall for the children to dine in.

The Zoning Administor inquired if the State had approved the proposed school.

Ron Colbert stated that the school will consist of three (3) educational levels -- kindergarten, first and second grades -- and the State does not give its approval. If the Church were to operate a day care center, then the State would grant an approval. Ron Colbert noted that the Church plans to use State tests to assure quality education, hold classes from 8:45 a.m., to 2:30 p.m., and have some religious teaching. It was stated that a licensed contractor would perform most of the work, with some church members doing minor work to complete the school for the September opening date.

There being no further testimony, the Zoning Administrator declared the public hearing on Conditional Use Permit No. CUP-114-81 closed.

COMMUNITY DEVELOPMENT

PLANNING DIVISION
STAFF REPORT

AGENDA NO. 2

PUBLIC HEARING OF June 17, 1981

CASE NO. CUP-114-81

APPLICANT Garden Grove Christian Church

SITE LOCATION S/E Corner Russell & Kerry Streets

ADDRESS 9822 Russell Street, Garden Grove, CA 92644

ZONE R-1

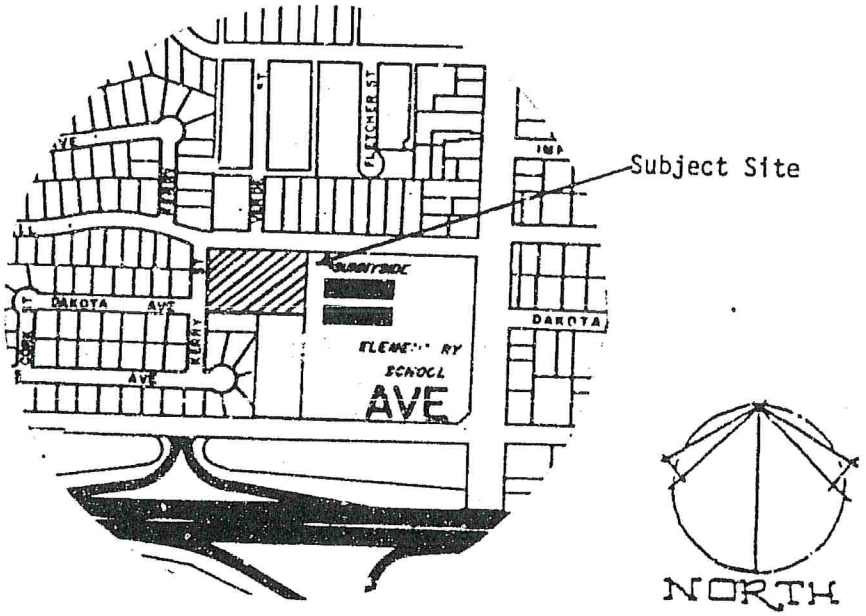
AP NO. 098-081-19

GENERAL PLAN DESIG. LDR

OWNER (same)

CEQA DETERMINATION Exempt

VICINITY MAP



REQUEST the approval of a Conditional Use Permit for the conversion and remodeling of an approximately 2,875 square foot existing one-story building to be used as an elementary school facility, located on the church site on an approximately 1.81 acre parcel. The City of Garden Grove has determined that this action is exempt from the preparation of an Environmental Impact Report pursuant to Section 15101 (Class I Existing Facilities) of the California Environmental Quality Act of 1970.

CITY OF GARDEN GROVE, 11391 ACACIA PARKWAY, GARDEN GROVE, CA 92640

(714) 638-6831

GARDEN GROVE

STAFF REPORT FOR PUBLIC HEARING
CUP-114-81

I. ZONING AND LAND USE INFORMATION:

A. Subject property is zoned R-1 and is improved with the Garden Grove Christian Church.

B. Existing land use and zoning in the vicinity of the subject property are as follows:

1. North: Across Russell Avenue zoned R-2 and improved with multifamily and single family homes.

2. South: Zoned R-1 and improved with single family homes and the Orthodox Presbyterian Church.

3. West: Across Kerry Street zoned R-1 and improved with single family homes.

4. East: Zoned O-S and improved with the Sunnyside Elementary School.

C. General Plan Designation:

The proposed use is in conformance with the existing LDR (Low Density Residential) General Plan Designation and the current R-1 (One Family Residential) zoning.

II. BACKGROUND INFORMATION:

Most of the church buildings were built in 1957. Several minor exterior and interior additions were done a few years later.

III. STAFF COMMENTS:

A. The applicant is requesting the approval of a Conditional Use Permit (CUP) for the conversion and interior remodeling of an existing church building to an elementary school facility. The subject request is submitted in accordance with the requirements of the Garden Grove Municipal Code Section 9204 - "Permitted Uses."

B. The subject building is a single-story structure with a total area of approximately 2,875 square feet. The building is currently being used as a Sunday school facility. All remodeling will be interior and includes the removal and closing of three (3) doors and the removal of two (2) existing partitions to create adequate room for classroom No. 2. The proposed alteration shows three (3) classrooms, a nursery with a crib room, a storage room and an

office. Access to the subject site is provided by two drive approaches from Russell Avenue and one from Kerry Street. The existing church site is well kept and has adequate parking and landscaping.

C. Project Statistics

Item	Provided	Code
Parcel Size	75,821 sq. ft.	43,560 sq. ft.
Parking	137 spaces	120 spaces

D. Recommendation

Staff has reviewed the subject Conditional Use Permit in relationship to the goals of the City of Garden Grove and Municipal Code Section 9204 and 9219.4. Said criteria includes consideration of density, parking access, relation to public facilities, public service requirements and design compatibility. The subject development appears to comply with the aforementioned requirements. Staff recommends approval.

E. If CUP-114-81 is approved, the following conditions are suggested:

1. Fire extinguishers shall be provided to meet the requirements of the Fire Department.
2. A one-hour wall is required between classroom No. 1 and the forced air unit.
3. A manual pull alarm system is required. Plans shall be submitted to the Fire Department prior to installation.
4. The storage area is to be separated from the rest of the building with a one-hour separation wall.
5. Applicant shall verify that operable wall system does not cut off the required exit from area adjacent to classroom No. 1.

0106J/437A
6/10/81

CITY OF GARDEN GROVE
Public Works & Development

BUILDING PERMIT

Inspection Requests 638-6771

General Information 638-6661

P.C. #

OCCUPANCY E1 TYPE VN OCC. LOAD FIRE SPRINK.

USE ZONE R-1		FRONT	LEFT	RIGHT	REAR
FIRE ZONE —	Eav Proj.				
	Setbacks	NO CHANGE			

PLANNING ACTION CUP 114-81 PROVIDED PLANS

LAND USE APPROVED BY [signature] DATE 6-26-81

REMARKS CUP 114-81

G.G. SANT. DIS. FEE REQ'D. | O.C. SANT. DIS. FEE REQ'D. | DATE | INITIAL

	REQ'D	PROVIDED
PARCEL MAP		
R/W DEDICATION		

FEES AND BONDS

	REV. CODE	AMOUNT	
ST. BOND			
WATER BOND	NOT REQ'D		
WATER ASSMT. FEE (ACRG.)			
WATER ASSMT. FEE (FT.)			
PARKWAY TREE FEE			
PARK & REC. FEE (DIST.)			
DRAIN ASSMT. FEE (DIST.)			
PLAN RETENTION FEE			
BLDG. PLAN CHECK	3527	37	18
BLDG. PERMIT FEE	3226	57	87
ISSUANCE	3517	6	—
VALUATION 10,000	TOTAL FEES	101	05

AUTHORIZED BY [signature] DATE 7-13-81

I. INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
ROOF SHTG		
ROUGH FRAME		
INSULATION, ENERGY		
LATH OR DRYWALL		
PLAS. BROWN CT.		
SOUND INSULATION		
SMOKE DETECTOR		
PARKING		
LANDSCAPING		
LAND USE FINAL		
~~FINAL~~ [illegible]		
UTILITY RELEASE		

IDENTIFICATION CODE

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No._____ Expiration Date_____

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

[signature] 7-10-81
PERMIT APPLICANT SIGNATURE DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No._____ and Classification_____ is in full force and effect.

(PRINT) CONTRACTOR (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT DATE

BUSINESS TAX CERTIFICATE NO. EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:

Owner: Section 7044 ☒ Minor work under $100: Section 7048 ☐

Employee working for wages only: Section 7053 ☐

Other: [signature], Agent.

G.G. CHRISTIAN CHURCH 7-13-81
(PRINT) PROPERTY OWNER (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT DATE

For Applicant to Fill in

ADDRESS 9822 RUSSELL ST.

LOT NO. BLK NO. TRACT NO. PERMIT NO.

OWNER G.G. CHRISTIAN CHURCH TEL. NO. 537-4190

MAILING ADDRESS CITY ZIP 9822 RUSSELL ST., G.G. 92644

☐ ARCH ☐ ENGR. NONE

MAILING ADDRESS CITY ZIP

TEL. NO. STATE LIC. NO. & TYPE

VALIDATION

CONTRACTOR ~~A.V.C. CONSTRUCTION~~ OWNER

MAILING ADDRESS CITY ZIP ~~2543 W. CHANTICLEER, ANAHEIM 92804~~

TEL. NO. ~~714-995-8953~~ STATE LIC. NO. ~~333890~~

PRESENT BLDG. USE CLASSROOMS PROPOSED BLDG. USE CLASSROOMS

DESCRIBE WORK TO BE DONE INTERIOR REMODEL

NEW ☐ ADD'N ☐ ALTER. ☒ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) 2800 NO. OF STORIES 1 NO. OF DWELLING UNITS 0

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

A FEE MAY BE CHARGED FOR RE INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

DS-0007-9-79

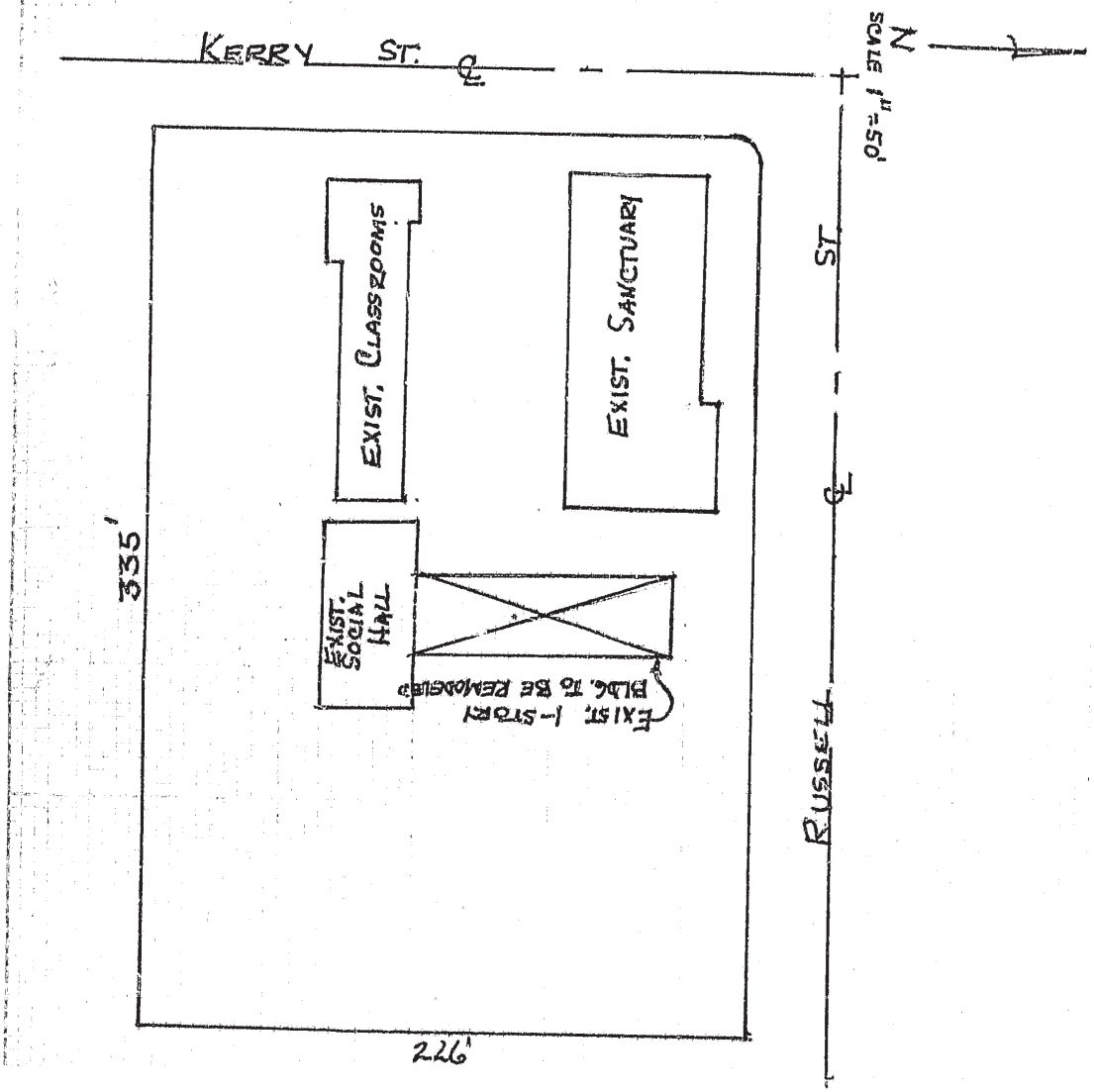
CITY OF GARDEN GROVE

PLOT PLAN

PUBLIC WORKS & DEVELOPMENT

OWNER: GARDEN GROVE CHRISTIAN CHURCH	JOB ADDRESS: 9822 RUSSELL ST., G.G.	PERMIT NO.: 12123/A
NAME OF CONSTRUCTION LENDER & BRANCH: NONE	ASSESSORS PARCEL NO.: 98-081-19 / LOT / BLOCK / TRACT	
ADDRESS / CITY	PLEASE CHECK ONE OR MORE: ☐ New ☐ Addition ☑ Alteration ☐ Repair ☐ Move ☐ Demolish	
	DATE: 7-10-81 / JOB DESCRIPTION: INTERIOR REMODEL	PERMIT VALUE: $10,000

SHOW NORTH ARROW, PROPERTY LINES AND ADJACENT STREETS.



PLOT PLAN APPROVED BY

#1 Building Insp./#2 Assessor/#3 Permittee/#4 File
I certify the information hereon is complete and correct. By Owen Witthaus

D 8-0042 • 3/79

APPENDIX C

Site Record Form Update

(Deleted for Public Review; Bound Separately)

APPENDIX D

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX E

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX F

Confidential Map

(Deleted for Public Review; Bound Separately)

July 1, 2025
J.N.: 3341.00

Mr. Chad Brown
Melia Homes
8951 Research Drive
Irvine, California 92618

Subject: Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California

Dear Mr. Brown,

Albus & Associates, Inc. is pleased to present to you our preliminary geotechnical investigation report for the proposed development at the subject site. This report presents the results of our literature review, subsurface exploration, laboratory testing, and engineering analyses. Conclusions relevant to the feasibility of the proposed site development are also presented herein based on the findings of our work.

We appreciate this opportunity to be of service to you. If you have any questions regarding the contents of this report, please do not hesitate to call.

Sincerely,

ALBUS & ASSOCIATES, INC.

David E. Albus
Principal Engineer

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of our work was to evaluate the feasibility of the proposed site development in order to assist you in your land acquisition evaluation and due-diligence review. The scope of our work for this investigation was focused primarily on the geotechnical issues that we expect could have significant fiscal impacts on future site development. While this report is comprehensive for feasibility purposes, it is not intended for final design purposes. As such, additional geotechnical studies may be warranted based on our review of future rough grading plans and foundation plans. The scope of our work for this investigation included the following:

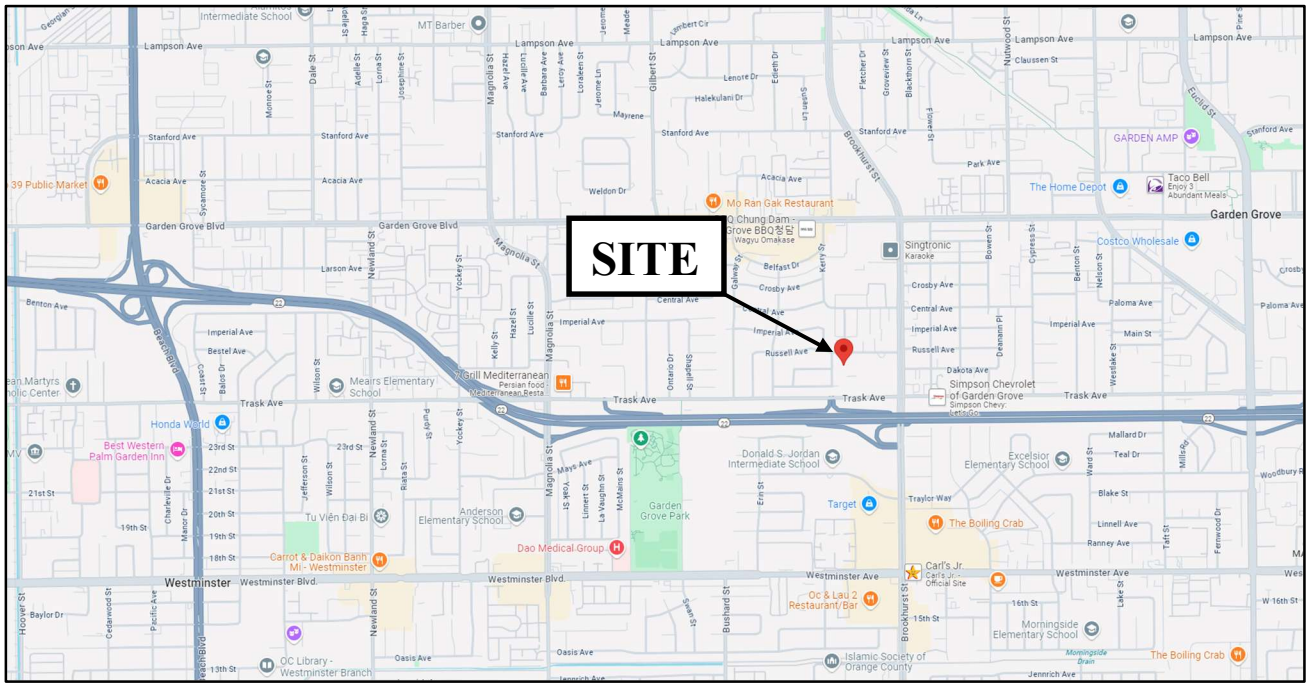
- Review of published geologic and seismic data for the site and surrounding area
- Exploratory drilling and soil sampling
- Laboratory testing of select soil samples
- Engineering analyses of data obtained from our review, exploration, and laboratory testing
- Evaluate site seismicity, liquefaction potential, and settlement potential
- Preparation of this report

1.2 SITE LOCATION AND DESCRIPTION

The property is located at 9822 Russell Avenue within the city of Garden Grove. The site is rectangularly shaped and bordered by Kerry Street to the west, Russel Avenue to the north, residential properties to the south, and Sunnyside Elementary School to the east. The location of the site and its relationship to the surrounding areas are shown on Figure 1, Site Location Map.

The site is currently occupied by a church located within the northwest corner of the site. Additional structures are also present within the northwest portion of the site and appear to be associated with a child day care center. The remainder of the site is covered in asphalt with driveways and parking bays associated with the onsite improvements. Chain link fencing is present along the east and a portion of the south. A masonry block wall is also present along the south property line.

The site is relatively flat with elevations ranging from 70 to 72 feet above Mean Sea Level (based on Google Earth). Drainage is generally directed as sheet flow to either Russell Avenue or to Kerry Street. Site vegetation consists of bushes and moderate sized trees.



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N

FIGURE 1-SITE LOCATION MAP

Proposed Residential Development
9822 Russell Avenue, Garden Grove, California

NOT TO SCALE

1.3 PROPOSED DEVELOPMENT

Review of the conceptual site plan provided suggests the site will be constructed with (26) twenty-six 2-story townhomes at grade within six buildings. Associated interior driveways, parking, underground utilities, and decorative hardscape and landscape areas are also anticipated.

No grading or structural plans were available in preparing this report. However, we anticipate minor cuts and filling of the site will be required to achieve future surface configuration, and we expect future foundation loads will be relatively light.

2.0 INVESTIGATION

2.1 RESEARCH

We have reviewed referenced geologic publications, maps, and historical aerial photos of the vicinity. Data from these sources were utilized for the development of some of our findings and conclusions presented in this report.

A cursory review of the geologic map of Orange County by Morton (1981) in the vicinity of the site suggests the site is underlain by alluvium and colluvium (Qac).

Historical imagery suggests that the site was undeveloped as far back as 1953. By 1963, the site appears to have been developed into its current configuration. The site appears to be relatively unchanged since the date of this proposal.

2.2 SUBSURFACE EXPLORATION

Subsurface exploration for this investigation was completed on June 10, 2025. Three (3) exploratory borings were drilled to depths of approximately 11.5 to 51.5 feet below existing ground surface utilizing a truck-mounted, hollow-stem-auger drill rig. A representative of ***Albus & Associates, Inc.*** logged the exploratory excavation. Visual and tactile identifications were made of the materials encountered, and their descriptions are presented on the Exploration Log in Appendix A.

The CPT soundings were advanced using a 30-ton CPT truck, utilizing an external subcontactor. As the cone is advanced through the soil, direct measurements are obtained and recorded for tip resistance, side resistance and porewater measurements. The relationship between the tip resistance and the side resistance allows for the determination of the general soil type. Following the completion of the CPT soundings, logs are generated that provide a relatively continuous profile of the tip resistance, side resistance, and pore water measurements. Copies of the CPT logs are provided in Appendix A.

Bulk, relatively undisturbed, and Standard Penetration Test (SPT) samples were obtained at selected depths for subsequent laboratory testing. Relatively undisturbed samples were obtained using a 3-inch O.D., 2.5-inch I.D., California split-spoon soil sampler lined with brass rings. SPT samples were obtained using a standard SPT soil sampler. During each sampling interval, the samplers were driven 18 inches with successive drops of a 140-pound automatic hammer falling 30 inches. The number of blows required to advance the sampler was recorded for each six inches of advancement. The total blow count for the lower 12 inches of advancement per soil sample is recorded on the exploration log. Samples were placed in sealed containers or plastic bags and transported to our laboratory for analyses and testing. The borings were backfilled with soil cuttings in a non-compacted state, and asphalt was patched upon completion of drilling.

The approximate locations of the exploratory excavations completed by this firm are shown on the enclosed Geotechnical Map, Plate 1.

2.3 LABORATORY TESTING

Selected samples of representative earth materials from the borings were returned to our laboratory for testing. Tests consisted of USCS classification, in-situ moisture content and dry density, maximum dry density and optimum moisture content, expansion potential, soluble sulfate content, Atterberg limits, consolidation, direct shear, percent passing No. 200 sieve, sieve analysis, and corrosivity testing (pH, chloride, and resistivity). Descriptions of laboratory testing and the test results are presented in Appendix B and on the Exploration Logs in Appendix A.

3.0 SUBSURFACE CONDITIONS

3.1 SUBSOIL CONDITIONS

Artificial fills (Af) were encountered within the upper 2 feet across the site within the areas of our exploration. The fills were predominately sands with silts, damp, and fine- to medium-grained. Site exploration was limited to areas within the existing asphalt due to the existing buildings onsite. We anticipate deeper, localized fills below and surrounding the existing buildings which would have resulted from previous grading activities.

Alluvium (Qal) was encountered below the fills for the maximum depth explored of 51.5 feet. The alluvium consisted of sands with silt, sandy silts, silty sands / sandy silts, and silty sands.

A more detailed description of the interpreted soil profile at each of the boring locations is presented in Appendix A. The stratigraphic descriptions in the logs represent the predominant materials encountered and relatively thin, often discontinuous layers of different material may occur within the major divisions.

3.2 GROUNDWATER

Groundwater was encountered during this firm's subsurface exploration at a depth of 14 feet. The CDMG Special Report 03 suggests that historic high groundwater for the subject site is approximately 13-14 feet.

3.3 FAULTING

Geologic literature and field exploration do not indicate the presence of active faulting within the site. The site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Earthquake Fault Zoning Act. Table 3.1 presents a summary of all the known seismically active faults within 10 miles of the site based on the 2008 National Seismic Hazards Maps.

TABLE 3.1
SUMMARY OF FAULTS

Name	Distance (miles)	Slip Rate (mm/yr.)	Preferred Dip (degrees)	Slip Sense	Rupture Top (km)	Fault Length (km)
San Joaquin hills	5.22	0.5	23	thrust	2	27
Newport-Inglewood, alt 1	6.46	1	88	strike slip	0	65
Newport Inglewood Connected alt 1	6.46	1.3	89	strike slip	0	208
Newport Inglewood Connected alt 2	6.49	1.3	90	strike slip	0	208
Puente Hills (Coyote Hills)	7.25	0.7	26	thrust	2.8	17

4.0 ANALYSES

4.1 SEISMICITY AND SEISMIC DESIGN PARAMETERS

The 2022 CBC requires seismic parameters in accordance with ASCE 7-16. Unless noted otherwise, all section numbers cited in the following refer to the sections in ASCE 7-16.

The site is underlain by soil strata that are susceptible to liquefaction. As such, per item 1 in Section 20.3.1, the project site should be designated Site Class F. However, because the proposed developments are anticipated to have fundamental periods of less than 0.5 seconds, per the same (referenced item) the site is exempted from Site Class F designation. Instead, site class can be designated per Section 20.3. Using weighted average SPT blow count N > 15 (across the upper 100 ft of the soil profile) in Table 20.3-1, Site Class D is assigned. (or: Using weighted average SPT blow count N < 15 (across the upper 100 ft of the soil profile) in Table 20.3-1, Site Class E is assigned.). We used the OSHPD seismic hazard tool to obtain the basic mapped acceleration parameters, including short periods (S_S) and 1-second period (S_1) MCE_R Spectral Response Accelerations. Section 11.4.8 requires site-specific ground hazard analysis for structures on Site Class E with S_S greater than or equal to 1.0 or Site Class D or E with S_1 greater than or equal to 0.2. Based on the mapped values of S_S and S_1 the project site falls within this category, requiring site specific hazard analysis in accordance with Section 21.2.

According to Section 21.2.3 (Supplement 1), the site-specific Risk Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration at any period is the lesser of the probabilistic and the deterministic response accelerations, subject to the exception specified in the same section. The probabilistic response spectrum was developed using the computer program OpenSHA (Field et al., 2013), which implements Method 1 as described on Section 21.2.1.1. Fault Models 3.1 and 3.2 from the Third Uniform California Earthquake Rupture Forecast (UCERF3) were used as the earthquake rupture forecast models for the PSHA. In addition to known fault sources, background seismicity was also included in the PSHA. The ground motion Prediction Equations (GMPEs) selected for use in this analysis are those developed for the Pacific Earthquake Engineering Research Center (PEER) Next

Generation Attenuation (NGA) West 2 project. Four GMPEs - Abrahamson et al. (2014), Boore et al. (2014), Campbell and Bozorgnia (2014), and Chiou and Youngs (2014) were used to perform the analysis.

In accordance with Section 21.2.2 (Supplement 1), the deterministic spectral response acceleration at each period was calculated as the 84th percentile, 5% damped response acceleration, using NGA-West2 GMPE Worksheet. For this, information from at least three causative faults with the greatest contribution per deaggregation analysis were used and the larger acceleration spectrum among these was selected as the deterministic response spectrum. The deterministic spectrum was adjusted per requirements in Section 21.2.2 (Supplement 1) where applicable. Both probabilistic and deterministic spectra were subjected to the maximum direction scale factors specified in Section 21.2 to produce the maximum acceleration spectra.

Design response spectrum was developed by subjecting the site-specific MCE_R response spectrum to the provisions outlined in Section 21.3. This process included comparison with 80% code-based design spectrum determined in accordance with Section 11.4.6. The short period and long period site coefficient (Fa and Fv, respectively) were determined per Section 21.3 in conjunction with Table 11.4-1. Site specific design acceleration parameters (S_{MS}, S_{M1}, S_{DS}, and S_{D1}) were calculated according to Section 21.4.

Per Section 11.2 (definitions on Page 79 of ASCE7-16) for evaluation of liquefaction, lateral spreading, seismic settlements, and other soil-related issues, Maximum Considered Earthquake Geometric Mean (MCE_G) peak ground acceleration PGA_M shall be used. The site-specific PGA_M is calculated per Section 21.5.3, as the lesser of the probabilistic PGA_M (Section 21.5.1) and deterministic PGA_M (Section 21.5.2), but no less than 80% site modified peak ground acceleration, PGA_M, obtained from OSHPD seismic hazard tool. According to Section 21.5.3 of ASCE 7, either mapped or site-specific PGAm may be used for soil related analysis. For this investigation, a mapped PGAm of 0.67 was incorporated into the analysis.

4.2 STATIC SETTLEMENT

Analyses were performed for the potential settlement of the underlying soils encountered during our investigation. The site is predominately granular in nature. As such, analyses of settlement were based on the elastic method using estimated moduli correlated from N_{60} blow counts, as well as consideration from consolidation testing. Two analyses were performed to evaluate settlement of the structures. The first model was based on a conventional shallow strip footing 1.2 feet wide and a wall load of 3,000 plf. The second model was based on a conventional square footing with 3 feet width and a column load of 27 kips. Both models yielded a total settlement of less than 0.5 inches.

4.3 LIQUEFACTION

Engineering research of soil liquefaction potential (Youd, et al., 2001) indicates that generally three basic factors must exist concurrently in order for liquefaction to occur. These factors include:

- A source of ground shaking, such as an earthquake, capable of generating soil mass distortions.
- A relatively loose silty and/or sandy soil.

- A relative shallow groundwater table (within approximately 50 feet below ground surface) or completely saturated soil conditions that will allow positive pore pressure generation.

The liquefaction susceptibility of the onsite subsurface soils was evaluated by analyzing the potential concurrent occurrence of the above-mentioned three basic factors. The liquefaction evaluation for the site was completed under the guidance of Special Publication 117A: Guidelines for Evaluating and Mitigating Seismic Hazards in California (CDMG, 2008).

The liquefaction analyses were based on field and laboratory testing data results from CPT-1 and CPT-2. The liquefaction analyses were performed utilizing the CLiq software by GeoLogismiki which incorporates the methods by NCEER (1998) and Robertson (2009) for the CPT data.

Historic high groundwater was assumed at a depth of 13 feet below the existing ground surface based on our discussion in Section 3.2. Fine-grained soils that do not have a Plasticity Index (PI) less than 12 and field moisture contents greater than 85% of liquid limit (LL) or soils with corrected blow counts greater than 30 per foot were assumed to be not susceptible to liquefaction. Based on our analysis, some layers of granular soils below a depth of 13 feet have factors of safety below 1.3 are prone to liquefaction during the design earthquake event. The results of our liquefaction analyses are presented in Appendix C.

5.0 CONCLUSIONS

5.1 FEASIBILITY OF PROPOSED DEVELOPMENT

From a geotechnical point of view, the proposed site development is considered feasible provided the recommendations presented in this report are incorporated into the design and construction of the project. Furthermore, it is also our opinion that the proposed development will not adversely impact the stability of adjoining properties if grading and construction is performed in accordance with the recommendations presented in this report. Key issues that could have significant impacts on the geotechnical aspects of the proposed site development are discussed in the following sections of this report.

5.2 GEOLOGIC HAZARDS

5.2.1 Ground Rupture

No known active faults are known to project through the subject site, nor do the sites lie within the boundaries of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. The closest known active fault is the San Joaquin hills fault, located approximately 5.22 miles away. Therefore, the potential for ground rupture due to an earthquake beneath the sites is considered low.

5.2.2 Ground Shaking

The site is situated in a seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. The site lies in relatively close proximity to several seismically active faults; therefore, during the life of the proposed structures, the property will probably experience similar moderate to occasionally high ground shaking from these fault zones, as

well as some background shaking from other seismically active areas of the Southern California region. Design and construction in accordance with the current California Building Code (C.B.C.) requirements are anticipated to adequately address potential ground shaking. Potential ground accelerations have been estimated for the site and are presented in Section 4.1 of this report.

5.2.3 Liquefaction

Based on our analyses, liquefaction may occur below the site during periods of strong ground motion. Our analyses indicate liquefaction could lead to a total seismic settlement (saturated and dry) of the ground surface of up to approximately 5.5 inches due to seismic consolidation during liquefaction. Given this condition, differential settlement due to seismic settlement would likely be on the order of half of the total seismic settlement or approximately 2.75 inches over 30 feet or approximately 0.01L.

Based on the State of California Special Publication 117A, hazards from liquefaction should be mitigated to the extent required to reduce seismic risk to "acceptable levels". The acceptable level of risk means, "that level that provides reasonable protection of the public safety" [California Code of Regulations Title 14, Section 3721 (a)]. The use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations, have been proven to adequately provide basal support for similar structures during comparable liquefaction events. Further, ASCE 7-16, Section 12.13.9.2 allows for use of properly designed foundations for mitigation of seismic settlement. Since the estimated differential settlement is less than 0.015L, structural mitigation is permitted. Specific recommendations for mitigation of differential seismic settlement are provided in Section 6.3.

5.3 STATIC SETTLEMENT

Provided the existing near surface soils are removed and recompacted, total and differential static settlement can likely be limited to a maximum of 1 inch and ½-inch over 30 feet, respectively. These estimated magnitudes of static settlements are considered within tolerable limits for the proposed residential structures. Specific recommendations for ground preparation are provided in Section 6.1.4.

5.4 EXCAVATION AND MATERIAL CHARACTERISTICS

Onsite earth materials are anticipated to be relatively easy to excavate with conventional heavy earthmoving equipment. The site earth materials are generally considered suitable for reuse as fill provided they are cleared of deleterious debris and oversized rocks (greater than 4 inches in greatest dimension). If encountered, portions of concrete debris and asphalt can likely be reduced in size (4" minus) and incorporated within fill soils during earthwork operations.

Temporary construction slopes will be required to complete removal of unsuitable soils and for construction of underground utilities. Site materials are typically coarse-grained and may be prone to caving. Such excavations will require laybacks where they are surcharged or where they exceed 4 feet in height. Specific recommendations are provided in Section 6.1.5.

Most of the near-surface soils are below optimum moisture content. As such, the addition of water to these materials will be required during placement and compaction as engineered fills.

5.5 SHRINKAGE AND SUBSIDENCE

Volumetric changes in earth quantities will occur when excavated onsite soil materials are replaced as properly compacted fill. We estimate the existing upper 4 feet of earth materials will shrink up to approximately 8 to 13 percent. The subsidence of removal bottoms is estimated to be on the order of 0.15 feet. The estimates of shrinkage and/or bulkage are intended as an aid for project engineers in determining earthwork quantities. However, these estimates should be used with some caution since they are not absolute values. Contingencies should be made for balancing earthwork quantities based on actual swelling and bulkage that occurs during the grading process.

5.6 SOIL EXPANSION

Based on USCS visual manual classification, the near-surface soils within the site are generally anticipated to possess a **Very Low** expansion potential. Additional testing for soil expansion will be required subsequent to rough grading and prior to construction of foundations and other concrete work to confirm these conditions.

6.0 RECOMMENDATIONS

6.1 EARTHWORK

6.1.1 General Earthwork and Grading Specifications

All earthwork and grading should be performed in accordance with applicable requirements of Cal/OSHA, applicable specifications of the Grading Codes of the City of Garden Grove, California in addition to the recommendations presented herein.

6.1.2 Pre-Grade Meeting and Geotechnical Observation

Prior to commencement of grading, we recommend a meeting be held between the developer, City Inspector, grading contractor, civil engineer, and geotechnical consultant to discuss the proposed grading and construction logistics. We also recommend that a geotechnical consultant be retained to provide soil engineering and engineering geologic services during site grading and foundation construction. This is to observe compliance with the design specifications and recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated. If conditions are encountered that appear to be different than those indicated in this report, the project geotechnical consultant should be notified immediately. Design and construction revisions may be required.

6.1.3 Site Clearing

All existing site improvements, oversized materials, vegetation and other deleterious materials should be removed from the areas to be developed. Existing underground improvements such as utility lines, septic tanks, seepage pits, etc. are also anticipated at the site. If encountered during site development, these improvements should also be completely removed from the site and seepage pits should be properly abandoned in accordance with the requirements established by the governing agencies as well as recommendations made in the field by the project geotechnical consultant.

In general, seepage pits that are open should be cleared of any fluids and then filled with 2-sack cement slurry up to within 5 feet of proposed grades. Any brick lining that remains in the upper 5 feet should be removed and the remainder of the pit filled with engineered fill in accordance with Section 6.1.6. Seepage pits that are presently backfilled with soil should be removed to a depth of 10 feet below pad grade and be capped with 2-sack cement slurry. The slurry cap should be at least 5 feet thick and should extend at least 12 inches outside the perimeter of the seepage pit. The remaining 5 feet should be filled with engineered fill in accordance with Section 6.1.6.

The project geotechnical consultant should be notified at the appropriate times to provide observation services during clearing operations to verify compliance with the above recommendations. Voids created by clearing and excavation should be left open for observation by the geotechnical consultant. Should any unusual soil conditions or subsurface structures be encountered during site clearing or grading that are not described or anticipated herein, these conditions should be brought to the immediate attention of the project geotechnical consultant for corrective recommendations as needed.

Concrete debris generated by site demolition can be reduced to no more than 4 inches in maximum dimension and uniformly incorporated with fill soils during earthwork operations.

6.1.4 Ground Preparation

Within the building pad areas and retaining walls, the existing artificial fills are considered unsuitable for supporting proposed structures and site improvements. Therefore, the upper 2 feet of the existing earth materials should be removed and replaced as engineered compacted fills. In addition to general removal of unsuitable soils, the existing soils should be over-excavated to a minimum depth of 1 foot below the bottom of footings for residential structures and one foot below retaining walls.

Existing soil within roadways and parking areas should be removed to at least 12 inches below the proposed pavement subgrade and replaced with engineered compacted fill.

Removals should extend laterally beyond the limits of the proposed buildings, a distance equal to the depth of removal (i.e. 1:1 projection) but not less than 5 feet. Existing soils below proposed pavement should be removed laterally to at least the edge of the pavement. Where removals are limited by existing structures, protected trees or property lines, special considerations may be required in the construction of affected improvements. Under such conditions, specific recommendations should be provided by this firm.

All removal excavations should be evaluated by the geotechnical consultant during grading to confirm the exposed conditions are as anticipated and to provide supplemental recommendations if required.

The grading contractor should take appropriate measures when excavating adjacent any existing improvements to remain in-place to avoid disturbing or compromising support of existing structures.

Following removals and overexcavation, the exposed grade should first be scarified to a depth of 6 inches, brought to at least the optimum moisture content, and then compacted to at least 90 percent of the laboratory standard (ASTM D 1557).

6.1.5 Temporary Excavations

Temporary construction slopes and trench excavations may be cut vertically up to a height of 4 feet provided that no surcharging of the excavations is present. Temporary excavations greater than 4 feet in height but no more than 10 feet should be laid back to a 1:1 (H:V) or flatter or shored to mitigate the potential for instability. Where temporary excavations expose friable granular soils, the excavation should be laid back to a gradient of 1.5:1 (H:V).

Excavations should not be left open for prolonged periods of time. The project geotechnical consultant should observe all temporary cuts to confirm anticipated conditions and to provide alternate recommendations if conditions dictate. All excavations should conform to the requirements of Cal/OSHA.

The grading contractor should take appropriate measures when excavating adjacent existing improvements to avoid disturbing or compromising support of existing structures.

6.1.6 Fill Placement

Materials excavated from the site may be reused as fill provided they are free of deleterious materials and particles greater than 4 inches in maximum dimension (oversized materials). Asphaltic and concrete debris generated during site demolition or encountered within the existing fill can be incorporated within new fill soils during earthwork operations provided they are reduced to no more than 4 inches in maximum dimension. Such materials should be mixed thoroughly with fill soils to prevent nesting. All fill should be placed in lifts no greater than 8 inches in loose thickness, moisture conditioned to at least 100 percent of the optimum moisture content, then compacted in place to at least 90 percent of the laboratory standard. Each lift should be treated in a similar manner. Subsequent lifts should not be placed until the project geotechnical consultant has approved the preceding lift.

6.1.7 Import Materials

If import materials are required to achieve the proposed finish grades, the import soils should have an Expansion Index (EI) less than 21 (ASTM D 4829) and negligible soluble sulfate content. Import sources should be indicated to the geotechnical consultant at least 3 days prior to hauling the materials to the site so that appropriate testing and evaluation of the fill materials can be performed in advance.

6.2 SITE SPECIFIC SEISMIC DESIGN PARAMETERS

6.2.1 Mapped Seismic Design Parameters

For design of the project in accordance with Chapter 16 of the 2022 CBC, the mapped seismic parameters may be taken as presented in the tables below.

TABLE 6.1
2022 CBC Mapped Seismic Design Parameters

Parameter	Value
Site Class	D
Mapped MCE_R Spectral Response Acceleration, short periods, S_S	1.374
Mapped MCE_R Spectral Response Acceleration, at 1-second period, S_1	0.488
Site Coefficient, F_a	1.0
Site Coefficient, F_v *	1.712
Adjusted MCE_R Spectral Response Acceleration, short periods, S_{MS}	1.374
Adjusted MCE_R Spectral Response Acceleration, at 1-second period, S_{M1} *	1.253
Design Spectral Response Acceleration, short periods, S_{DS}	0.916
Design Spectral Response Acceleration, at 1-second period, S_{D1} *	0.835
Long-Period Transition Period, T_L (sec.)	8
Seismic Design Category for Risk Categories I-IV	II

MCE_R = Risk-Targeted Maximum Considered Earthquake

*According to Section 11.4.8 in ASCE 7-16 and supplement 3, "a ground motion hazard analysis shall be performed in accordance with Section 21.2 for the following structures on Site Class D site with S_1 greater than or equal to 0.2." However, "A ground motion hazard analysis is not required for structures where the value of the parameter S_{M1} determined by Eq. (11.4-2) is increased by 50% for all applications of S_{M1} in the Standard. The resulting value of the parameter S_{D1} determined by Eq. (11.4-4) shall be used for all applications of S_{D1} in this Standard." Should this exception not be met, the site-specific seismic design parameters provided in the next section should be used.

6.2.2 Site-Specific Seismic Design Parameters

In addition to the Code Spectra parameters presented in Table 6.1, we have performed a site-specific ground motion hazard analysis in accordance with Chapter 21 of ASCE 7-16 to obtain site-specific seismic design acceleration parameters, the risk-targeted maximum considered earthquake response spectrum, and the design earthquake response spectrum. The site-specific seismic design parameters are presented below.

TABLE 6.2
2022 CBC Site-Specific Seismic Design Parameters

Parameter	Value
Site Class	D
Site Coefficient, F_a	1.0
Site Coefficient, F_v	2.5
Adjusted MCE Spectral Response Acceleration, short periods, S_{MS}	1.683
Adjusted MCE Spectral Response Acceleration, at 1-second period, S_{M1}	1.488
Design Spectral Response Acceleration, short periods, S_{DS}	1.122
Design Spectral Response Acceleration, at 1-second period, S_{D1}	0.992

MCE = Maximum Considered Earthquake

6.3 FOUNDATION DESIGN

6.3.1 General

The following design parameters are provided to assist the project structural engineer to design foundation systems to support the proposed structures at the site. Recommendations for design of other foundation systems will be provided upon request. These design parameters are based on typical site materials encountered during subsurface exploration and are provided for preliminary design and estimating purposes. Depending on actual materials encountered during site grading and actual foundation loads, the design parameters presented herein may require modification.

The site is subject to the adverse effects of liquefaction. The site may be subject to seismic settlement that will require additional mitigation through design considerations in the foundation and slab on grade systems. We assume the foundation system will consist of either shallow foundations that are tied together with grade beams or a post-tension slab system. Therefore, the provision of ASCE 7-16, Section 12.13.9.2 should be incorporated into the design in addition to other recommendations provided below. Where the requirements of ASCE 7-16 are greater, the provisions of ASCE 7-16 should govern.

6.3.2 Soil Expansion

The recommendations presented herein are based on soils with a **Very Low** expansion potential (EI < 21). Following site grading, additional testing of site soils should be performed by the project geotechnical consultant to confirm the basis of these recommendations. If site soils with higher expansion potentials are encountered or imported to the site, the recommendations contained herein may require modification.

6.3.3 Settlement

Under normal static conditions, the foundation system should be designed to tolerate a total settlement of 1 inch and a differential settlement of ½-inch over 30 feet. The foundations should also be designed for total and differential seismic settlement of 5.5 inches and 2.75 inches over 30 feet, respectively. Requirements for conventional shallow footings should incorporate the requirements of Section 12.13.9 of ASCE 7-16. The PTI design parameters presented in Section 6.3.7 incorporate the estimated seismic settlements.

6.3.4 Allowable Bearing Value

Provided site grading is performed as recommended herein, a bearing value of 2,000 pounds per square foot (psf) may be used for continuous beams or isolated pad footings. The bearing value is based on beams having a minimum width of 12 inches and founded at a minimum of 12 inches below the lowest adjacent grade. The above value may be increased by 250 psf and 1000 psf for each additional foot in width and depth, respectively, up to a maximum value of 3,000 psf. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for wind and seismic forces.

6.3.5 Lateral Resistance

Provided site grading is performed in accordance with the recommendations provided by the project geotechnical consultant, a passive earth pressure of 330 pounds per square foot per foot of depth up to

a maximum value of 1,000 pounds per square foot may be used to determine lateral bearing for beams. This value may be increased by one-third when designing for wind and seismic forces. A coefficient of friction of 0.37 may also be used between concrete and the supporting soils to determine lateral sliding resistance. No increase in the coefficient of friction should be used when designing for wind and seismic forces. Where lateral removals cannot be performed beyond the foundation, the passive resistance values should be decreased by 25% such as for design of property line walls.

The above values are based on foundations placed directly against compacted fill. In the case where footing sides are formed, all backfill against the foundations should be compacted to at least 90 percent of the laboratory standard.

6.3.6 Shallow Footings and Slabs on Grade

Exterior and interior building footings should be founded at a minimum depth of 12 inches and 12 inches, respectively, below the lowest adjacent grade. All continuous footings should be reinforced with a minimum of two No. 4 bars, one top and one bottom. The structural engineer may require different reinforcement and should dictate if greater than the recommendations provided herein.

Interior isolated pad footings should be a minimum of 24 inches square and founded at minimum depths of 12 inches below the lowest adjacent final grade. Exterior isolated pad footings intended for support of patio covers or similar construction should be a minimum of 24 inches square and founded at a minimum depth of 12 inches below the lowest adjacent final grade. Isolated footings should be tied to nearby continuous footings in both directions with grade beams in accordance with the requirements of ASCE 7-16, Section 12.13.9.

Interior concrete slabs constructed on grade should be a minimum 4 inches thick and should be reinforced with a minimum of No. 3 bars spaced 30 inches on center, each way. Care should be taken to ensure the placement of reinforcement at mid-slab height. The structural engineer may recommend a greater slab thickness and reinforcement based on proposed use and loading conditions and such recommendations should govern if greater than the recommendations presented herein. Reinforcement and stiffening beams should be provided as required by ASCE 7-16, Section 12.13.9 for effects of liquefaction settlement.

Concrete floor slabs in areas to receive carpet, tile, or other moisture sensitive coverings should be underlain with a minimum of 10-mil moisture vapor retarder conforming to ASTM E 1745-11, Class A. The membrane should be properly lapped, sealed, and underlain with at least 2 inches of sand having a SE no less than 30. One inch of this sand may be placed over the membrane to aid in the curing of the concrete. This vapor retarder system is anticipated to be suitable for most flooring finishes that can accommodate some vapor emissions. However, this system may emit more than 4 pounds of water per 1000 sq. ft. and therefore, may not be suitable for all flooring finishes. Additional steps should be taken if such vapor emission levels are too high for anticipated flooring finishes.

Special consideration should be given to slabs in areas to receive ceramic tile or other rigid, crack-sensitive floor coverings. Design and construction of such areas should mitigate hairline cracking as recommended by the structural engineer.

6.3.7 Post-Tensioned Slab on Grade

Due to potential seismic settlement, the proposed structures may be supported by a post-tension slab. Perimeter edge beams for the post-tensioned slabs should have a minimum effective width of 12 inches and be founded at a minimum depth of 12 inches below the lowest adjacent final ground surface. Interior beams may be founded at a minimum depth of 12 inches below the tops of the finish floor slabs. Where a post-tensioned mat is utilized, the exterior edge of the mat should be embedded at least 8 inches below the lowest adjacent grade. The thickness of the floor slab/mat should be determined by the project structural engineer; however, we recommend a minimum slab thickness of 5.0 inches.

Design of the mat may be based on a modulus of subgrade reaction (Kv1) of 125 pounds per cubic inch (pci). The modulus is based on an effective loading area of 1 foot by 1 foot. The modulus may be adjusted for other effective loading areas using the equation provided below.

$K_b(pci) = Kv1\left\{\frac{b+1}{2b}\right\}^2$; where "b" is the effective width of loading (minimum dimension) in feet.

Concrete floor slabs in areas to receive carpet, tile, or other moisture sensitive coverings should be underlain with a minimum of 10-mil moisture vapor retarder conforming to ASTM E 1745, Class A. The membrane should be properly lapped, sealed, and underlain within a layer of sand at least 2 inches thick. One inch of sand may be placed over the membrane to aid in the curing of the concrete. The sand should have a SE no less than 30. This vapor retarder system is anticipated to be suitable for most flooring finishes that can accommodate some vapor emissions. However, this system may emit more than 4 pounds of water per 1000 sq. ft. and therefore, may not be suitable for all flooring finishes. Additional steps should be taken if such vapor emission levels are too high for anticipated flooring finishes. If a post tension mat is used and is at least 8 inches in thickness, sand below the slab may be omitted.

Prior to placing concrete, subgrade soils below slab-on-grade/mat areas should be thoroughly moistened to provide moisture contents at least 120 percent of the optimum moisture content to a depth of 12 inches.

Based on the guidelines provided in the "Design of Post-Tensioned Slabs-on-Ground" 3rd Edition by Post-Tensioning Institute, the em and ym values are summarized in Table 6.3. These values already consider differential settlement from liquefiable soils.

TABLE 6.3
PTI Design Parameters

Parameter	Value
Edge Lift Moisture Variation Distance, e_m	5.1 feet
Edge Lift, y_m	1.66 inches
Center Lift Moisture Variation Distance, e_m	9.0 feet
Center Lift, y_m	1.10 inches

6.3.8 Foundation Observations

Foundation excavations should be observed by the project geotechnical consultant to verify that they have been excavated into competent bearing soils and to the minimum embedment recommended above. These observations should be performed prior to placement of forms or reinforcement. The excavations should be trimmed neat, level and square. Loose, sloughed or moisture-softened materials and debris should be removed prior to placing concrete.

6.4 RETAINING AND SCREENING WALLS

6.4.1 General

The following preliminary design and construction recommendations are provided for general retaining and screen walls. Final wall designs specific to site development should be provided to the project geotechnical consultant for review once completed. The structural engineer and architect should provide appropriate recommendations for sealing at all joints and applying moisture-proofing material on the back of the walls.

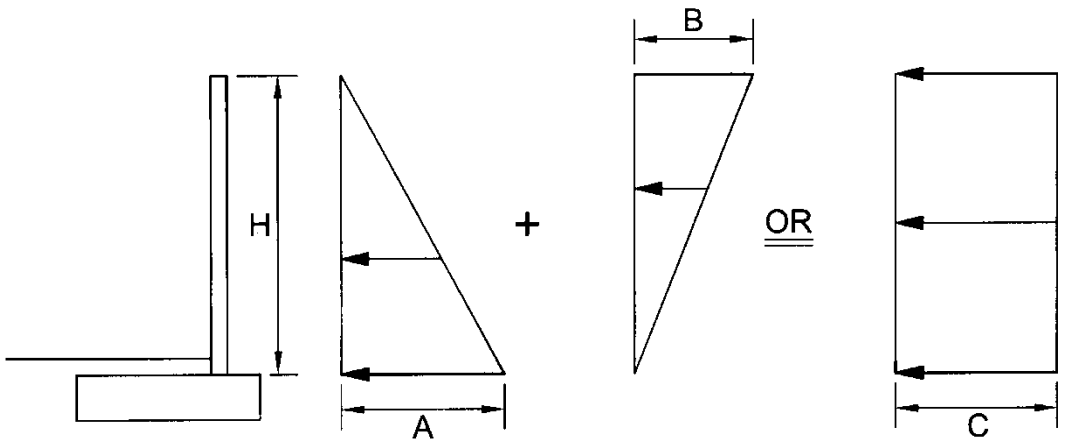
6.4.2 Allowable Bearing Value and Lateral Resistance

Design of retaining and screen walls may utilize the bearing and lateral resistance values provided in Section 6.3.4 and 6.3.5. The passive earth pressure for walls along property lines, where lateral removals are likely restricted, should be reduced by 25%.

6.4.3 Earth Pressures

Static and seismic earth pressures for level and 2:1 (H:V) backfill conditions are provided in Table 6.4. Seismic earth pressures provided herein are based on the method provided by Seed & Whitman (1970) using a peak ground acceleration (PGA) of 0.39 g for 10% probability of exceedance in 50 years. As indicated in Section 1807.2.2of the 2022 CBC, retaining walls supporting 6 feet of backfill or less are not required to be designed for seismic earth pressures. The values provided in the following table do not consider hydrostatic pressure. Retaining walls should also be designed to support adjacent surcharge loads imposed by other nearby footings or traffic loads in addition to the earth pressure.

TABLE 6.4
SEISMIC EARTH PRESSURES
Pressure Diagram



Earth Pressure Values
Walls Up to 10 Feet in Height

Value	Backfill Condition	
	Level	2H:1V Slope
A	33H	54H
B	12H	12H
C	22H	33H

Note:
H is in feet and resulting pressure is in psf. Design may utilize either the sum of the static component and the seismic component force diagrams or the total force diagram above. SEAOSC has suggested using a load factor of 1.7 for the static component and 1.0 for the seismic component. The actual load factors should be determined by the structural engineer.

6.4.4 Drainage and Moisture-Proofing

Retaining walls should be constructed with a perforated pipe and gravel subdrain to prevent entrapment of water in the backfill. The perforated pipe should consist of 4-inch-diameter, ABS SDR-35 or PVC Schedule 40 with the perforations laid down. The pipe should be embedded in ¾- to 1½-inch open-graded gravel wrapped in filter fabric. The gravel should be at least one foot wide and extend at least one foot up the wall above the footing and drainage outlet. Drainage gravel and piping should not be placed below outlets and weepholes. Filter fabric should consist of Mirafi 140N, or equal. Outlet pipes should be directed to positive drainage devices.

The use of weepholes may be considered in locations where aesthetic issues from potential nuisance water are not a concern. Weepholes should be 2 inches in diameter and provided at least every 6 feet on center. Where weepholes are used, perforated pipes may be omitted from the gravel subdrain.

Retaining walls supporting backfill should also be coated with a moisture-proofing compound or covered with such material to inhibit infiltration of moisture through the walls. Moisture-proofing material should cover any portion of the back of the wall that will be in contact with soil and should lap over and onto the top of the footing. A drainage panel should be provided between the soil backfill and water proofing. The panel should extend from the top of the backdrain gravel up to within 12 inches of finish grade. The top of footing should be finished smoothly with a trowel to inhibit the infiltration of water through the wall. The project structural engineer should provide specific recommendations for moisture-proofing, water stops, and joint details.

6.4.5 Footing Reinforcement

All continuous footings should be reinforced with a minimum of four No. 4 bars, two top and two bottom. The structural engineer may require different reinforcement and should dictate if greater than the recommendations provided herein. Where recommended removals are limited due to space restrictions, greater reinforcement may be warranted. Such specific recommendations should be provided by our firm during grading as-built conditions observed in the field.

6.4.6 Wall Jointing

All free-standing, exterior site walls should be provided with cold joints through the masonry block section at horizontal spacing generally not exceeding 40 feet. The joints should not extend through the footing. Retaining walls that are integral to the building should be provided joints based on recommendations by the structural engineer.

6.4.7 Footing Observations

Footing excavations should be observed by the project geotechnical consultant to verify that they have been excavated into competent bearing soils and to the minimum embedment recommended herein. These observations should be performed prior to placement of forms or reinforcement. The excavations should be trimmed neat, level, and square. Loose, sloughed or moisture-softened materials and debris should be removed prior to placing concrete.

6.4.8 Wall Backfill

Onsite soils may be used for backfill behind retaining walls. The project geotechnical consultant should approve the backfill used for retaining walls. Wall backfill should be thoroughly moistened to provide moisture contents slightly over optimum moisture content; placed in lifts no greater than 12 inches in thickness, and then mechanically compacted with appropriate equipment to at least 90 percent of the laboratory standard. Hand-operated compaction equipment should be used to compact the backfill placed immediately adjacent to the wall to avoid damage to the wall.

6.5 EXTERIOR FLATWORK

Concrete sidewalks, patios, and similar flatwork should be a nominal 4 inches thick and provided with saw cuts or expansion joints at spacing no greater than 10 feet in each direction. Special jointing detail should be provided in areas of block-outs, notches, or other irregularities to avoid cracking at points of high stress. Subgrade soils below flatwork should be thoroughly moistened to a moisture content of at least 100 percent of optimum to a depth of 12 inches. Moistening should be accomplished by lightly spraying the area over a period of a few days just prior to pouring concrete.

Drainage from flatwork areas should be directed to local area drains and/or other appropriate collection devices designed to carry runoff water to the street or other approved drainage structures. The concrete flatwork should also be sloped at a minimum gradient of 0.5% away from building foundations and masonry walls.

6.6 CONCRETE MIX DESIGN AND CORROSION

Laboratory testing of existing near-surface soils for soluble sulfate content indicates soluble sulfate concentration less than 0.15%. We recommend following the procedures provided in ACI 318, Section 4.3, Table 4.3.1 for **negligible** sulfate exposure. Upon completion of rough grading, an evaluation of as-graded conditions and further laboratory testing should be completed for the site to confirm or modify the recommendations provided in this section.

Laboratory testing of onsite soil indicates a minimum resistivity of 4,700 ohm-cm, chloride content of 25 ppm, and a pH of 8.3. Based on laboratory test results, site soils are **Moderately Corrosive** to metals. Structures fabricated from metals should have appropriate corrosion protection if they are in direct contact with site soils. Under such conditions, a corrosion specialist should provide specific recommendations.

6.7 POST GRADING CONSIDERATIONS

6.7.1 Site Drainage and Irrigation

Positive drainage devices, such as sloping concrete flatwork, graded swales or area drains, should be provided around the new construction to collect and direct all surface water to suitable discharge areas. In general, the site should be graded to conform to the requirements of Section 1804.4 of the 2022 California Building Code. However, the slope of the ground surface may be reduced to a maximum of 2% based on soils and environmental conditions of the site. No rain or excess water should be directed toward or allowed to pond against structures such as walls, foundations, flatwork, etc.

Excessive irrigation water can be detrimental to the performance of the proposed site development. Water applied in excess of the needs of vegetation will tend to percolate into the ground. Such percolation can lead to nuisance seepage and shallow perched groundwater. Seepage can form on slope faces, on the faces of retaining walls, in streets, or other low-lying areas. These conditions could lead to adverse effects such as the formation of stagnant water that breeds insects, distress or damage of trees, surface erosion, slope instability, discoloration and salt buildup on wall faces, and premature failure of pavement. Excessive watering can also lead to elevated vapor emissions within buildings that can damage flooring finishes or lead to mold growth inside the home.

Key factors that can help mitigate the potential for adverse effects of overwatering include the judicious use of water for irrigation, use of irrigation systems that are appropriate for the type of vegetation and geometric configuration of the planted area, the use of soil amendments to enhance moisture retention, use of low-water demand vegetation, regular use of appropriate fertilizers, and seasonal adjustments of irrigation systems to match the water requirements of vegetation. Specific recommendations should be provided by a landscape architect or other knowledgeable professional.

6.7.2 Utility Trenches

Trench excavations should be constructed in accordance with the recommendations contained in Section 6.1.5 of this report. Trench excavations must also conform to the requirements of Cal/OSHA.

Trench backfill materials and compaction criteria should conform to the requirements of the local municipalities. As a minimum, utility trench backfill should be compacted to at least 90 percent of the laboratory standard. Trench backfill should be brought to moisture content slightly over optimum, placed in lifts no greater than 12 inches in thickness, and then mechanically compacted with appropriate equipment to at least 90 percent of the laboratory standard. The project geotechnical consultant should perform density testing, along with probing, to test compaction. Jetting should not be completed without prior approval from the project geotechnical consultant.

Within shallow trenches (less than 18 inches deep) where pipes may be damaged by heavy compaction equipment, imported clean sand having a SE of 30 or greater may be utilized. The sand should be placed in the trench, thoroughly watered, and then compacted with a vibratory compactor. For utility trenches located below a 1:1 (H:V) plane projecting downward from the outside edge of the adjacent footing base or crossing footing trenches, concrete or slurry should be used as trench backfill.

6.8 PRELIMINARY PAVEMENT DESIGN

6.8.1 Preliminary Structural Sections

Based on the soil conditions present at the site and estimated traffic indices, preliminary pavement sections are provided in Table 6.5 below. A preliminary "R-value" of 25 was used for the near-surface soil in this preliminary pavement design. The sections provided below are for planning purposes only and should be re-evaluated subsequent to site grading. Final pavement sections should be based on actual R-value testing of in-place soils and analysis of anticipated traffic. It should be noted that the preliminary paving sections provided below are considered suitable for support of a 94,000 pound fire apparatus.

TABLE 6.5
PRELIMINARY PAVEMENT STRUCTURAL SECTIONS
FOR RESIDENTIAL DEVELOPMENT

Location	Traffic Index	AC (inches)	Paver Thickness (mm)	Portland Cement Concrete (inches)	AB (inches)
Driveway	5.0	3.0 4.0	--	--	7.0 4.0
		--	80	--	8.0
		--	--	6.0	--
Parking Stalls	--	3.0	--	---	4.0

6.8.1 Subgrade Preparation

Prior to placement of pavement elements, subgrade soils should be moisture-conditioned to at least 110 percent of the optimum moisture content then compacted to at least 90 percent of the laboratory determined maximum dry density. Areas observed to pump or yield under vehicle traffic should be removed and replaced with firm and unyielding compacted soil or aggregate base materials.

6.8.2 Aggregate Base

Aggregate base should be moisture conditioned to slightly over the optimum moisture content, placed in lifts no greater than 6 inches in thickness, then compacted to at least 95 percent of the laboratory standard (ASTM D 1557). Aggregate base materials should be Class 2 Aggregate Base conforming to Section 26-1 of the latest edition of the Caltrans Standard Specifications, Crushed Aggregate Base conforming to Section 200-2.2 of the latest edition of the Standard Specifications for Public Works Construction (Greenbook) or Crushed Miscellaneous Base conforming to Section 200-2.4 of the Greenbook.

6.8.3 Asphaltic Concrete

Paving asphalt should be PG 64-10. Asphaltic concrete materials should conform to Section 203-6 of the Greenbook and construction should conform to Section 302 of the Greenbook. Where traffic will traverse over cold joints in asphaltic concrete such as against concrete ribbon gutters and concrete paver sections, the asphaltic concrete section should be thickened by 1 additional inch from the values indicated in the above Table 6.5 within 2 feet of cold joints.

6.8.4 Concrete Pavers

Concrete pavers should conform to the requirements of ASTM C 936. Construction of the pavers, including bedding sand, should follow manufacturer's specifications. Typical thickness of bedding sand is about 1 inch. The gradation of bedding sand should meet the requirement in Table 6.6.

TABLE 6.6
Gradation for Sand Bedding

Sieve Size	Percent Passing
⅜"	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	0 - 1

Construction of edge restraints should also follow manufacturer's specifications. As a minimum, restraints should be provided along the perimeter of concrete pavers and where there is a change in the paving materials. The proposed concrete bands should extend to the bottom of the base course underlying the concrete pavers. Portland cement concrete used to construct concrete bands should conform to Section 201 of the Greenbook and should have a minimum compressive strength of 2,500 pounds per square inch (psi) at 28 days. Reinforcement and jointing of concrete pavement sections should be designed according to the minimum recommendations provided by the Portland Cement Association (PCA). For rigid pavement, transverse and longitudinal contraction joints should be provided at spacing no greater than 15 feet. Score joints may be constructed by saw cutting to a depth of ¼ of the slab thickness. Expansion/cold joints may be used in lieu of score joints. However, cold joints should be provided with dowels or keyways are recommended by PCA.

6.8.5 Portland Cement Concrete (PCC)

Portland cement concrete used to construct concrete paving should conform to Section 201 of the Greenbook and should have a minimum compressive strength of 3,000 pounds per square inch (psi) at 28 days. Reinforcement and jointing of concrete pavement sections should be designed according to the minimum recommendations provided by the Portland Cement Association (PCA). For rigid pavement, transverse and longitudinal contraction joints should be provided at spacing no greater than 15 feet. Score joints may be constructed by saw cutting to a depth of ¼ of the slab thickness. Expansion/cold joints may be used in lieu of score joints. Such joints should be properly sealed. Where traffic will traverse over cold joints or edges of concrete paving, the edges should be thickened by 20% of the design thickness toward the edge over a horizontal distance of 5 feet.

Trash pickup areas should be provided with a concrete slab where the bins will be picked up and extend at least 3 feet past the front wheel landing areas. The slab should be at least 8 inches thick and be reinforced with No. 4 bars spaced at 24 inches on centers, both ways. The slabs should be provided transverse and longitudinal joints spacing as specified above. Dowels or a keyway should be provided at all cold joints.

6.9 PLAN REVIEW AND CONSTRUCTION SERVICES

We recommend ***Albus & Associates, Inc.*** be engaged to review any future development plans, including revisions to the grading plans, foundation plans and proposed structural loads, prior to construction. This is to verify that the assumptions of this report are valid and that the preliminary conclusions and recommendations contained in this report have been properly interpreted and are incorporated into the project plans and specifications. If we are not provided the opportunity to review these documents, we take no responsibility for misinterpretation of our preliminary conclusions and recommendations.

We recommend that a geotechnical consultant be retained to provide soil engineering services during construction of the project. These services are to observe compliance with the design, specifications or recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

If the project plans change significantly from the assumed development described herein, the project geotechnical consultant should review our preliminary design recommendations and their applicability to the revised construction. If conditions are encountered during construction that appear to be different than those indicated in this report or subsequent design reports, the project geotechnical consultant should be notified immediately. Design and construction revisions may be required.

7.0 LIMITATIONS

This report is based on the proposed development and geotechnical data as described herein. The materials described herein and in other literature are believed representative of the total project area, and the conclusions contained in this report are presented on that basis. However, soil materials can vary in characteristics between points of exploration, both laterally and vertically, and those variations could affect the conclusions and recommendations contained herein. As such, observation and testing by a geotechnical consultant prior to and during the grading and construction phases of the project are essential to confirming the basis of this report.

This report summarizes several geotechnical topics that should be beneficial for project planning and budgetary evaluations. The information presented herein is intended only for a preliminary feasibility evaluation and is not intended to satisfy the requirements of a site specific and detailed geotechnical investigation required for further planning and permitting.

This report has been prepared consistent with that level of care being provided by other professionals providing similar services at the same locale and time period. The contents of this report are professional opinions and as such, are not to be considered a guaranty or warranty.

This report should be reviewed and updated after a period of one year or if the site ownership or project concept changes from that described herein.

This report has been prepared for the exclusive use of **Melia Homes** to assist the project consultants in determining the feasibility of the proposed development. This report has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes.

Respectfully submitted,

ALBUS & ASSOCIATES, INC

Daniel Albus
Project Engineer

Reviewed by:

Hai D. Nguyen
Associate Engineer
RCE 82460



REFERENCES

Report and Publications

American Society of Civil Engineers, 2017, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, ASCE 7-16.

California Department of Conservation, Division of Mines and Geology, 1997, "Seismic Hazard Zone Report for the Anaheim and Newport Beach 7.5-Minute Quadrangles, Orange County, California", Seismic Hazard Zone Report 03.

California Department of Conservation, Division of Mines and Geology (CDMG), 2008, "Guidelines for Evaluating and Mitigating Seismic Hazards in California," Special Publication 117A.

California Geological Survey, 1998, "Earthquake Zones of Required Investigation, Anaheim Quadrangle," Official Map Released: April 15, 1998, Scale 1:24,000.

Field, E.H., Biasi, G.P., Bird, P., Dawson, T.E., Felzer, K.R., Jackson, D.D., Johnson, K.M., Jordan, T.H., Madden, C., Michael, A.J., Milner, K.R., Page, M.T., Parsons, T., Powers, P.M., Shaw, B.E., Thatcher, W.R., Weldon, R.J., II, and Zeng, Y., 2013, Uniform California earthquake rupture forecast, version 3 (UCERF3)—The time-independent model: U.S. Geological Survey Open-File Report 2013–1165, 97 p., California Geological Survey Special Report 228, and Southern California Earthquake Center Publication 1792, http://pubs.usgs.gov/of/2013/1165/.

Field, E.H., T.H. Jordan, and C.A. Cornell (2003), OpenSHA: A Developing Community-Modeling Environment for Seismic Hazard Analysis, Seismological Research Letters, 74, no. 4, p. 406-419.

Ishihara, K., and Yoshimine, M., 1992, "Evaluation of Settlements in Sand Deposits Following Liquefaction During Earthquakes," Soils and Foundations, Vol. 32, No. 1.

Morton, P.K. and Miller, R.V., 1981, **Geologic map of Orange County, California, showing mines and mineral deposits**, California Division of Mines and Geology, Bulletin B-204, 1:48,000.

NCEER, 1997, "Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils," Technical Report NCEER-97-0022.

Robertson, P.K. (2009). "Performance based earthquake design using the CPT." Proc., IS Tokyo Conference, CRC Press/Balkema, Taylor & Francis Group, Tokyo.

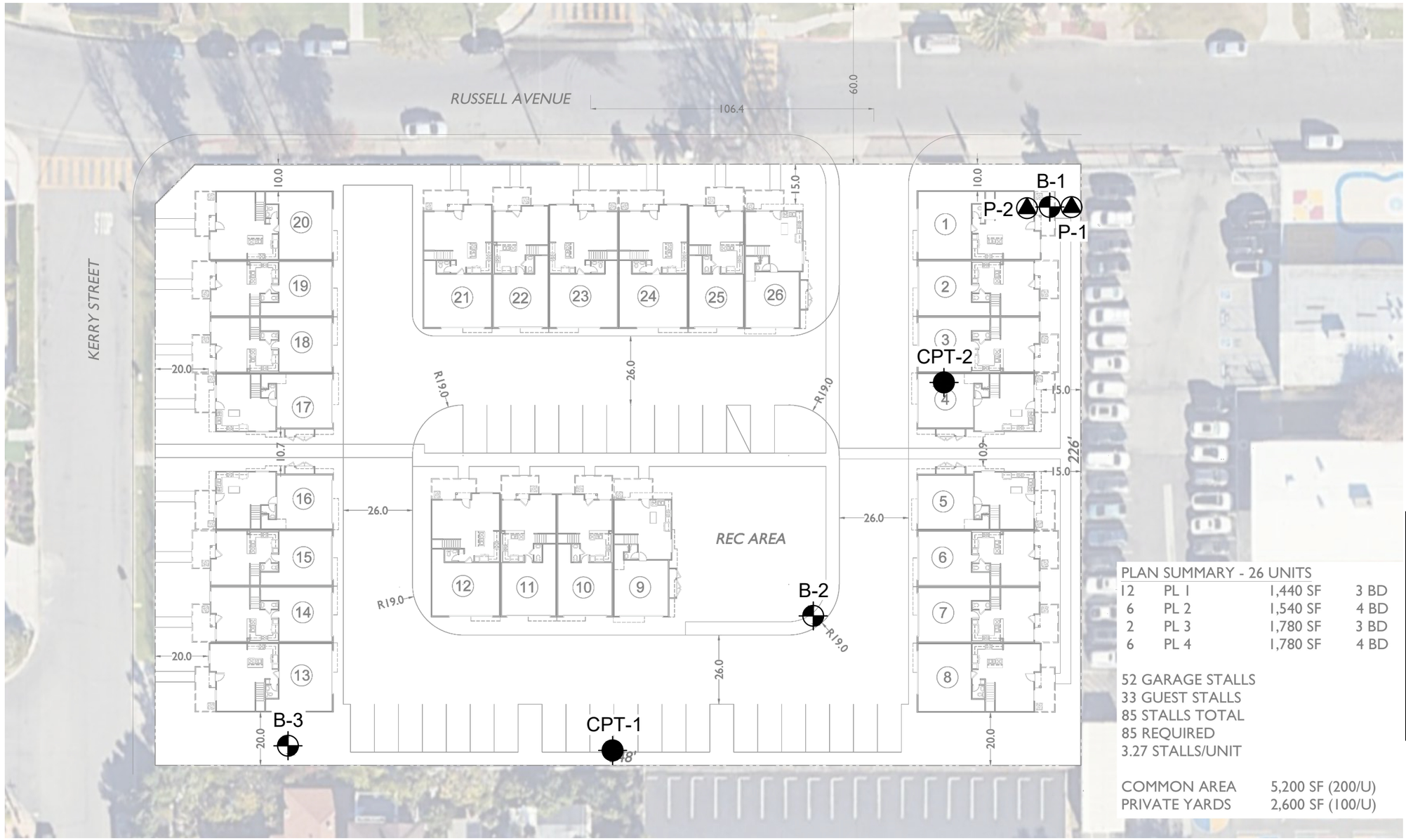
Seed, H.B. and Whitman, R.V., 1970, "Design of Earth Retaining Structures for Dynamic Loads," ASCE Specialty Conference, Lateral Stresses in the Ground and Design of Earth Retaining Structures, Cornell Univ., Ithaca, New York, 103-147.

Southern California Earthquake Center (SCEC), 1999, "Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazards in California," University of Southern California, March 1999.

Tokimatsu, K. & Seed, H.B., 1987, "Evaluation of Settlement in Sands Due to Earthquake Shaking," Journal of Geotechnical Engineering, ASCE 113 (8): 861-878.

U.S. Geologic Survey (USGS), 2004, "Preliminary Digital Geological Map of the 30' X 60' Santa Ana Quadrangle, southern California, version 2.0," Open-File Report 99-172.

Youd, T.L., Idriss, I.M., Andrus, R.D., Arango, I., Castro, G., Christian, J., Dobry, R., Finn, W.D.L., Harder, L.F., Hynes, M.E., Ishihara, K., Koester, J.P., Liao, S.S.C., Marcuson, W.F., Martin, G.R., Mitchell, J.K., Moriwaki, Y., Power, M.S., Robertson, P.K., Seed, R.B., and Stokoe, K.H. 2001. "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils." Journal of Geotechnical and Geoenvironmental Engineering, 127 (10): 817-833.



0 20 40 80

APPROX SCALE : 1" = 40'

EXPLANATION

(Locations Approximate)

- Exploratory Boring
- Percolation Testing
- CPT

PLAN SUMMARY - 26 UNITS

12	PL 1	1,440 SF	3 BD
6	PL 2	1,540 SF	4 BD
2	PL 3	1,780 SF	3 BD
6	PL 4	1,780 SF	4 BD

52 GARAGE STALLS
33 GUEST STALLS
85 STALLS TOTAL
85 REQUIRED
3.27 STALLS/UNIT

COMMON AREA	5,200 SF (200/U)
PRIVATE YARDS	2,600 SF (100/U)

© Google 2025

Base Provided By Summa Architecture

ALBUS ASSOCIATES

GEOTECHNICAL MAP

Job No.: 3341.00 | Date: 06/18/2025 | Plate: 1

APPENDIX A

EXPLORATION LOGS

Field Identification Sheet

Light gray

Gray

Dark gray

Gray Brown

Light brown

Brown

Dark Brown

Olive brown

Olive

Yellow

Yellowish brown

Yellowish red

Red

Reddish Brown

Tan

Description Order:

Description, Color, Moisture, Density, Grain Size, Additional Description

Description	%	Example
	0-5	Sand
trace	5-15	Sand trace Silt
with	15-30	Sand with Silt
	30+	Silty Sand

More Examples

Sand with Silt trace Clay

Sand trace Silt and Clay

Sand with Silt and Clay

Gravelly Sand with Silt trace Clay

Silty Clay with Sand trace Gravel

Moisture

Dry	absence of water
Damp	below optimum
Moist	near optimum
Very Moist	above optimum
Wet	free water visible

Density (Navfac)

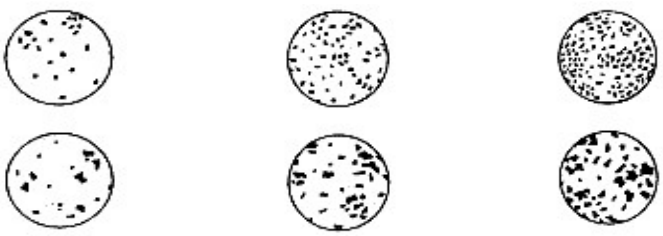
Coarse grained soils	SPT	CA
Very Loose	0-3	0-5
Loose	3-8	5-13
Medium Dense	8-14	13-22
Dense	14-25	22-40
Very Dense	25>	40>
Fine grained soils		
Very Soft	2<	0-3
Soft	2-4	3-6
Medium Stiff	4-8	6-13
Stiff	8-15	13-24
Very Stiff	15-30	24-48
Hard	30>	48>

Grain Size

Description		Sieve Size	Approx. Size
Boulders		>12"	Larger than basketball
Cobbles		3-12"	Fist to basketball
Gravel	coarse	3/4-3"	Thumb to Fist
	fine	#4-3/4"	Pea to Thumb
Sand	coarse	#10-4	Rock Salt to Pea
	medium	#40-10	Sugar to Rock Salt
	fine	#200-40	Flour to Sugar
Fines		Pass #200	Smaller than Flour

Additional Description (ie. roots, pinhole pores, debris, etc.)

Trace 5% Moderate 15% Abundant 30%



EXPLORATION LOG

Project:		Location:
Address:		Elevation:
Job Number:	Client:	Date:
Drill Method:	Driving Weight:	Logged By:

Depth (feet)	Lith-ology	Material Description	Water	Samples: Blows Per Foot	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		EXPLANATION							
		Solid lines separate geologic units and/or material types.							
		Dashed lines indicate unknown depth of geologic unit change or material type change.							
5		**Solid black rectangle** in Core column represents California Split Spoon sampler (2.5in ID, 3in OD).							
		Double triangle in core column represents SPT sampler.							
10		**Vertical Lines** in core column represents Shelby sampler.							
		Solid black rectangle in Bulk column respresents large bag sample.							
		Other Laboratory Tests:							
15		Max = Maximum Dry Density/Optimum Moisture Content							
		EI = Expansion Index							
		SO4 = Soluble Sulfate Content							
		DSR = Direct Shear, Remolded							
		DS = Direct Shear, Undisturbed							
		SA = Sieve Analysis (1" through #200 sieve)							
		Hydro = Particle Size Analysis (SA with Hydrometer)							
20		200 = Percent Passing #200 Sieve							
		Consol = Consolidation							
		SE = Sand Equivalent							
		Rval = R-Value							
		ATT = Atterberg Limits							

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76847	-117.95723	70.9

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							max ei so4 sa ph resist ch
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): tan, damp, medium grained				20	3	96	
3		**Alluvium (Qal)** Sand (SP): tan, damp, medium dense, fine to medium grained							
4						20	2.4	97.7	
5									
6		Sand trace Silt (SP): gray brown, very moist, loose, fine to medium grained				6	7.6	93.1	200
7									
8									
9									
10		Sandy Silt (ML): gray brown, very moist, very loose, fine to medium grained				5			
11									
12									
13									
14			▼						
15		@ 15 ft, wet, loose				3			200
16									
17									
18									
19									
20		Silty Sand / Sandy Silt (SM / ML): gray, wet, medium dense / very stiff, fine grained				14			200
21									
22									
23									
24									
25		Silty Sand (SM): gray, wet, loose, fine grained				6	25.5		att
26									
27									
28									
29									

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76847	-117.95723	70.9

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
31		Silty Sand / Sandy Silt (SM / ML): gray, wet, loose / stiff, fine grained				6			
32									
33									
34									
35		@ 35 ft, medium dense				9			200
36									
37									
38									
39									
40						8			
41									
42									
43									
44									
45		Silty Sand with Clay (SM-SC): gray, wet, medium dense, fine grained				11	27.8		att
46									
47									
48									
49									
50						8	34.3		
51									
52		Total Depth 51.5 feet Groundwater at 14 feet							
53									
54									
55									
56									
57									
58									
59									

EXPLORATION LOG B-2

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76805	-117.95752	70.7

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, damp, fine to medium grained				19	6.8	99.9	
3									
4		**Alluvium (Qal)** Sand (SP): light brown, damp, medium dense, fine to medium grained				12	8.8	96.9	consol
5									
6		@ 4 ft, gray brown, moist, loose				6	12.4	89.8	
7									
8									
9									
10		Sandy Silt trace Clay (ML): gray brown, very moist to wet, very loose, fine grained				4	31.6	89.1	sa hydro
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

EXPLORATION LOG B-3

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76792	-117.95817	71.3

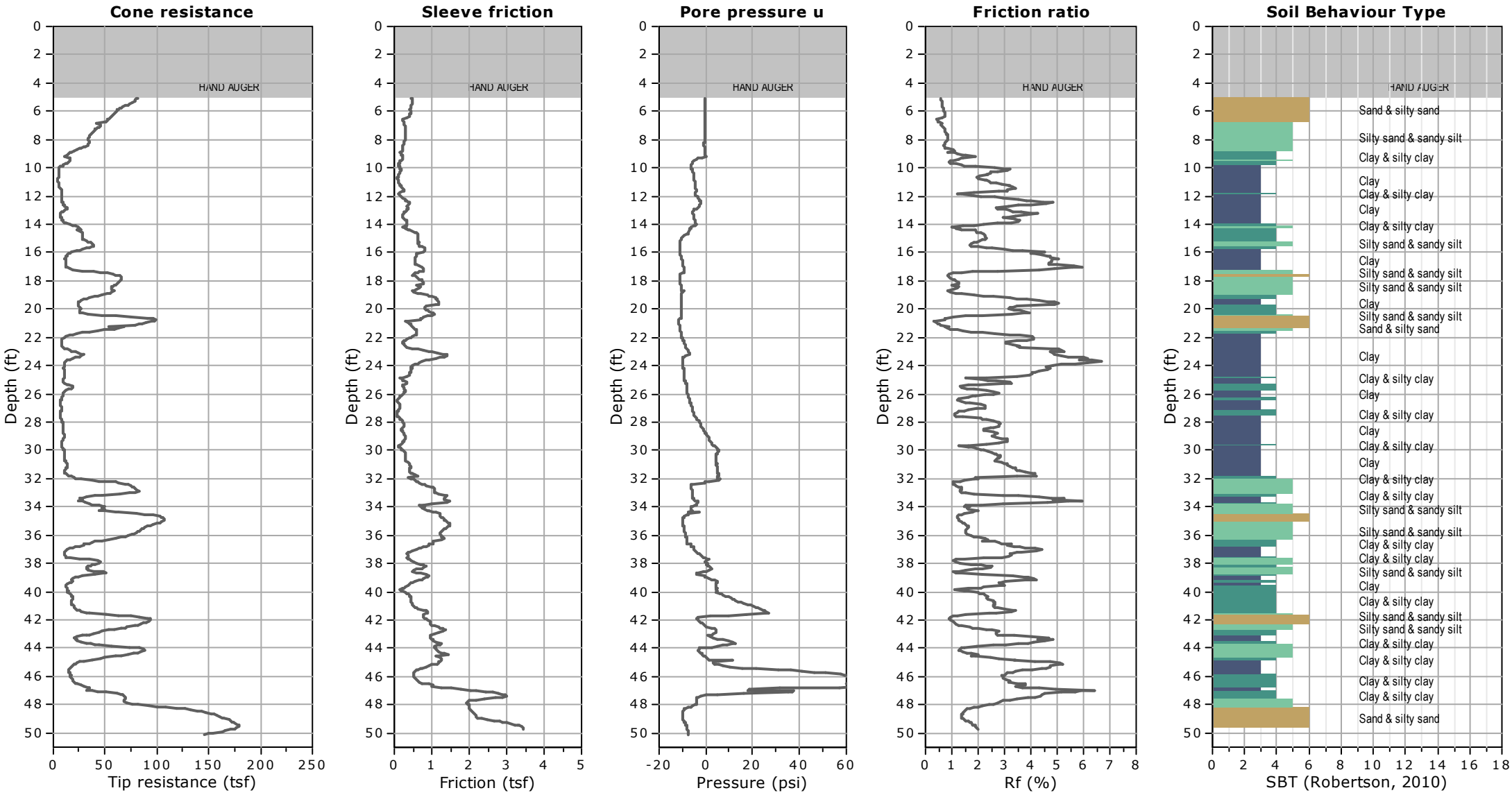
LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, moist, fine to medium grained				13	4.7	100.4	
3									
4		**Alluvium (Qal)** Sand (SP): brown, damp to moist, loose, fine to medium grained				16	8.4	100.2	
5									
6		@ 4 ft, medium dense				12	12.4	87.4	
7		@ 6 ft, loose							
8									
9									
10		Sandy Silt with Clay (ML): gray brown, moist, soft, fine grained				4	28.5	93.2	
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

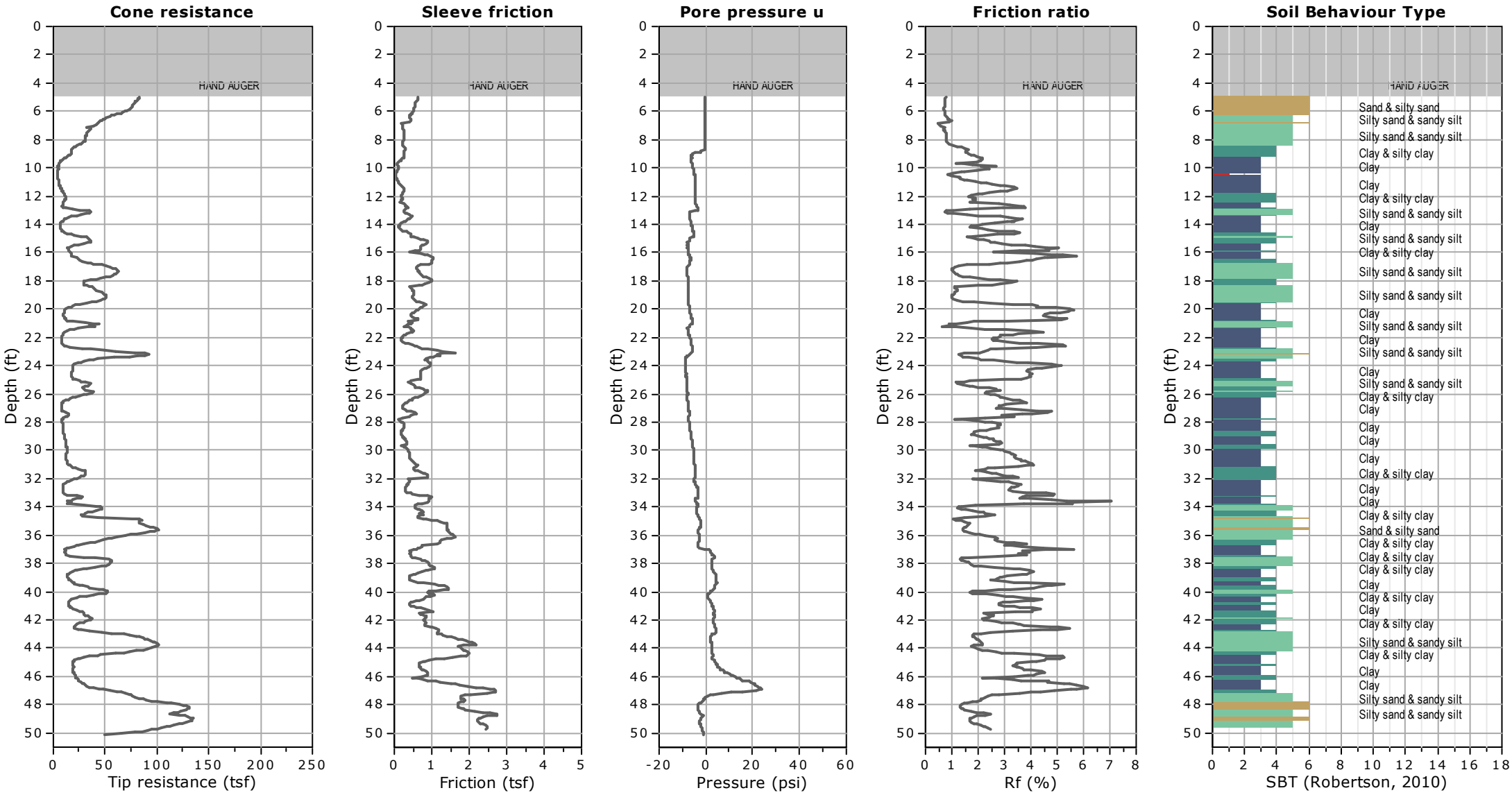
CPT-1
Total depth: 50.07 ft, Date: 6/10/2025



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

CPT-2
Total depth: 50.07 ft, Date: 6/10/2025



APPENDIX B

LABORATORY TEST PROGRAM

LABORATORY TESTING PROGRAM

Soil Classification

Soils encountered within the exploratory borings were initially classified in the field in general accordance with the visual-manual procedures of the Unified Soil Classification System (ASTM D2488). The samples were re-examined in the laboratory and classifications reviewed and then revised where appropriate. The assigned group symbols are presented in the Boring Logs provided in Appendix A.

In Situ Moisture and Density

Moisture content and dry density of in-place soil materials were determined in representative strata. Test data are summarized on the Boring Logs provided in Appendix A.

Maximum Dry Density and Optimum Moisture Content

Maximum dry density and optimum moisture content of onsite soils were determined for one selected sample in general accordance with Method A of ASTM D1557. Pertinent test values are given on Table B-1.

Expansion Potential

Expansion index testing was performed on a selected sample. The test was performed in accordance with ASTM D4829. The test result is presented on Table B-1.

Soluble Sulfate Content

A chemical analysis was performed on a selected soil sample to determine soluble sulfate content. The test was performed in accordance with California Test Method (CTM) 417. The test result is included in Table B-1.

Atterberg Limits

Atterberg Limits (Liquid Limit, Plastic Limit, and Plasticity Index) were performed in accordance with Test Method ASTM D-4318. Pertinent test values are presented within Table B-1.

Particle-Size Analyses and Hydrometer

Particle-size analyses were performed on selected samples in accordance with ASTM D 422. The results are presented graphically on the attached Plates B-1 and B-2.

Consolidation

Consolidation tests were performed for selected soil samples in general conformance with ASTM D 2435. Axial loads were applied in several increments to a laterally restrained 1-inch-high sample. Loads were applied in geometric progression by doubling the previous load, and the resulting deformations were recorded at selected time intervals. Results of the tests are graphically presented on Plate B-3.

Direct Shear

The Coulomb shear strength parameters, angle of internal friction and cohesion, were determined for

a bulk sample obtained from one our borings. The tests were performed in general conformance with Test Method ASTM D 3080. The sample was remolded to 90 percent of maximum dry density and at the optimum moisture content. Three specimens were prepared for each test, artificially saturated, and then sheared under varied loads at an appropriate constant rate of strain. Results are graphically presented on Plate B-4.

Percent Passing the No. 200 Sieve

The percentage of material passing the No. 200 sieve was determined on selected samples to verify visual classifications performed in the field. These tests were performed in accordance with ASTM D1140. Test results are presented on Table B-1.

Corrosion

Select samples were tested for minimum resistivity, chloride, and pH in accordance with California Test Method 643. Results of these tests are provided in Table B-1.

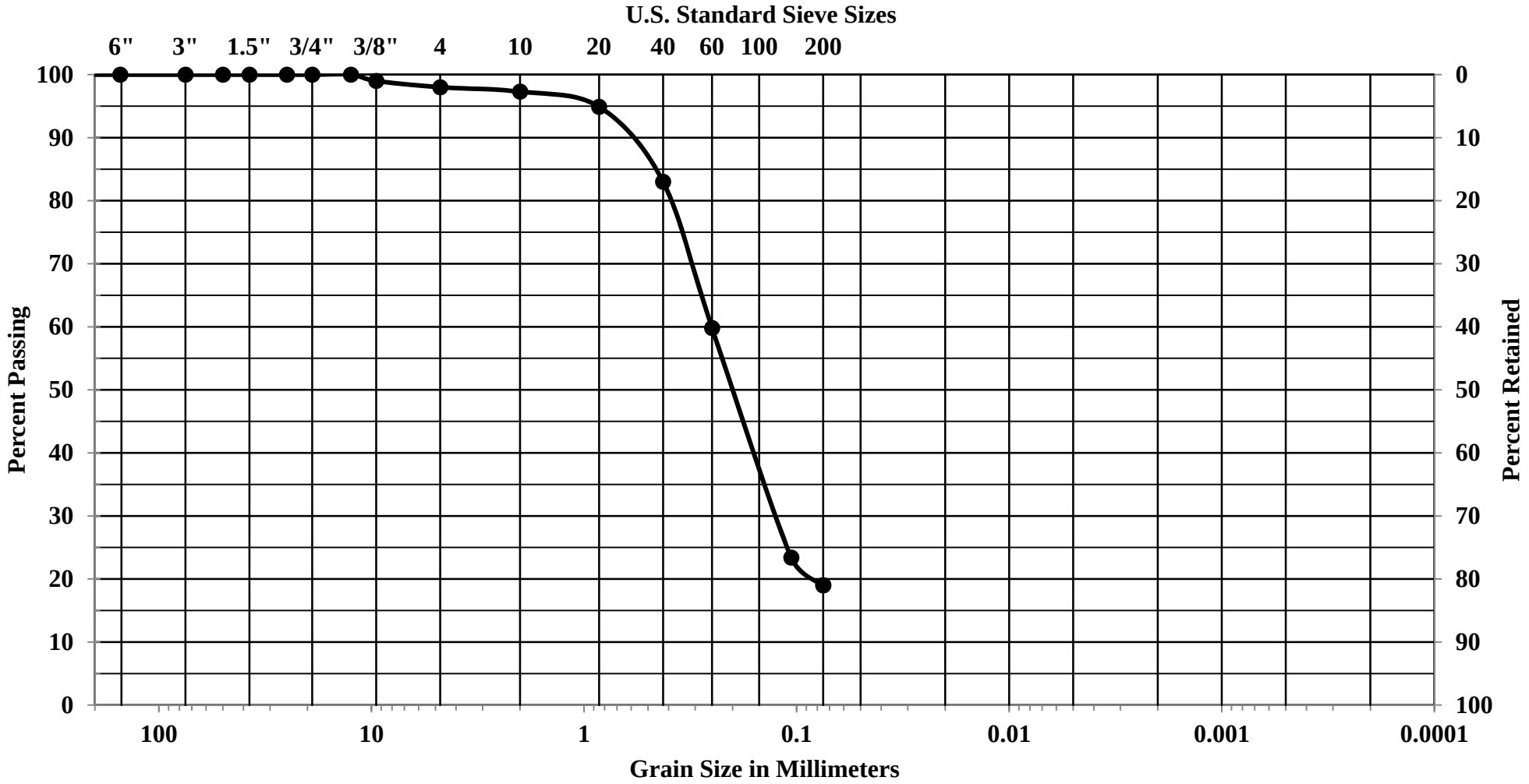
TABLE B-1
SUMMARY OF LABORATORY TEST RESULTS

Boring No.	Sample Depth (ft.)	Soil Description	Test Results	
B-1	0-5	Sand with Silt (SP-M)	Maximum Dry Density (pcf): Optimum Moisture Content (%): Expansion Index: Expansion Potential: Soluble Sulfate Content (%): Sulfate Exposure: pH: Chloride (ppm): Minimum Resistivity (ohm-cm):	121 10 0 Very Low 0.015 Negligible 8.3 25 4700
B-1	6	Sand trace Silt (SP)	Passing No. 200 Sieve (%):	2.6
B-1	15	Sandy Silt (ML)	Passing No. 200 Sieve (%):	59.1
B-1	20	Silty Sand / Sandy Silt (SM/ML)	Passing No. 200 Sieve (%):	51
B-1	25	Silty Sand (SM)	Liquid Limit: Plastic Index:	29 5
B-1	35	Silty Sand / Sandy Silt (SM/ML)	Passing No. 200 Sieve (%):	45.5
B-1	45	Silty Sand with Clay (SM-SC)	Liquid Limit: Plastic Index:	36 12

Note: Additional laboratory test results are provided on the boring logs provided in Appendix A.

GRAIN SIZE DISTRIBUTION

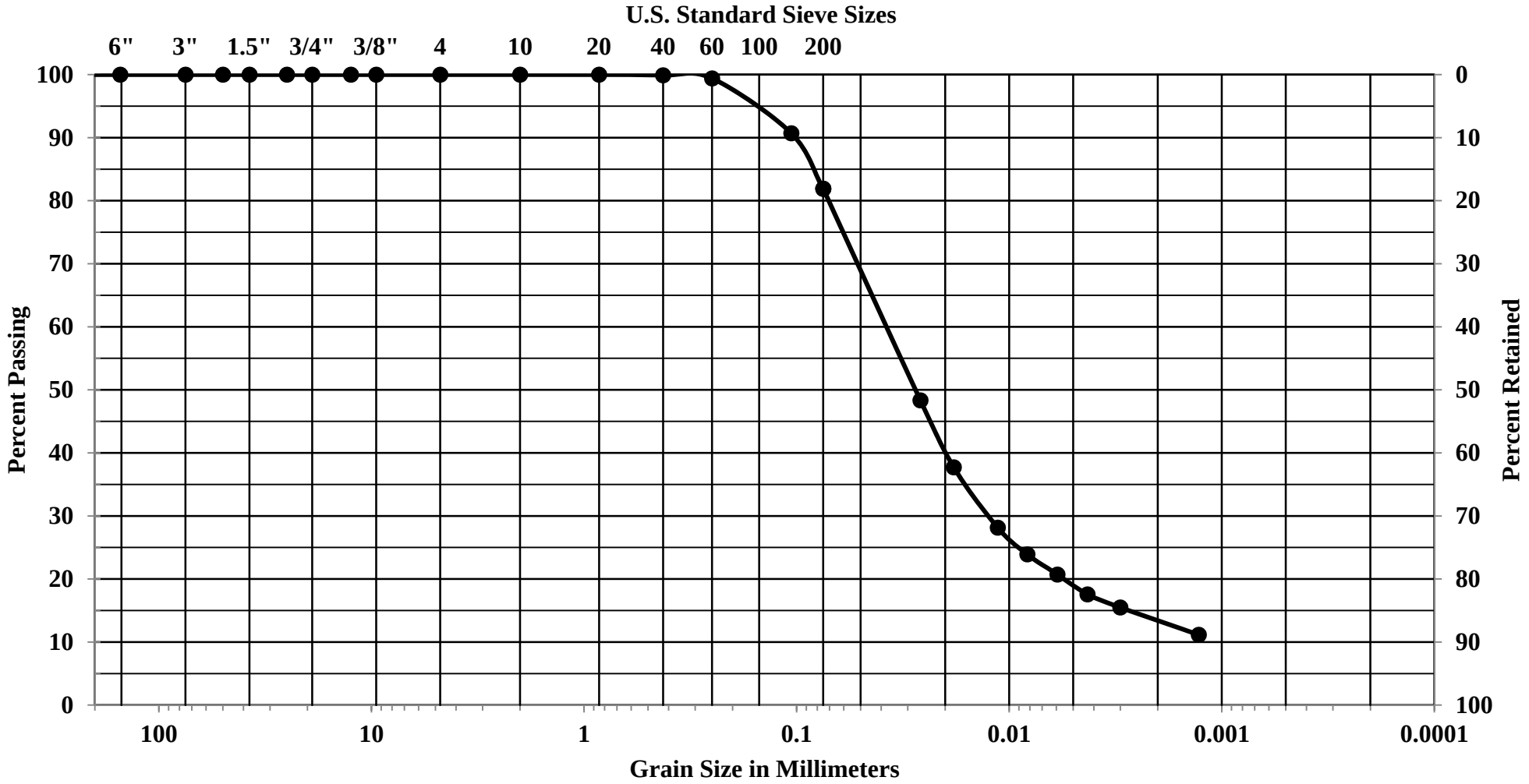
COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-1	0-5	Sand with Silt (SP-SM)

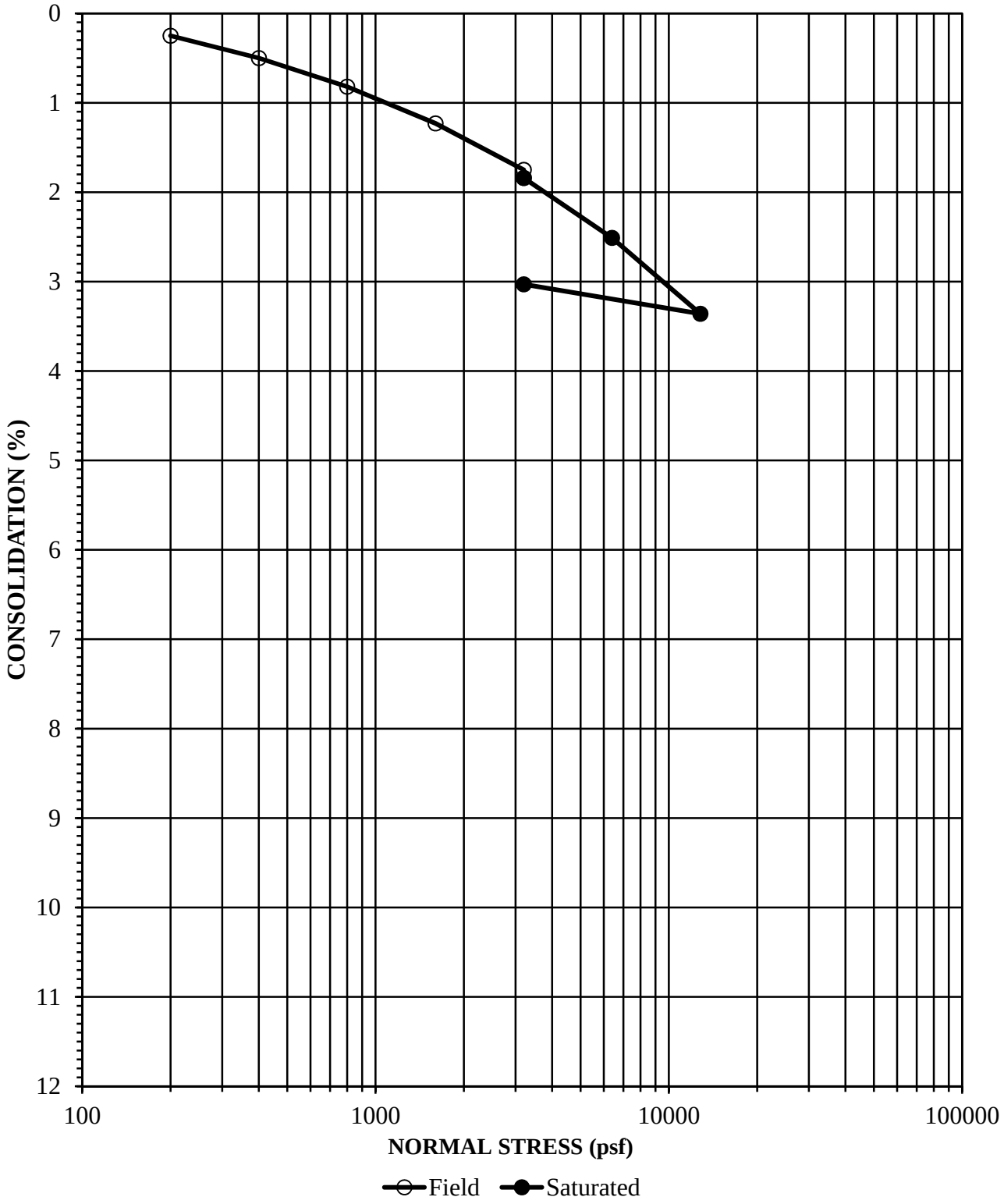
GRAIN SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-2	10	Silt trace Sand and Clay (ML)

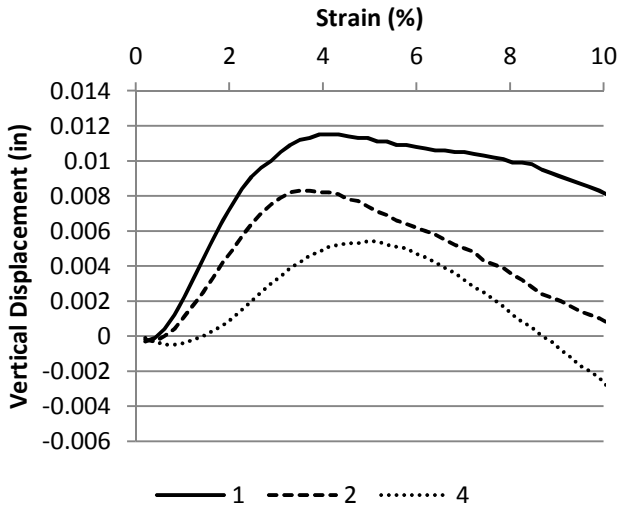
CONSOLIDATION

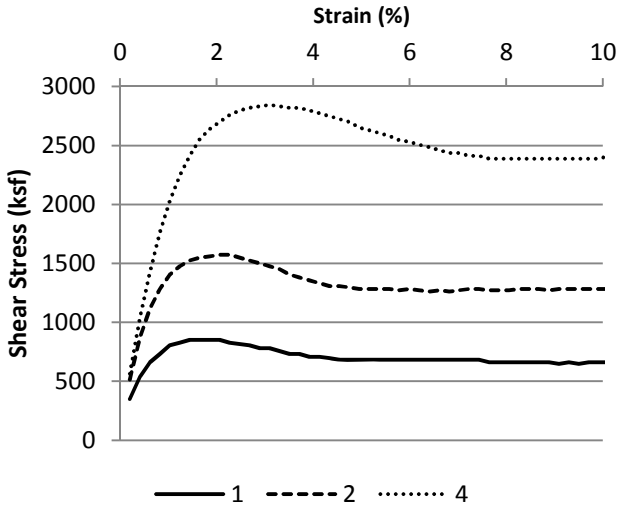


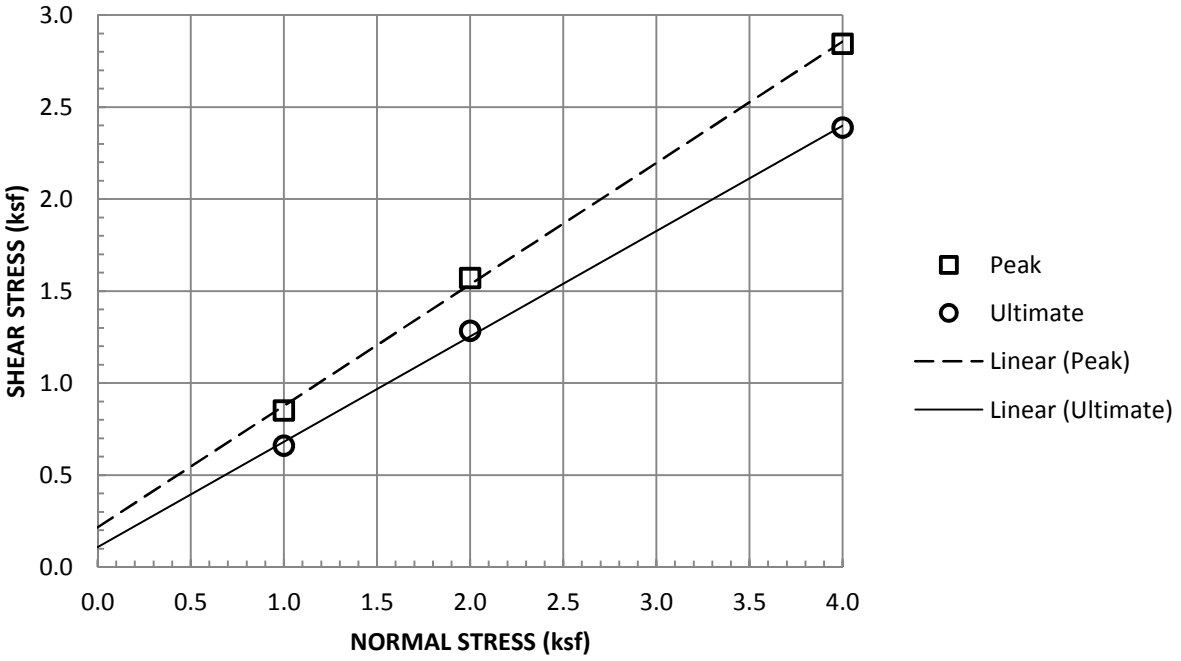
Job Number	Location	Depth	Description
3341.00	B-2	4	Silty Sand (SM)

Initial Dry Density (pcf)	Initial Moisture Content (%)	Final Moisture Concent (%)
96.0	10.4	17

DIRECT SHEAR







Sample Type:	Remolded to 90% of 121 pcf, Saturated		
Normal Stress (ksf)	1	2	4
Peak Shear Stress (ksf)	0.852	1.572	2.844
Peak Displacement (in)	0.012	0.008	0.005
Ultimate Shear Stress (ksf)	0.66	1.284	2.388
Ultimate Displacement (in)	0.25	0.25	0.25
Initial Dry Density (pcf)	108.7	108.7	108.7
Initial Moisture Content (%)	10	10	10
Final Moisture Content (%)	15.2	15.1	14.3
Strain Rate (in/min)	0.01		

Job Number	Location	Depth	Description
3341.00	B-1	0-5	Sand with Silt (SP-SM)

APPENDIX C

LIQUEFACTION ANALYSIS

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Kehoe Testing and Engineering
Albus & Associates, Inc.
1011 N. Armando St., Anaheim, CA
www.albusgeo.net

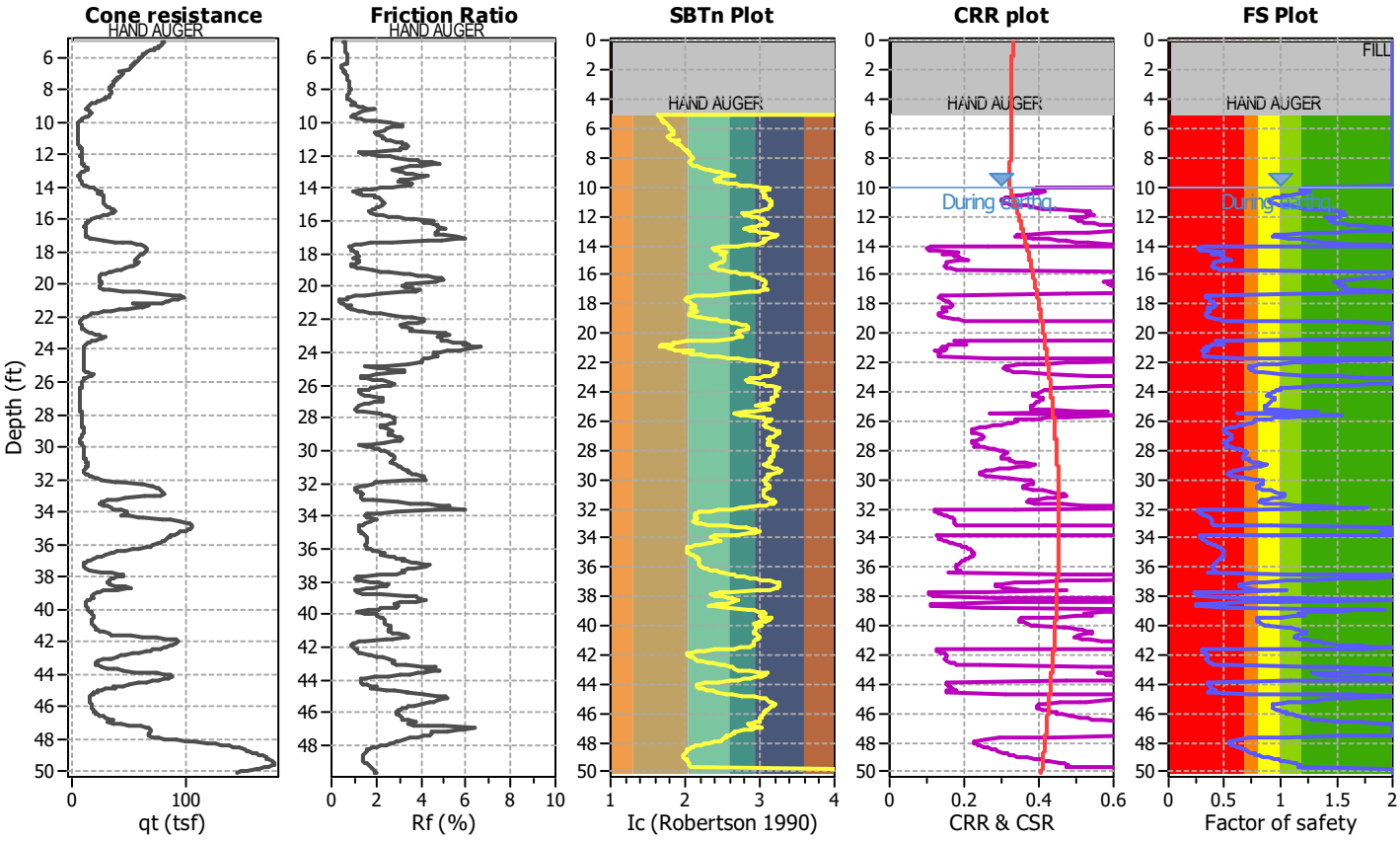
LIQUEFACTION ANALYSIS REPORT

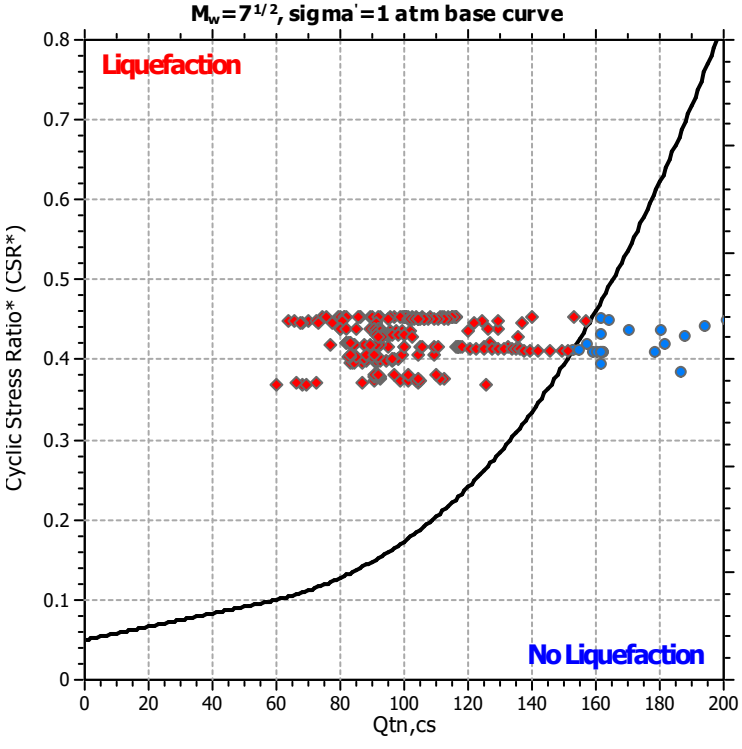
Project title : 3341.00 Melia Homes -- Garden Grove **Location : 9822 Russell Avenue, Garden Grove, CA**

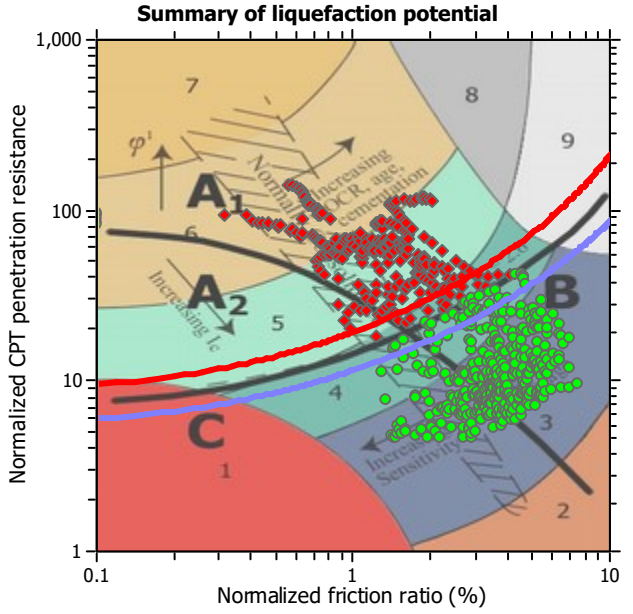
CPT file : CPT-1

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	14.00 ft	Use fill:	Yes	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	13.00 ft	Fill height:	3.00 ft	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	120.00 lb/ft³	Limit depth:	N/A
Earthquake magnitude M_w:	6.74	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.67	Unit weight calculation:	Based on SBT	K_σ applied:	No		

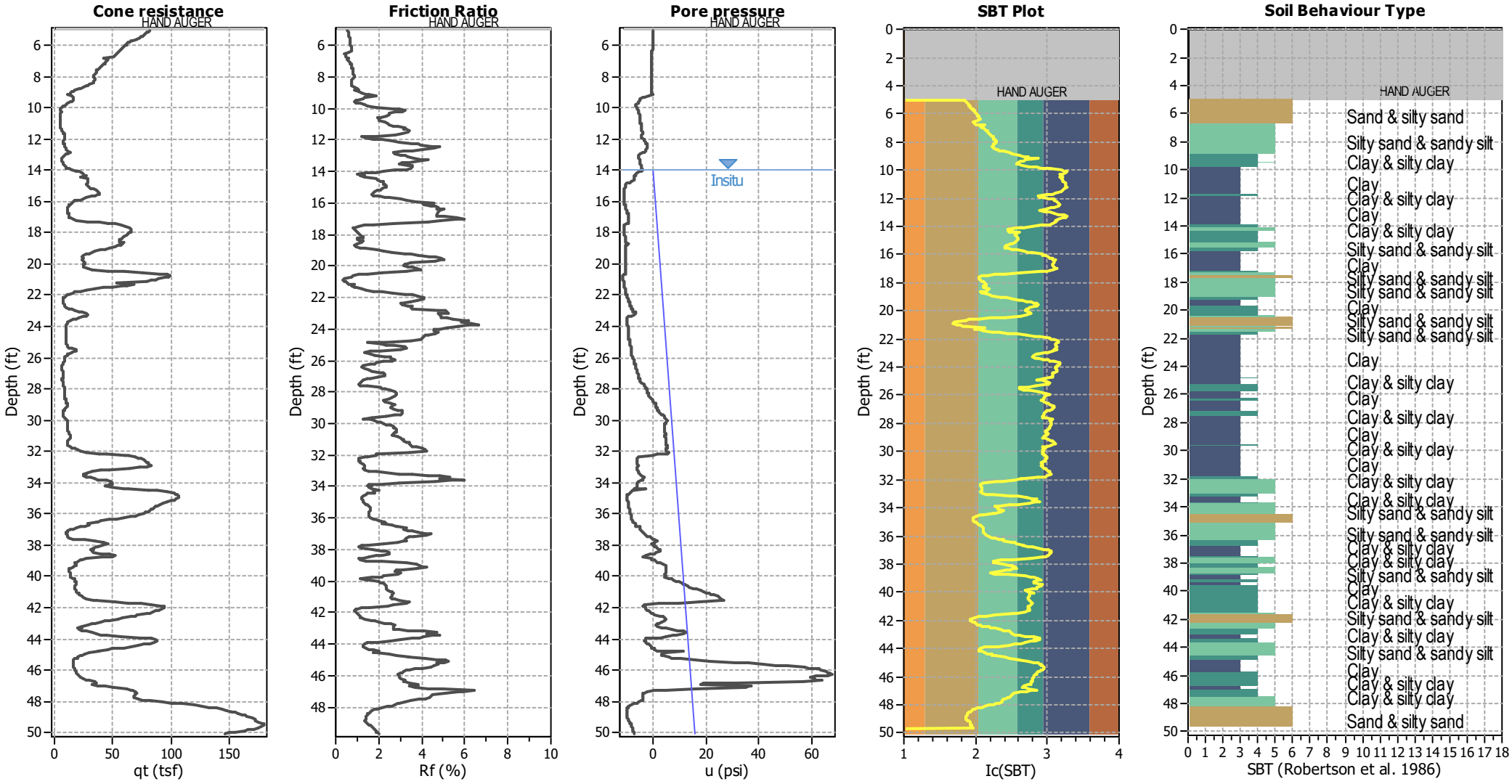






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



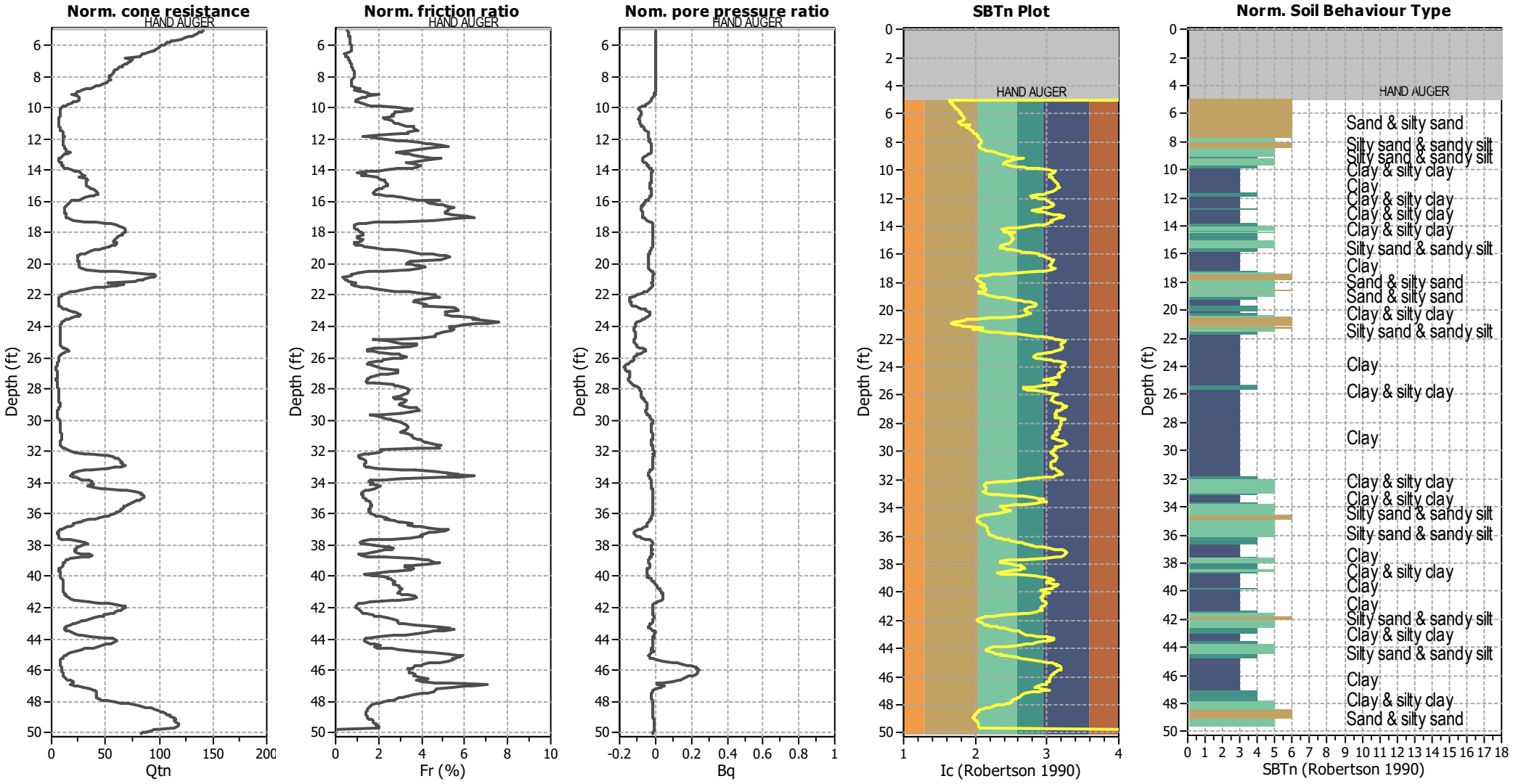
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



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Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBTn legend

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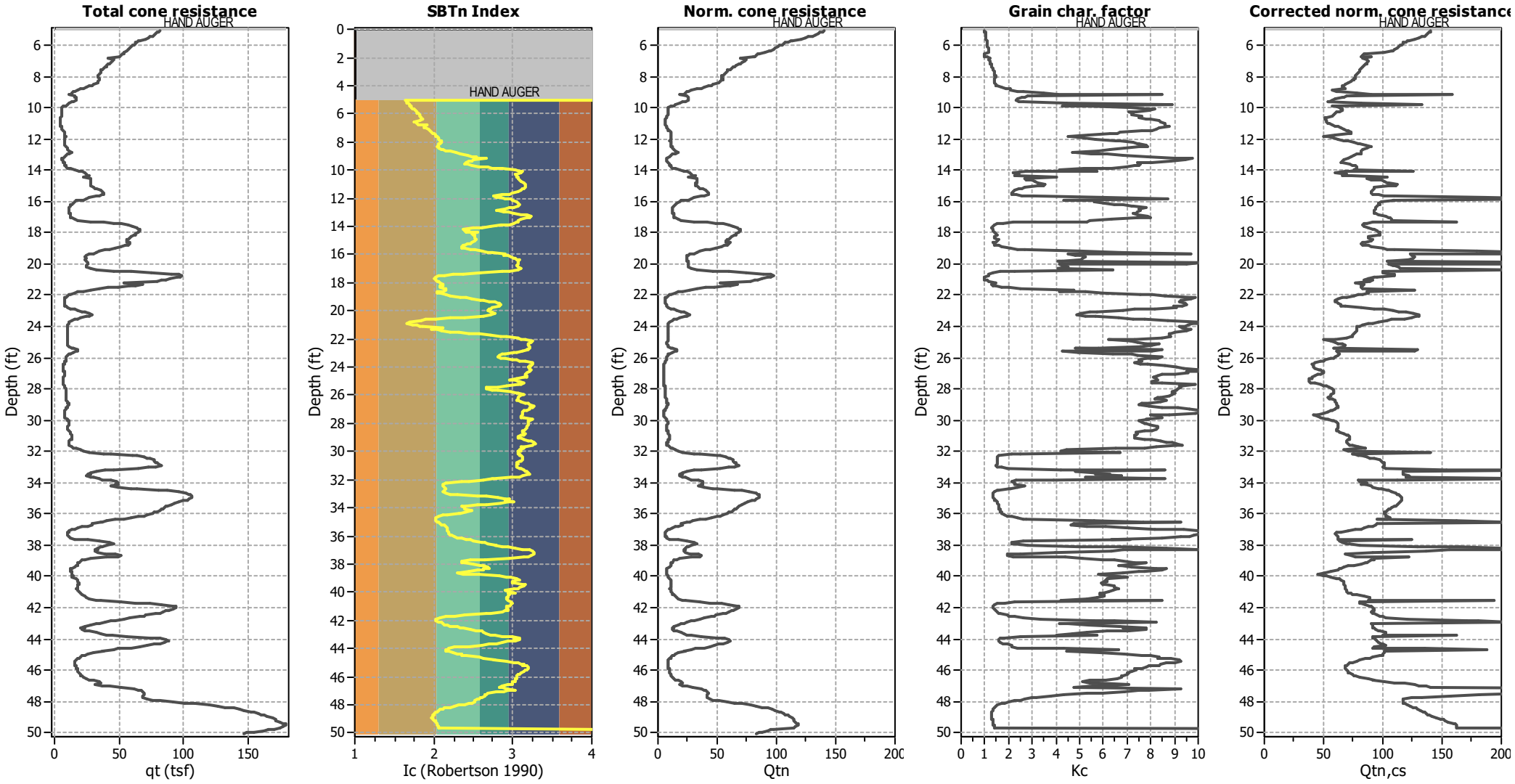
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
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Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
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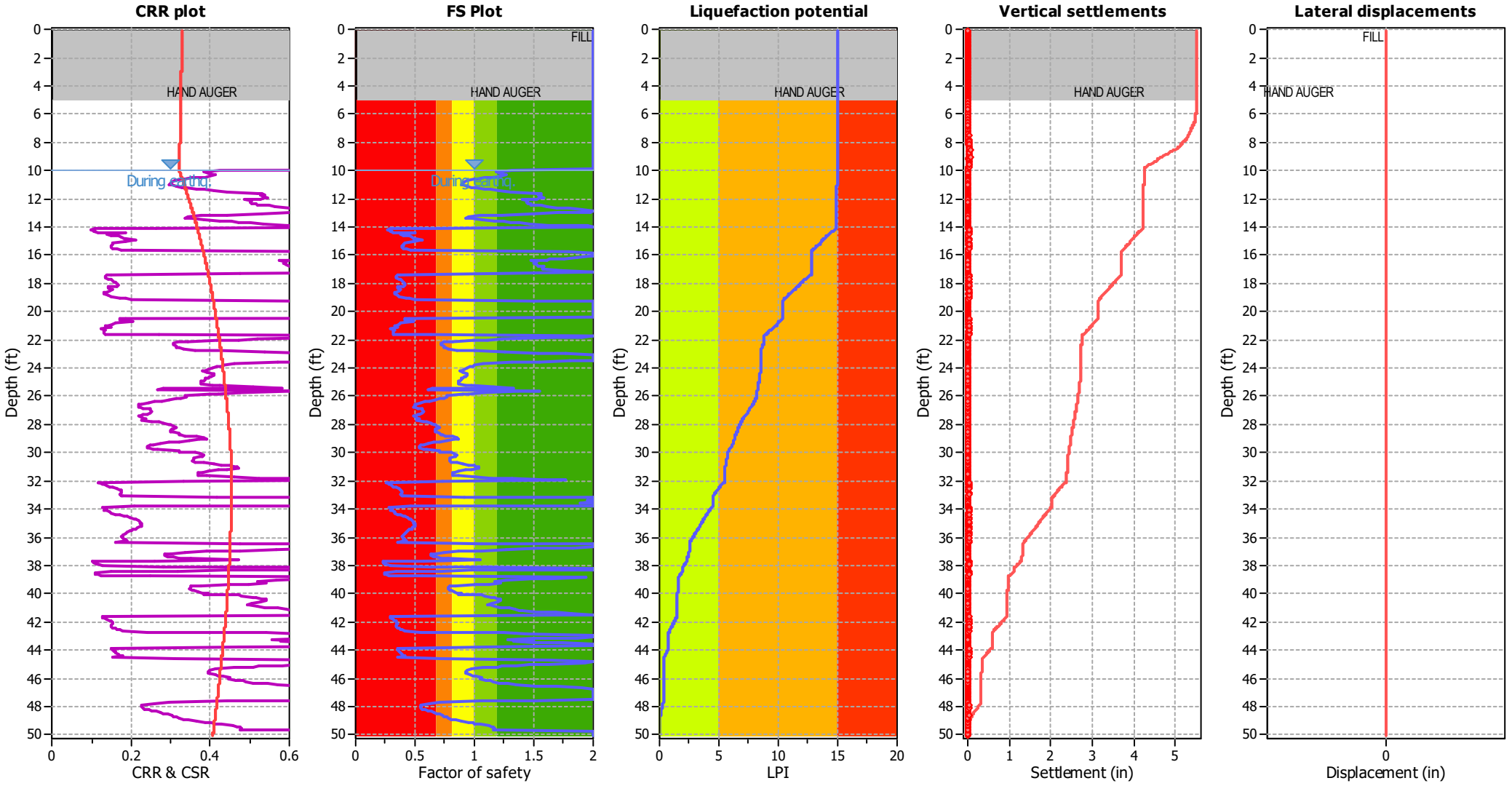
Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
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Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

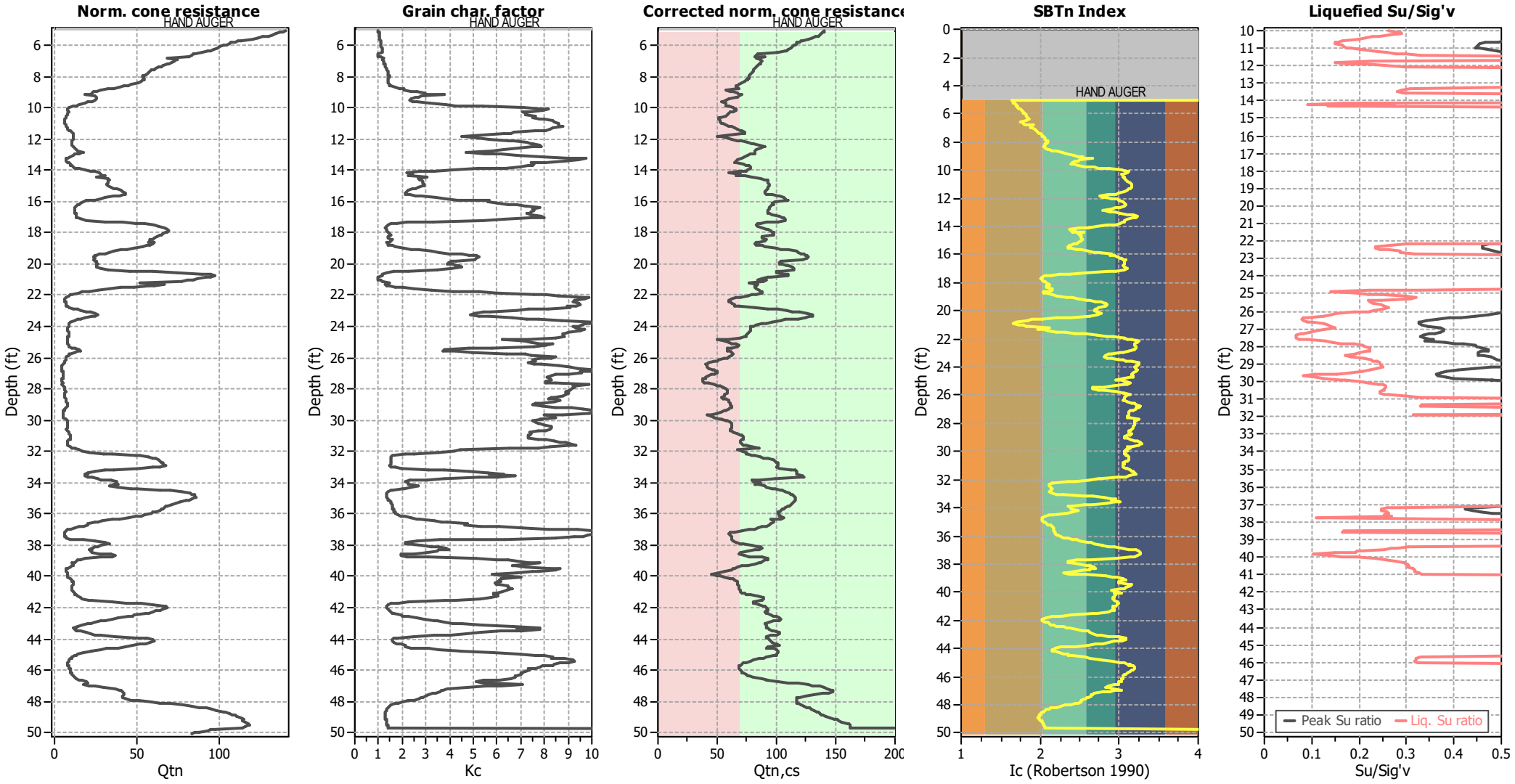
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
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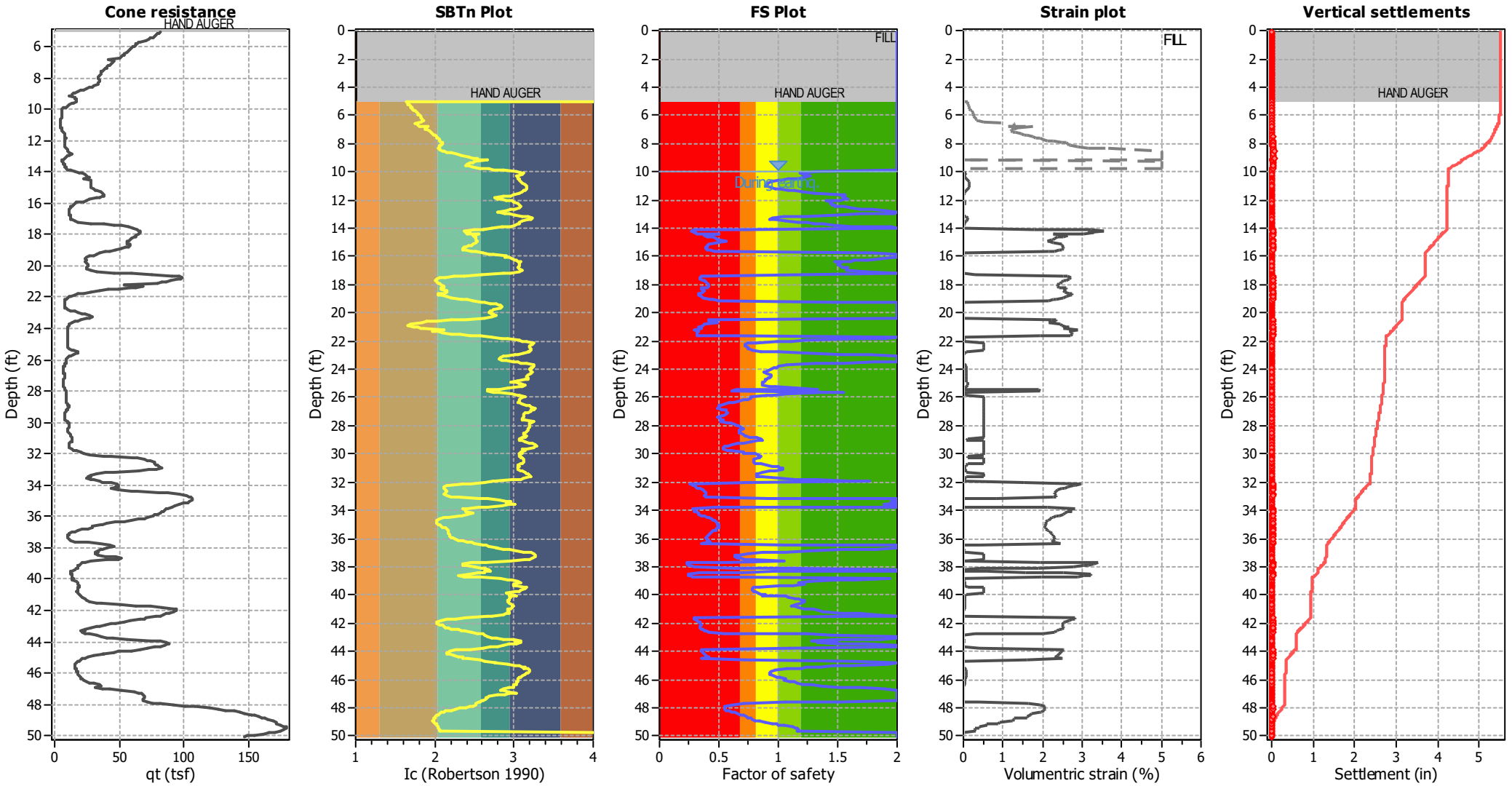
Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

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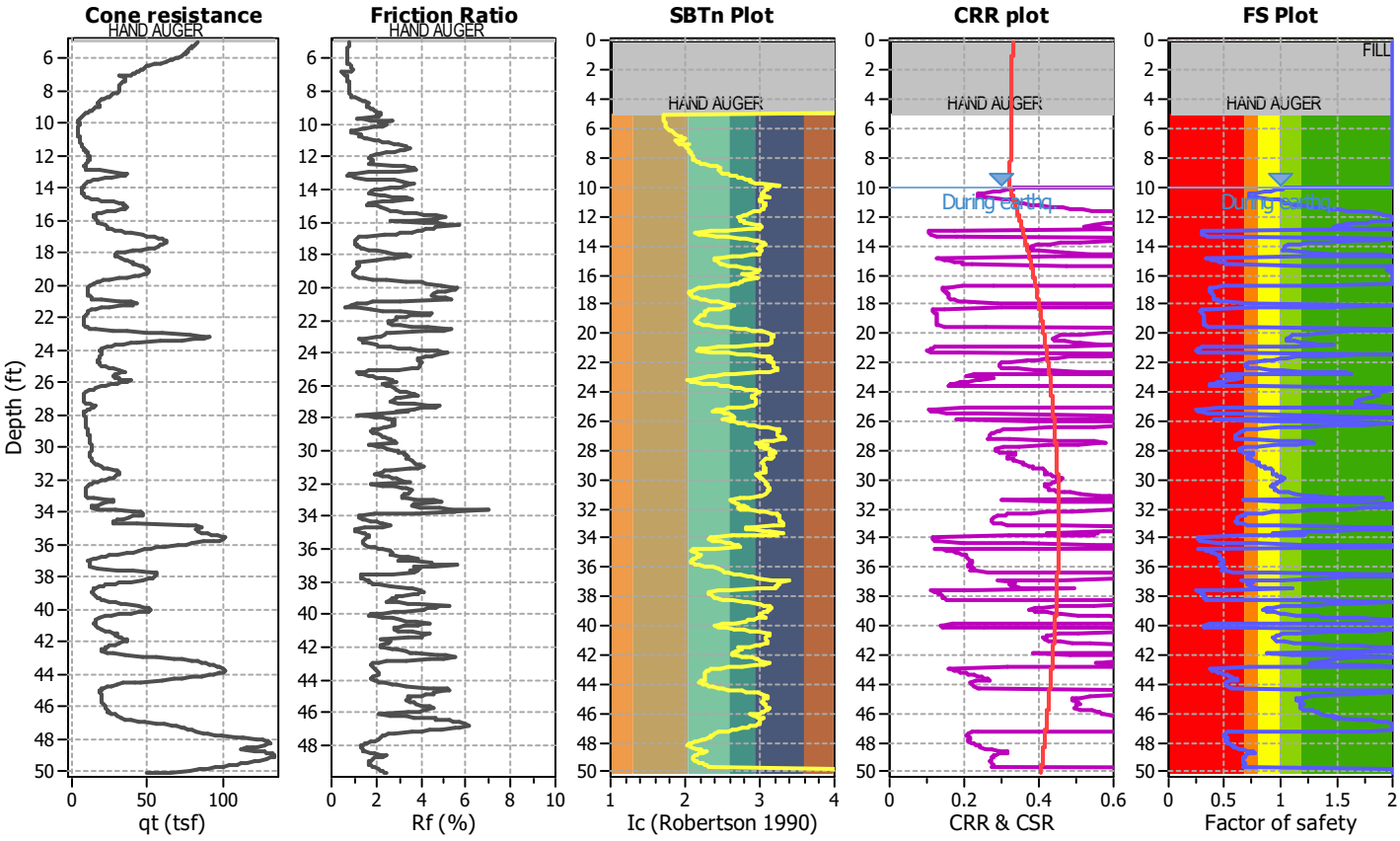
LIQUEFACTION ANALYSIS REPORT

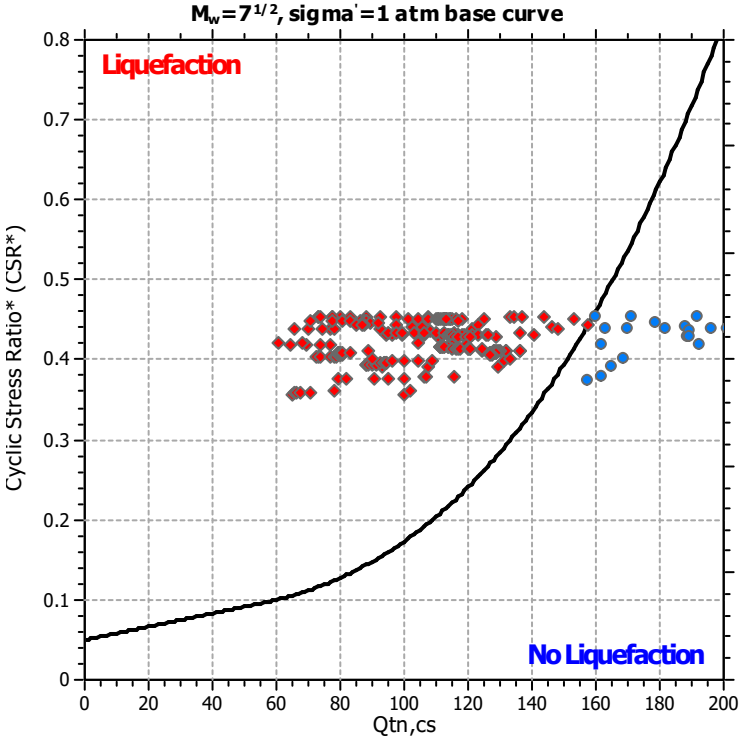
Project title : 3341.00 Melia Homes -- Garden Grove **Location : 9822 Russell Avenue, Garden Grove, CA**

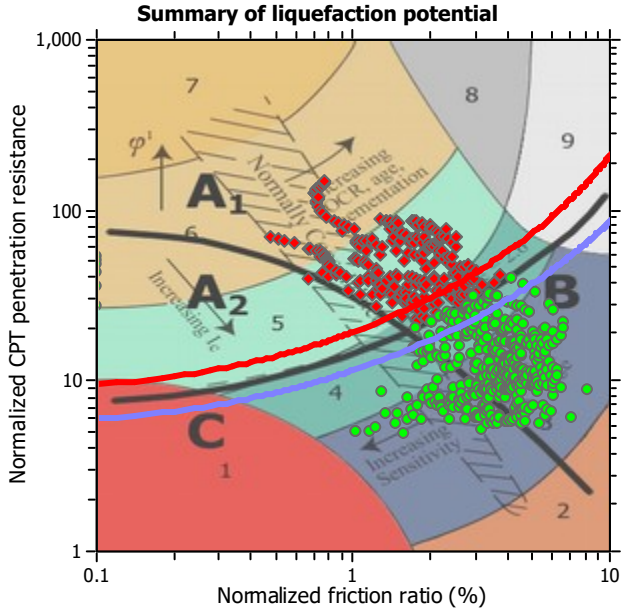
CPT file : CPT-2

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	14.00 ft	Use fill:	Yes	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	13.00 ft	Fill height:	3.00 ft	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	120.00 lb/ft³	Limit depth:	N/A
Earthquake magnitude M_w:	6.74	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.67	Unit weight calculation:	Based on SBT	K_σ applied:	No		







Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
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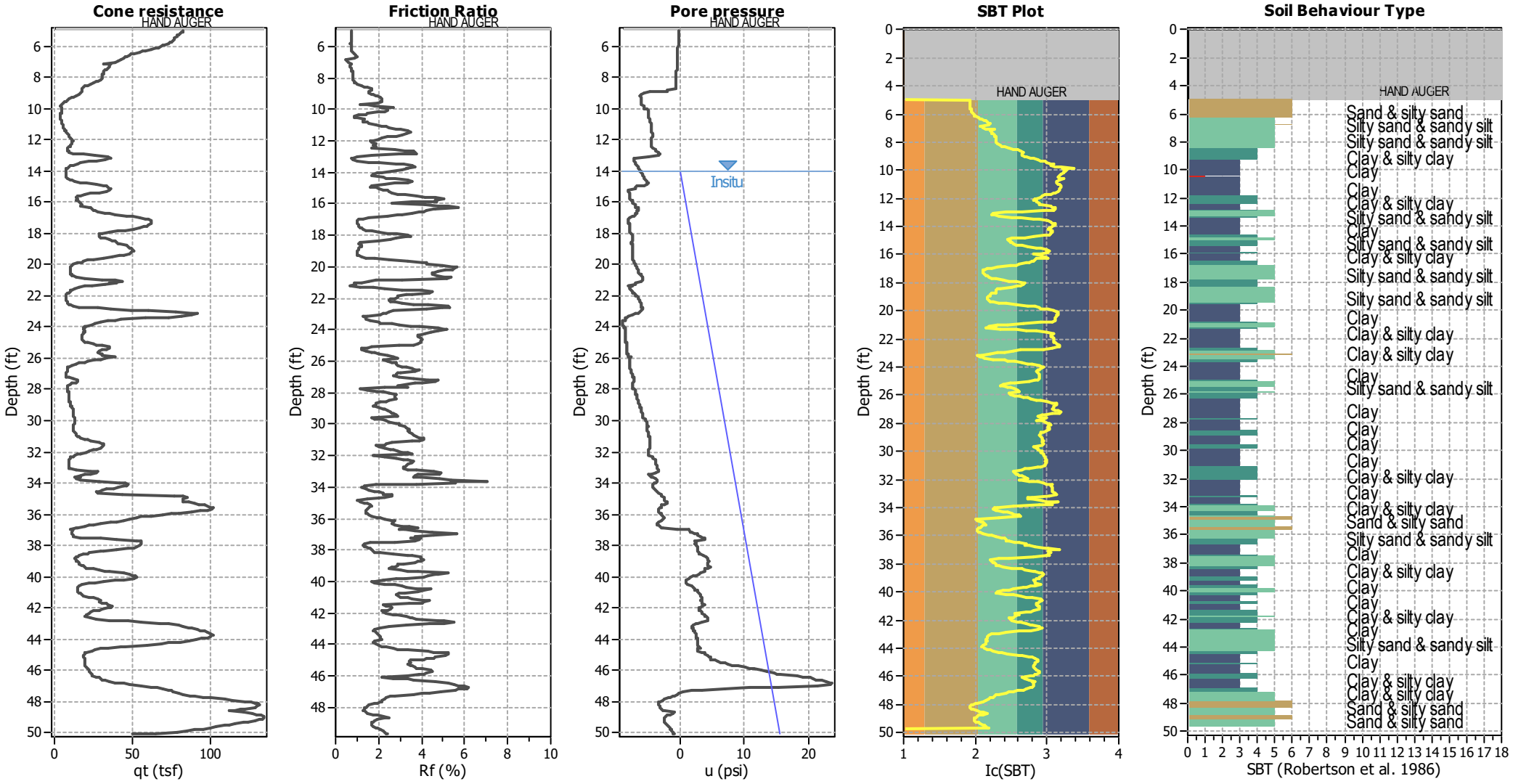
CPT basic interpretation plots



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SBT legend

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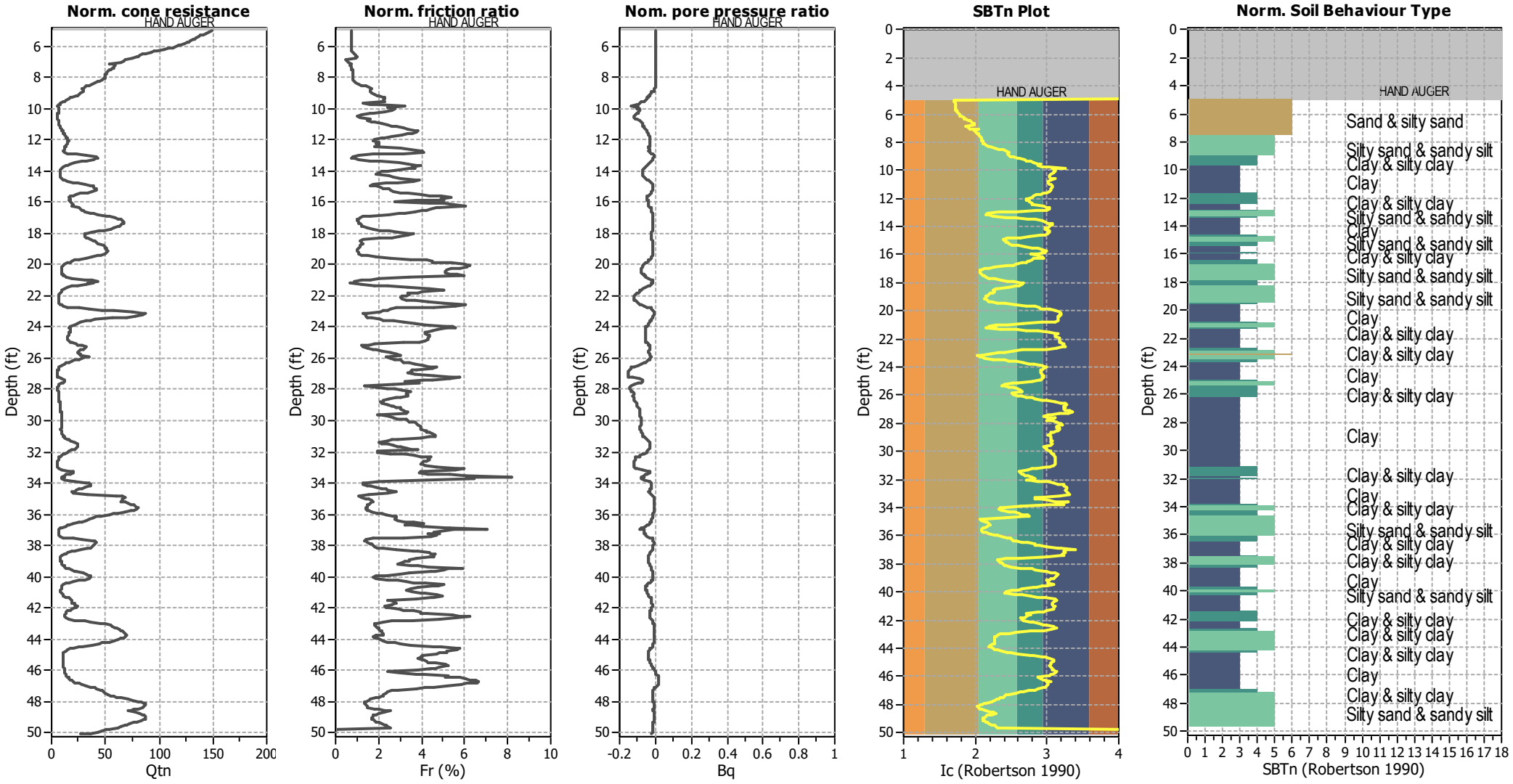
CPT basic interpretation plots (normalized)



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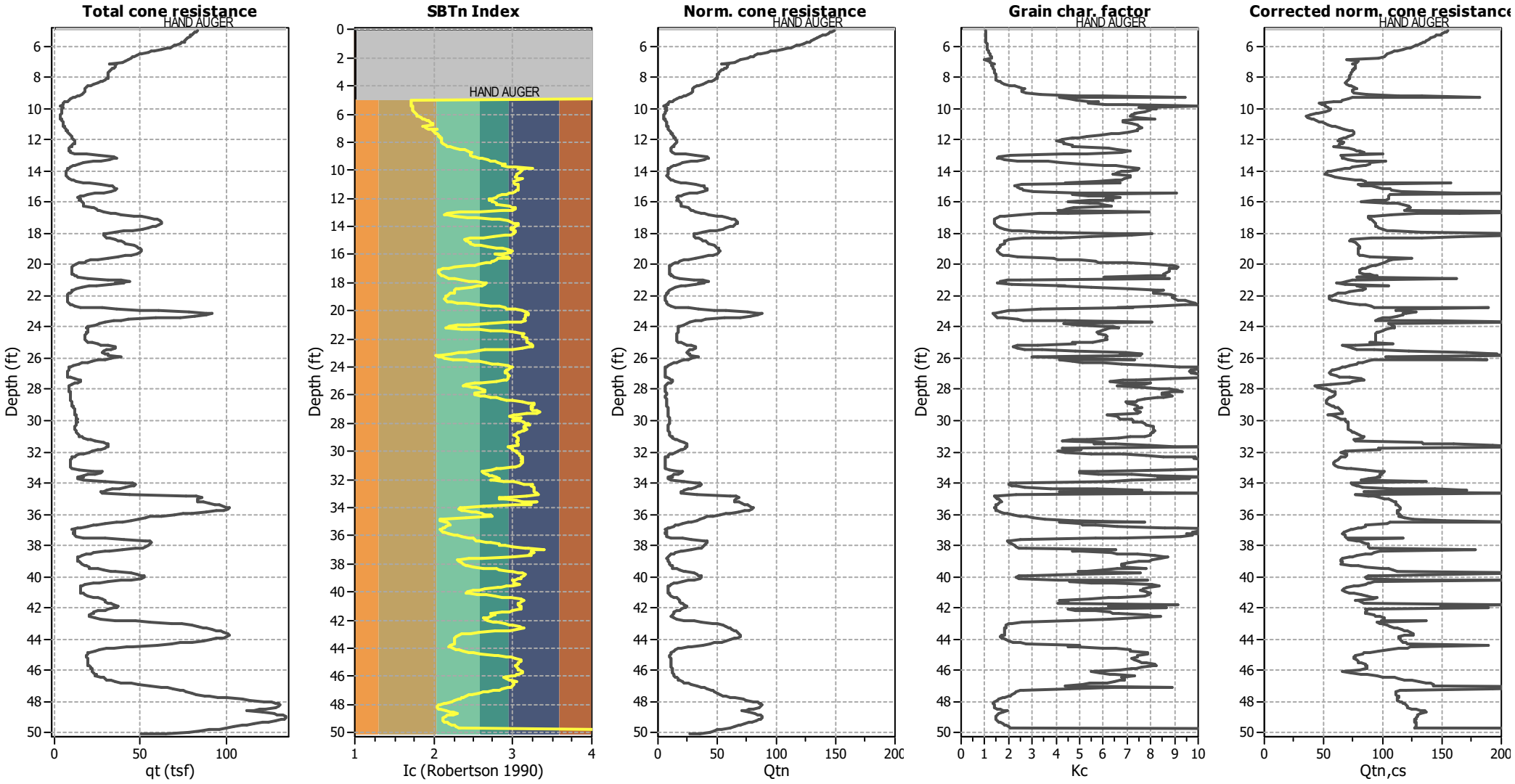
Liquefaction analysis overall plots (intermediate results)



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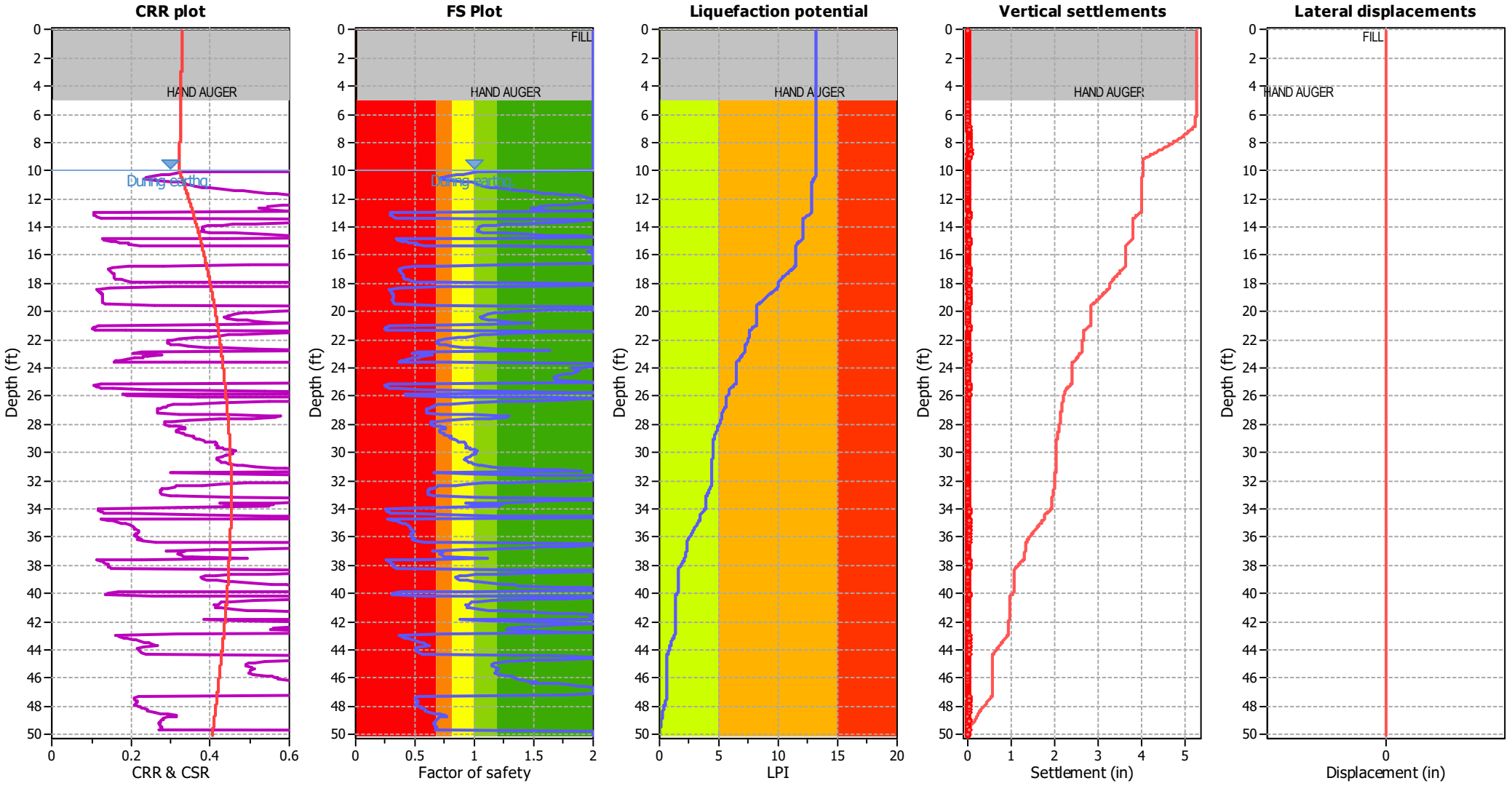
Liquefaction analysis overall plots



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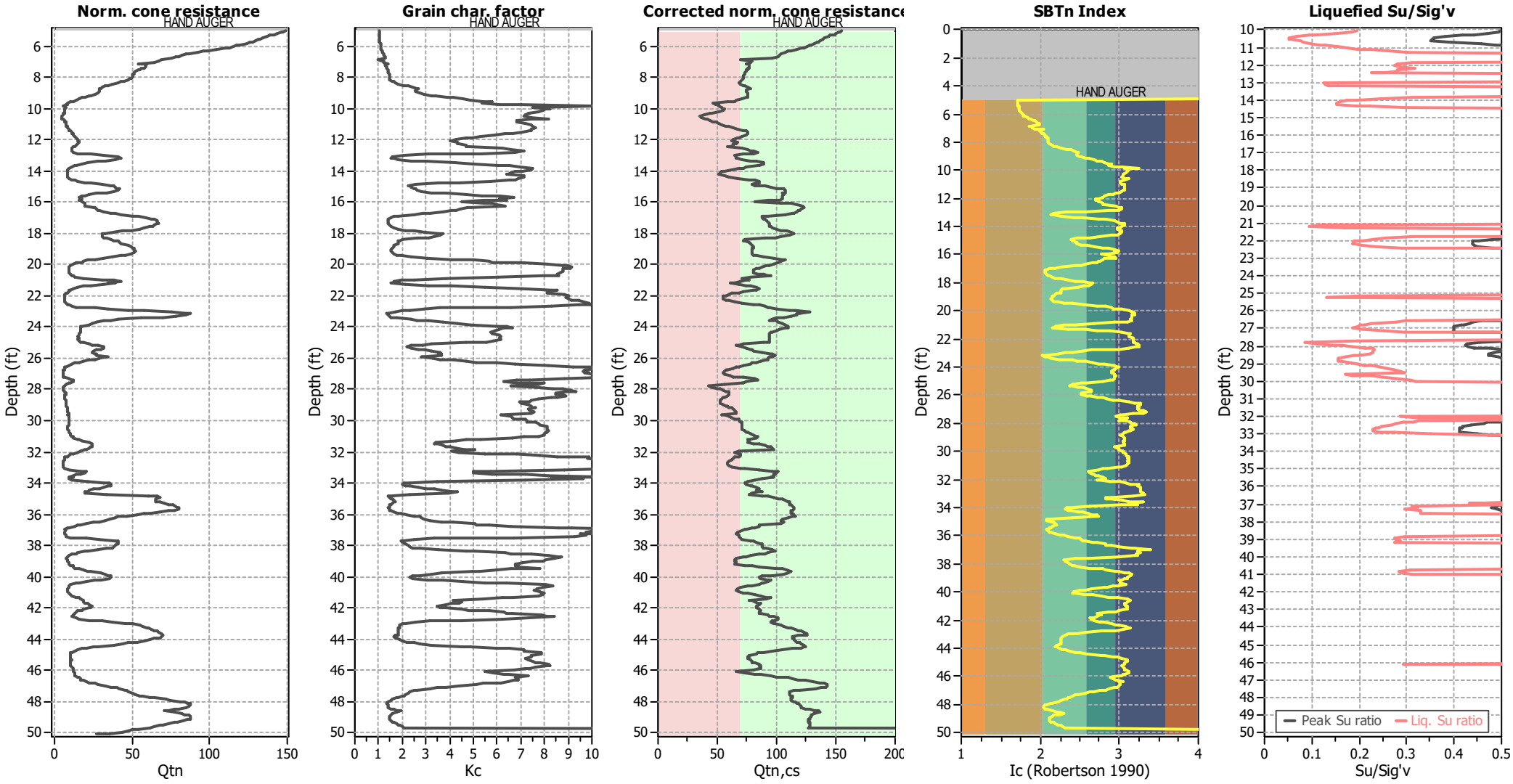
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Check for strength loss plots (Robertson (2010))



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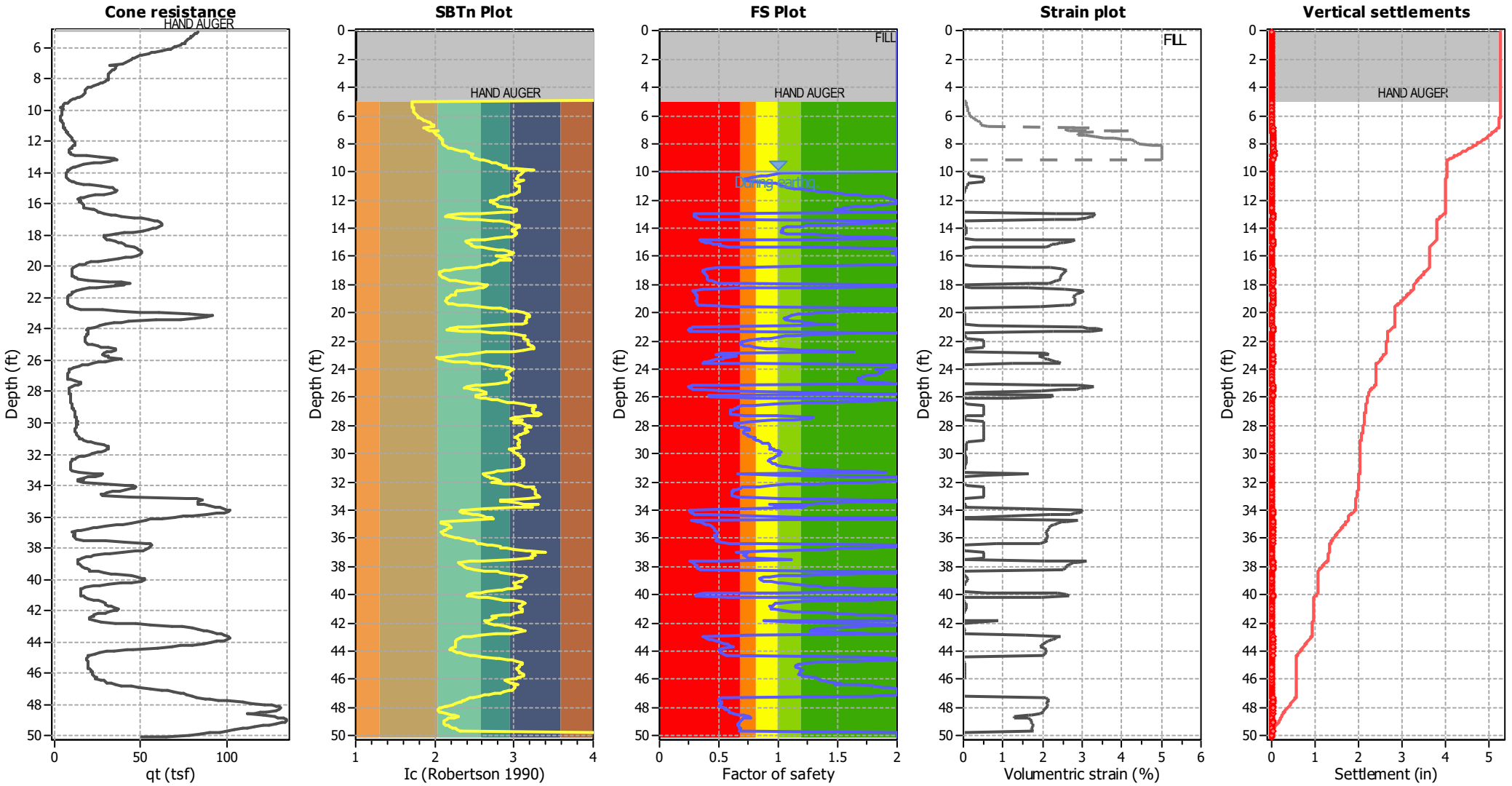
Estimation of post-earthquake settlements



Abbreviations

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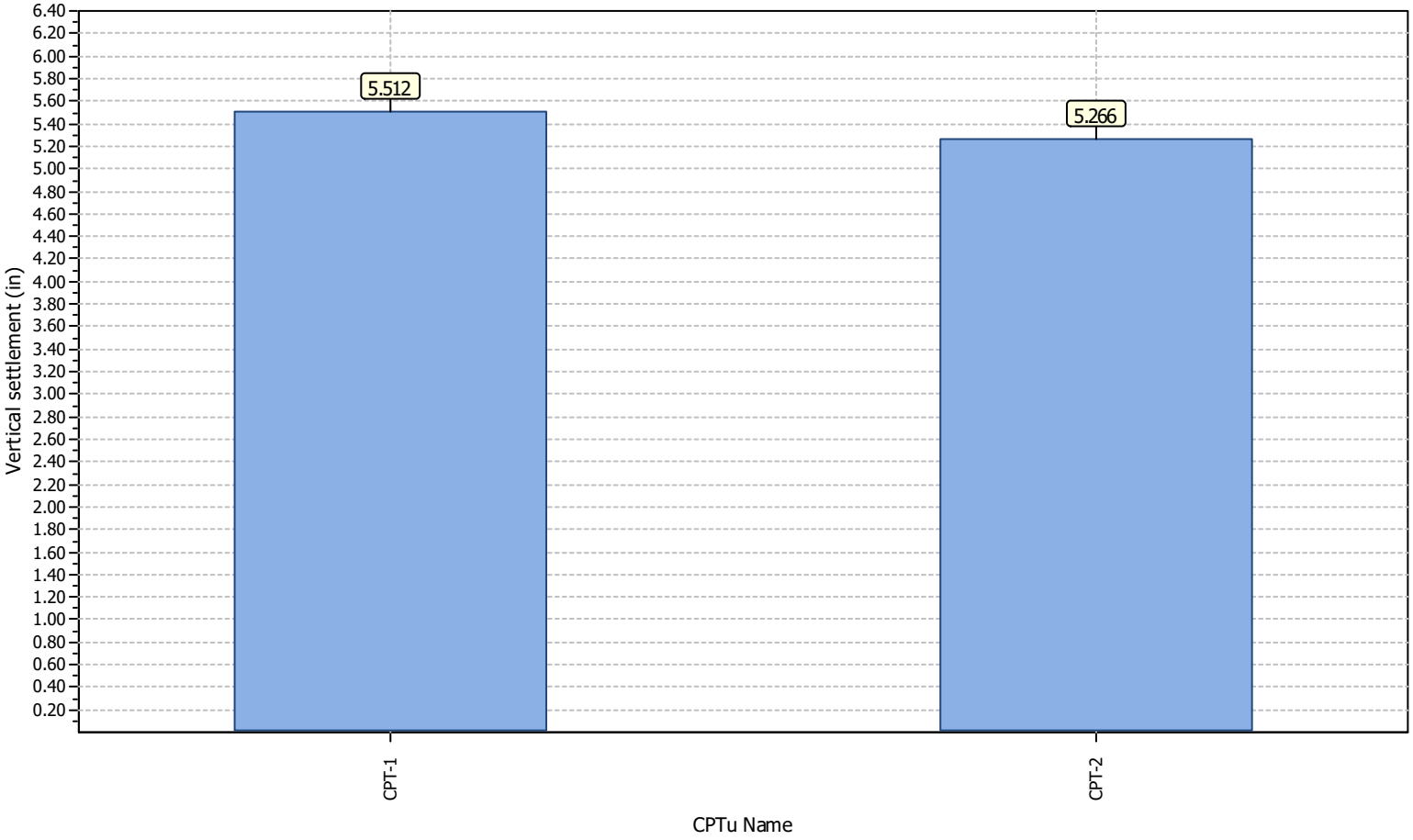
Project title : 3341.00 Melia Homes -- Garden Grove

Location : 9822 Russell Avenue, Garden Grove, CA

Overall vertical settlements report



PARTNER
Engineering and Science, Inc.

More Than Just Assessments.
Solutions.



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

9822 Russell Avenue
Garden Grove, California 92844

Report Date
July 8, 2025

Site Inspection Date
July 2, 2025

Partner Project No.
25-500978.1

Client Reference No.
500978

Prepared for:
Melia Homes
9860 Irvine Center Drive
Irvine, California 92618

Building Science | Environmental Consulting | Construction & Development | Energy & Sustainability

PARTNER

July 8, 2025

Mr. Chad Brown
Melia Homes
9860 Irvine Center Drive
Irvine, California 92618

Subject: Phase I Environmental Site Assessment
9822 Russell Avenue
Garden Grove, California 92844
Partner Project No. 25-500978.1

Dear Chad Brown,

Partner Engineering and Science, Inc. (Partner) is pleased to provide this Phase I Environmental Site Assessment (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Client Agreement.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate your trust in Partner and the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (949) 481-9818.

Sincerely,

Robert Vaughn
National Client Manager

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Practice E1527-21, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Melia Homes for the property located at 9822 Russell Avenue in Garden Grove, Orange County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Melia Homes with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the south side of Russell Avenue and east side of Kerry Street within a residential and commercial area of Orange County, California. Please refer to the table below for further description of the subject property:

SUBJECT PROPERTY DATA

Address(es):	9822 Russell Avenue, Garden Grove, California
Property Use:	Commercial
Land Acreage (Ac):	1.81
Number of Buildings:	Three
Number of Floors:	Church (One): Preschool (One and Two)
Gross Building Area (SF):	21,100
Net Rentable Area (SF):	21,100
Date of Construction:	Circa 1955
Parcel Number:	098-081-19
Type of Construction:	Wood-framed on a concrete slab-on-grade foundation
Current Tenants:	Iglesia de Cristo de Restauracion and Orangefield Child Development Center
Site Assessment Performed By:	Reese Davis of Partner
Site Assessment Conducted On:	July 8, 2025
Regulatory Radius Report Date:	June 16, 2025
Lien Search Date:	N/A
Report Date:	July 8, 2025
FOIAs Date:	June 2025
Groundwater Flow Direction (Inferred):	South
Estimated Depth to Groundwater (Feet bgs):	12 to 23

The subject property is currently occupied by Iglesia de Cristo de Restauracion and Orangefield Child Development Center. Onsite operations consist of a church and preschool. In addition to the current structures, the subject property is also improved with asphalt-paved parking areas, associated landscaping, a playground, and partial perimeter fencing.

According to available historical sources, the subject property was formerly unimproved land as early as 1896; agricultural land by 1938; and developed with the current structures by 1955. Tenants on the subject property have included various churches since the 1950s and a preschool since the 2010s.

The adjoining properties are tabulated below:

ADJOINING PROPERTIES

Direction	Land Use/Occupant
North:	Russell Avenue followed by an apartment complex (9801 and 9811 Russell Avenue), and three single-family residences (9831, 9841, and 9861 Russell Avenue)
Northeast:	Russell Avenue followed by a single-family residence (9871 Russell Avenue)
East:	Sunnyside Elementary School (9972 Russell Avenue)
Southeast:	Sunnyside Elementary School (9972 Russell Avenue)
South:	Single-family residence (13412 Kerry Street) and Orange County Chinese Christian Assembly Church (9881 Trask Avenue)
Southwest:	Intersection of Kerry Street and Dakota Avenue to the southwest followed by a single-family residence (9782 Dakota Avenue)
West:	Kerry Street, followed by two single-family residences (9781 and 9782 Russell Avenue)
Northwest:	Intersection of Russell Avenue and Kerry Street followed by a single-family residence (13352 Kerry Street)

Findings and Opinions

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and lead-based paint (LBP) are present. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and building occupants.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 9822 Russell Avenue in Garden Grove, Orange County, California (the “subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property; however, one BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

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FIGURES

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APPENDICES

Appendix A: Site Photographs
Appendix B: Historical/Regulatory Documentation

Appendix C: Regulatory Database Report
Appendix D: Qualifications

ACRONYM LIST

Ac	Acre
AAI	All Appropriate Inquiries
AMSD	Approximate Minimum Search Distance
AOC	Area of Concern
ACM	Asbestos Containing Material
APN	Assessor Parcel Number
AST	Aboveground Storage Tank
AUL	Activity and Use Limitation
AIRS	Aerometric Information Retrieval System
AFS	Air Facility System
ALT FUELS	Alternate Fueling Stations
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
BER	Business Environmental Risk
BRS	EPA Biennial Reporting System
COC	Chemical of Concern
CREC	Controlled Recognized Environmental Condition
CDL	Clandestine Drug Lab
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	RCRA Corrective Action Sites
ERIS	Environmental Risk Information Services
ERNS	Emergency Response Notification System
ECHO	Enforcement and Compliance History Online
FRP	Fiberglass Reinforced Plastic
FIM	Fire Insurance Map
FOIA	Freedom of Information Action
FINDS	Facility Index Database System
FRS	Facility Registry Service
FRP	Facility Response Plan
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FUDS	Formally Used Defense Site
FTTS	FIFRA/TSCA Tracking System
FTTS INSP	Inspection Case Listing
FUSRAP	Formerly Utilized Sites Remedial Action Program
FEMA	Federal Emergency Management Agency
HUD	U.S. Department of Housing and Urban Development
HSWA	Hazardous and Solid Waste Amendments
HVAC	Heating, Ventilation and Air Conditioning
HREC	Historical Recognized Environmental Condition
IODI	Open Dumps on Indian Lands
IHW	Industrial Hazardous Waste
IC/EC or INST/ENG	Institutional Control/Engineering Control
ICIS	Integrated Compliance Information System
LUCIS	Land Use Control Information System U.S. Department of the Navy
LQG	Large Quantity Generator
LPST	Leaking Petroleum Storage Tank
LST	Leaking Storage Tank
LUST	Leaking Underground Storage Tank

LBP	Lead-Based Paint
MSL	Mean Sea Level
MMMP	Mold, Moisture, and Mitigation Plan
MGP	Manufactured Gas Plant
MINES	Mines Master Index File
MLTS	Material Licensing Tracking System
HMIRS	Hazardous Materials Information Reporting System
MRDS	Mineral Resource Data System
NPL	National Priorities List
NCDL	National Clandestine Drug Labs
NPDES	National Pollutant Discharge Elimination System
NFRAP	No Further Remedial Action Planned
NonGen	Non Generator
NonGen/NLR	Non Generator/No Longer Regulated
ND	None Detected
NESHAP	National Emission Standards for Hazardous Air Pollutants
NWI	National Wetlands Inventory
NFA	No Further Action
N/A	Not Applicable
NOV	Notice of Violation
NTC	Notice To Comply
NRC	Nuclear Regulatory Commission
ODI	Inventory of Open Dumps
OWS	Oil-Water Separator
OSHA	Occupational Safety and Health Administration
O&M	Operations and Maintenance
PTO	Permit to Operate
Phase I ESA	Phase I Environmental Site Assessment
pCi/L	picoCuries per Liter
PHMSA	Pipeline and Hazardous Materials Safety Administration
PCB	Polychlorinated Biphenyl
PACM	Presumed Asbestos Containing Material
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
PFOA	perfluorooctanoic acid
PFOS	Perfluorooctane sulfonic acid
REFN	Petroleum Refineries
PRP	Potentially Responsible Party
PST	Petroleum Storage Tank
ROD	Record of Decision
RGA	Recovered Government Archive
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation Recovery Information System
REC	Recognized Environmental Condition
SF	Square Foot/Feet
SSA	Superfund Alternative Agreement
SSTS	Section Seven Tracking System
SQG	Small Quantity Generator
SMCRA	Office of Surface Mining Reclamation and Enforcement
SWF/LF	Solid Waste Facility/Landfill
SWRCY	Solid Waste Recycling Facility
SCRD	State Coalition for the Remediation of Drycleaners
SHWS	State Hazardous Waste Sites

SEMS	Superfund Enterprise Management Site
TANKS	Aboveground and Unregulated Tanks
TRIS	Toxic Chemicals Release Inventory System
TSCA	Toxic Substances Control Act
TSDF	Transfer, Storage and Disposal Facility
USDOE	United States Department of Energy
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UIC	Underground Injection Control
VEC	Vapor Encroachment Condition
VSQG	Very Small Quantity Generator
VCP	Voluntary Cleanup Program

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E1527-21 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 9822 Russell Avenue in Garden Grove, Orange County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-21) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "landowner liability protections," or "LLPs"). ASTM Standard E1527-21 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with and to the extent necessary to achieve the goal of the requirements set forth in the ASTM Standard E1527-21. This assessment included: 1) a property and adjoining site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments to obtain readily ascertainable information to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched readily available information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-21, AULs include both legal (that is, institutional) and physical (that is, engineering) controls that may include legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, or surface water on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, soil vapor, groundwater, and/or surface water on a property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the compliance and safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Melia Homes (herein referred to as Client) engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Client. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed. A copy of Partner's standard Terms and Conditions can be found at http://www.partneresi.com/terms-and-conditions.php.

1.5 Limiting Conditions

The findings and conclusions contain all the limitations inherent in these methodologies that are referred to in ASTM Practice E1527-21.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past or current owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources, this data gap is not expected to alter the findings of this assessment.
- Partner was unable to determine the property use at 5-year intervals when the use of the subject property changed, which constitutes a data gap. Partner reviewed all standard historical sources and conducted appropriate interviews. This data gap is not expected to alter the findings of this assessment.

Due to time constraints associated with this report, the Client has requested the report despite the above-listed limitations.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 9822 Russell Avenue in Garden Grove, California is located on the south side of Russell Avenue and east side of Kerry Street. According to the Orange County Assessor, the subject property is legally described as S TWP 5 RGE 10 SEC 6 SEC 6 T 5 R 10 S 226 FT N 256 FT E 5 AC SW1/4. According to Orange County Assessor and Preliminary Title Report, ownership has been vested in Iglesia de Cristo de Restauracion since 2006.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently occupied by Iglesia de Cristo de Restauracion and Orangefield Child Development Center. Onsite operations consist of a church and preschool. The subject property consists of three buildings: one church with a second-story mezzanine level and a preschool consisting of two buildings (one one-story and one two-story) located on the west and northwest side of the property. In addition to the current structures, the subject property is also improved with asphalt-paved parking areas, associated landscaping, a playground, and partial perimeter fencing.

The subject property is designated "R-1-7" for Single-Family Residential development by the City of Garden Grove, which is intended to provide for the establishment and promotion of single-family detached residences on individual lots and compatible associated activities. R-1-7 requires a minimum of 7,200 square feet lot area.

2.3 Current Use of Adjoining Properties

The subject property is located within a residential and commercial area of Orange County, California. During the vicinity reconnaissance, Partner observed the land uses on adjoining properties as defined in ASTM Practice E1527-21 as any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. The adjoining properties are tabulated below:

ADJOINING PROPERTIES

Direction	Land Use/Occupant
North:	Russell Avenue followed by an apartment complex (9801 and 9811 Russell Avenue), and three single-family residences (9831, 9841, and 9861 Russell Avenue)
Northeast:	Russell Avenue followed by a single-family residence (9871 Russell Avenue)
East:	Sunnyside Elementary School (9972 Russell Avenue)
Southeast:	Sunnyside Elementary School (9972 Russell Avenue)
South:	Single-family residence (13412 Kerry Street) and Orange County Chinese Christian Assembly Church (9881 Trask Avenue)
Southwest:	Intersection of Kerry Street and Dakota Avenue to the southwest followed by a single-family residence (9782 Dakota Avenue)

ADJOINING PROPERTIES

West:	Kerry Street, followed by two single-family residences (9781 and 9782 Russell Avenue)
Northwest:	Intersection of Russell Avenue and Kerry Street followed by a single-family residence (13352 Kerry Street)

2.4 Physical Setting Sources

2.4.1 Topography

TOPOGRAPHIC DATA SUMMARY

Quadrangle Year:	2022
Quadrangle Name:	Anaheim, CA
Source:	USGS 7.5 Minute Topographic Map
Elevation (Feet):	74
Slope Direction:	Southwest
Slope Degree:	Gentle

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

While under natural and undisturbed conditions shallow groundwater flow most frequently follows the topography of the land surface, natural or man-made features can affect flow direction, and the presumed flow may not match the actual flow directions at the subject property and vicinity.

HYDROLOGY DATA SUMMARY

Groundwater Flow Direction:	South
Groundwater Flow Source:	A previous subsurface investigation conducted on a nearby property (Arco #629, 13482 Brookhurst- Case # 95UT062)
Estimated Depth to Groundwater (Feet bgs):	12 to 23
Estimated Depth Source:	A previous subsurface investigation conducted on a nearby property (Arco #629, 13482 Brookhurst- Case # 95UT062)
Closest Body of Surface Water Name:	East Garden Grove Wintersburg Channel
Closest Body of Surface Water Distance (Miles):	2
Closest Body of Surface Water Direction:	Southeast

HYDROLOGY DATA SUMMARY

Water System Operator:	City of Garden Grove Public Works Department, Water Services Division
Shallow Groundwater Use:	Not used for domestic purposes
Source of Drinking Water:	Surface water imported from the Metropolitan Water District of Southern California and groundwater from eleven (11) wells in the Orange County groundwater basin

2.4.3 Geology/Soils

GEOLOGY AND SOIL DATA SUMMARY

Physiographic Province:	The subject property is situated within the Peninsular Ranges Physiographic Province of California. This province is characterized by a series of ranges that are separated by longitudinal valleys, trending northwest to southeast, subparallel to faults branching from the San Andreas Fault.
Geologic Unit Description:	The uppermost geologic formation underlying the soils at the subject property is the Pleistocene to Holocene age Quaternary alluvium and marine deposits unit. This formation consists of coarse-detrital as the primary rock type, and the unit is described as alluvium, lake, playa, and terrace deposits that are unconsolidated and semi-consolidated.
Geologic Data Source:	United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey
Soil Series Name:	Metz loamy sand
Soil Series Description:	Metz loamy sand is a well-drained soil typically formed in alluvial deposits derived from granitic and sedimentary rock sources. It has a sandy texture with a loamy component that provides moderate water retention while allowing for rapid permeability. This soil type generally exhibits low shrink-swell potential and minimal runoff, making it less prone to erosion. Slopes range from 0 to 2 percent.

2.4.4 Flood Zone Information

FLOOD ZONE DATA SUMMARY

Source:	Federal Emergency Management Agency
Community Panel No.	06059C0139J

FLOOD ZONE DATA SUMMARY

FIRM Date:	December 3, 2009
Zone Designation:	Zone X (shaded); defined as moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee.

A copy of the reviewed flood map is included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

HISTORICAL USE INFORMATION

Years	Resource	Description/Use
1896-1935	Topographic Maps	Unimproved Land
1938-1953	Aerial Photographs, Topographic Maps	Agricultural Land
1955-Present	Aerial Photographs, City Directories, Client-Provided Information, Interviews, Topographic Maps	Church, Classroom Buildings; Tenants Include various churches since 1955 and pre-schools since at least 2010

Tenants on the subject property have included various churches since the 1950s and a preschool since the 2010s.

No potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Risk Information Services (ERIS) on June 18, 2025. The inferred uses of the subject property and adjoining properties as interpreted from the aerial photographs in Appendix B are tabulated below:

Date: **1938**		Scale: **1"=500'**
Subject Property:	Appears to be agricultural land	
North:	Appears to be agricultural land	
East:	Appears to be agricultural land	
South:	Appears to be agricultural land	
West:	Appears to be agricultural land	

Date: **1947**		Scale: **1”=500’**
Subject Property:	No significant changes visible	
North:	Appears to be unimproved, vacant land	
East:	No significant changes visible	
South:	No significant changes visible	
West:	No significant changes visible	

Date:	**1953**	Scale:	**1”=500’**
Subject Property:	No significant changes visible		
North:	Appears to be partially developed with residences		
East:	Appears to be partially developed with the current elementary school		
South:	No significant changes visible		
West:	No significant changes visible		

Date:	**1963, 1972, 1981, 1987, 1995, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, 2022, 2024**	Scale:	**1”=500’**
Subject Property:	Appears to be developed with the current buildings		
North:	Appears to be residentially developed across a street		
East:	Appears to be developed with the current elementary school		
South:	Appears to be developed with a residence and the current church building		
West:	Appears to be residentially developed across a street		

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of fire insurance maps (FIMs) from ERIS on June 15, 2025. FIM coverage was not available for the subject property.

A copy of the no coverage letter is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from ERIS on June 23, 2025 for past names and businesses that were listed for the subject property and adjoining properties. The findings are tabulated below:

SUBJECT PROPERTY SUMMARY

City Directory Search for 9822 Russell Ave (Subject Property)	
Year(s)	**Occupant Listed**
1955	G Gr Church of Christ
1958	G Gr Church of Christ
1964	Church of Christ
1967	Church of Christ
1970	Church of Christ Christian
1975	Church of Christ

1981	Gardn Grv Ch God
1986	Cornerstone Christn 537 4850, Gardn Gry Chrsth Ch 537 4190
1991	Bethel Missionry Ch, Gardn Grv Chrstn Ch, Cornerstone Christn
1996	Cornerstone Christn, Gardn Grv Chrstn Ch
2001	Cornerstone Christn, Cross County Vtnmse Chrstn Ch, Cross County Christian Church
2003	Bethel Missionary Church, Cross County Vietnamese Chrstn, Cross County Christian Church
2008	Iglesia De Cristo Mllf
2012	Sunflower Preschool
2016	Sunflower Preschool, Development Center Orange, Iglesia De Cristo Mllf
2020	Sunflower Preschool, Development Center Orange, Iglesia De Cristo Mllf
2023	Sunflower Preschool, Development Center Orange, Iglesia De Cristo Mllf
2024	Sunflower Preschool, Development Center Orange, Iglesia De Cristo Mllf

Based on the city directory review, no environmentally sensitive listings were identified for the subject property address(es).

ADJOINING PROPERTY SUMMARY

City Directory Search for 9801 Russell Ave (Adjoining Property)	
Year(s)	**Occupant Listed**
1958	Apartment
1964	Apartment, Lanpherie D
1967	Faust M, Braughton C, Irwin W F, Clifton S, Building
1981	Singh Gora, Telles Danl J, Kean Daniel K, Nguyen Nuong
1986	Singh Gora 638 1174, Nguyễn Hoa Thi 636 1381, Nguyên Nuong 638 7594
1991	Nguyen Van
1996	Nguyen Van, Phạm Dinh
2001	Bui Lan, Bernth Harold, Lương Hoa
2003	Dinh Pham
2008	Lan Bui, Hien Luong
2016	Nina Le, Trung Luong, Todd Le
2020	Nina Le
2023	Nina Le
2024	Hardwin Huynh

City Directory Search for 9811 Russell Ave (Adjoining Property)	
Year(s)	**Occupant Listed**
1958	Apartment, Ayersman Raymond E, Humlie J Virginia, Taylor Kenneth E
1964	Apartment, A□ Lautenschlager T, Giraldi M J, Riddle R L
1967	Hill T, Carlsen M J, Apartment
1970	Bruce Wm L Jr, Emmons Lynn A
1981	Bui Muon Van, Nguyen Thanh
1986	Bui Muon Van 534 0436, Nguyên Nga Ghi 636 2113, Nguyên Thanh 636 4347, Dang Thuoi T 638 9357
1991	Dang Thuoi T
1996	Dang Thuoi T, Nguyên Trung M
2001	Dang Thuoi T
2003	Thuoi Thi Dang
2008	Thuoi T Dang
2016	Lan Nguyen, Jacqueline Nguyen, Jimmy Huynh
2020	Lan Nguyen, Jacqueline Nguyen, Jimmy Huynh
2023	Lan Nguyen, Jacqueline Nguyen, Jimmy Huynh
2024	Allen Luong, Jacqueline Nguyen

City Directory Search for 9831 Russell Ave (Adjoining Property)	
Year(s)	**Occupant Listed**
1958	Apartment, Jeffers James J, Coffino Rita
1964	Aparthent, Canterberry H L, Kaletka H W, Magness We
1967	Pena H, Wilson B J, Riley M J, Apartment
1970	Gray Lenore, Riley Mary Jane
1975	Fox Steven
1981	Rudden K
1986	Audden K 534 8096, Tran Charlie 537 0823
1991	Bui Laura, Dạng Hung Phi, Hồ Thanh Van
1996	Lê Dung Dinh
2001	Tan Ca, • Đinh Hoà, Nguyen Chin H, Nguyên Ho, Huynh Nhan, Chung Don
2008	Ca Tan, Nhuan N Huynh

2020	Dat Trieu
2023	Dat Trieu

City Directory Search for 9841 Russell Ave (Adjoining Property)

Year(s)	Occupant Listed
1955	Henley Albert
1958	Henley Albert
1964	Carnes D, Henley Albert
1967	Carnes D, Henley Albert
1981	Pfaff Walter H
1986	Pfaff Walter H 638 9127
1991	Xxxx
1996	Xxxx
2001	Kim Hạng
2012	Marvin Kim
2016	Nathan Kim
2020	Nathan Kim
2023	Nathan Kim

City Directory Search for 9861 Russell Ave (Adjoining Property)

Year(s)	Occupant Listed
1955	Final C E
1958	Final C E
1964	Hayne a Jr
1967	Schultz H
1970	Miller Dan
1975	Krogman Danl L
1981	Krogman Danl L
1986	Krogman Danl L 534 8411
1991	Krogman Dan L
1996	Krogman Dan ! L
2001	Krogman Dani L
2008	Daniel L Krogman

2012	Jorge Aguilar, Roberto Lozano, Jose Hernandez

City Directory Search for 9972 Russell Ave (Adjoining Property)

Year(s)	Occupant Listed
1955	Sunnyside School
1958	Sunnyside School
1964	Sunnyside Elem Schl
1975	Southwest Garden Grove Little League
1981	Dowling David L, Southwest Grdn Grve, Sunnyside Elem Sc
1986	Sunnyside Elem Sc 538 6158, Southwest Grdn Grve 638 0463
1991	Sunnyside Elem Sc, Southwest Grdn Grve
1996	Sunnyside Elem Sc, Southwest Grdn Grv
2001	Sunnyside Elementary School, Southwest Gardn 71 Grv Little Lge
2003	Southwest Gg Little League, Sunnyside Elementary School
2008	Sunnyside Elementary School
2012	Sunnyside Elementary School
2016	Sunnyside Elementary School
2020	Sunnyside Elementary School
2023	Sunnyside Elementary School
2024	Sunnyside Elementary School

City Directory Search for 9881 Trask Ave (Adjoining Property)

Year(s)	Occupant Listed
1964	Presbyterian Church
1967	Presbyterian Church
1970	Orthodox Presbyterian Church
1975	Orthodox Presbyterian Church
1981	Presbytern Oath Ch, Orthdox Prsbytrn Ch
1986	Gardn Gry Ortho Ch, Presbyteran Ort Ch, Peninsula Chrstn Sc
1991	Gardn Grv Ortho Ch, Presby Orthodox Ch, Peninsula Chrstn Sc
1996	Gardn Grv Ortho Ch, Presby Orthodox Ch, Peninsula Chrstn Sc
2001	Orange Co Chnse Chrstn Asmbly
2003	Kings Mission, Orange County Chinese Christin

2008	Orange County Chinese Church
2012	Orange County Church
2016	Orange County Church
2020	Orange County Church
2023	Orange County Church
2024	Orange County Church

Based on the city directory review, no environmentally sensitive listings were identified for the adjoining property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from ERIS on June 15, 2025. The following inferred uses of the subject property and adjoining properties interpreted from topographic maps in Appendix B and are tabulated below:

Date:	**1896, 1898, 1901, 1935, 1942, 1949, 1950**
Subject Property:	No structural development depicted
North:	No structural development depicted
East:	No structural development depicted
South:	No structural development depicted
West:	No structural development depicted

Date:	**1965, 1972, 1981**
Subject Property:	Depicted as developed with three building structures labeled as a church
North:	Shaded to depict urban development, across Russell Avenue
East:	Developed with a small cluster of buildings labeled "Sunnyside School"
South:	Partially shaded to depict urban development; one building is also depicted, labeled as a church
West:	Shaded to depict urban development, across Kerry Street

Date:	**2015, 2018, 2022**
Subject Property:	No site-specific features are depicted
North:	Only roadways are shown and no site-specific features are depicted
East:	Only roadways are shown and no site-specific features are depicted
South:	Only roadways are shown and no site-specific features are depicted

West:	Only roadways are shown and no site-specific features are depicted

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

State Department

REGULATORY AGENCY DATA

Name of Agency:	California Environmental Protection Agency (CalEPA)
Point of Contact:	1001 I Street, Sacramento, CA 95814
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	(916) 323-2514
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the CalEPA.

Health Department

REGULATORY AGENCY DATA

Name of Agency:	Orange County Health Care Agency (OCHCA)- Environmental Health Division
Point of Contact:	Public Record Request (https://orangecounty.nextrequest.com/requests/new)
Agency Address:	1241 E. Dyer Road, Suite 120, Santa Ana, CA 92701
Agency Phone Number:	714-433-6000
Date of Contact:	June 25, 2025
Method of Communication:	Online Request Form

Summary of Communication:

As of the date of this report, Partner has not received a response from the OCHCA for inclusion in this report.

Fire Department

REGULATORY AGENCY DATA

Name of Agency:	Orange County Fire Authority (OCFA)- Community Risk Reduction
Point of Contact:	OCFA Email (CRTK@ocfa.org)
Agency Address:	1 Fire Authority Road, Irvine, CA 92602
Agency Phone Number:	714-573-6040

Date of Contact:	June 25, 2025
Method of Communication:	Online Request Form

Summary of Communication:

The OCFA provided Partner with a Fire Safety Inspection form dated June 3, 2025. The inspection noted two permits: Permit AL1R for "Liquefied Petroleum Gas Reissuance" and "Permit AP23R for "Assembly, >300 Occupants- Reissuance". No violations were noted.

Building Department

REGULATORY AGENCY DATA

Name of Agency:	Garden Grove Building and Safety Department
Point of Contact:	Building Permits Archive (https://ch.ggcity.org/permitsoft/permits/search)
Agency Address:	11222 Acacia Parkway, Garden Grove, CA 92840
Agency Phone Number:	714-741-5307
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

Records were available for review, as further discussed in the following table.

Building Records Reviewed for 9822 Russell Avenue (Subject Property)

Year(s)	Owner/Occupant/Address	Description
1980	9822 Russell Avenue	Permit - PLUMBING
1980	9822 Russell Avenue	Permit - BUILDING ALTERATIONS TO OTHER BUILDINGS
1980	9822 Russell Avenue	Permit - ELECTRIC
1981	9822 Russell Avenue	Permit - HEATING/AC
1981	9822 Russell Avenue	Permit - ALTERATIONS TO OTHER BUILDINGS. BUILDING ALTERATIONS TO OTHER BUILDINGS
1981	9822 Russell Avenue	Permit - Electrical
1981	9822 Russell Avenue	Permit - PLUMBING
1983	9822 Russell Avenue	Permit - BUILDING ALTERATIONS TO OTHER BUILDINGS
1987	9822 Russell Avenue	Permit - BUILDING REPAIRS
1989	9822 Russell Avenue	Permit - REPAIRS, REROOF W/COMP SHINGLES
1994	9822 Russell Avenue	Building Permit - MISCELLANEOUS.

		DIRECTIONAL SIGN
2011	9822 Russell Avenue	Permit- WROUGHT IRON FENCE BETWEEN (E)WOOD COLUMNS 110' X 5' IN FRONT OF PARKING AREA AT PRESCHOOL
2019	9822 Russell Avenue	Banner Permit - for Orangefield Child Development Center, not to exceed 60 days per year
2019	9822 Russell Avenue	Banner Permit/Special Event Sales Permit

Planning Department

REGULATORY AGENCY DATA

Name of Agency:	Planning Department
Point of Contact:	Online Zoning Map (https://ggcity.org/maps/zoning-land-use/)
Agency Address:	11222 Acacia Parkway, Garden Grove, CA 92840
Agency Phone Number:	714-741-5312
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

According to reviewed online documents, the subject property is zoned "R-1-7" for Single-Family Residential development by the City of Garden Grove, which is intended to provide for the establishment and promotion of single-family detached residences on individual lots and compatible associated activities. R-1-7 requires a minimum of 7,200 square feet lot area.

Oil & Gas Exploration

REGULATORY AGENCY DATA

Name of Agency:	California Geologic Energy Management Division (CalGEM)
Point of Contact:	Well Finder (https://maps.conservation.ca.gov/doggr/wellfinder/)
Agency Address:	715 P Street, MS 1900, Sacramento, CA 95814
Agency Phone Number:	(916) 445-9686
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

According to CalGEM, no oil or gas wells are located on or adjoining to the subject property.

Assessor's Office

REGULATORY AGENCY DATA

Name of Agency:	Orange County Assessor
Point of Contact:	Parcel Quest (https://assr.parcelquest.com/Home)
Agency Address:	500 South Main Street, 2nd Floor, Orange, CA 92868
Agency Phone Number:	714-834-2727
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

According to records reviewed, the subject property is identified by APN 098-081-19, totals 1.806-acres, and was last sold in 2006.

Air Pollution Control Agency

REGULATORY AGENCY DATA

Name of Agency:	South Coast Air Quality Management District (SCAQMD)
Point of Contact:	Online Database (https://scaqmd-online.maps.arcgis.com/apps/webappviewer/index.html?id=70dd0045e66243488b3f1ae32405cc0a)
Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Agency Phone Number:	909-396-2000
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the AQMD.

Regional Water Quality Agency

REGULATORY AGENCY DATA

Name of Agency:	Regional Water Quality Control Board (RWQCB)- Santa Ana Region
Point of Contact:	GeoTracker (https://geotracker.waterboards.ca.gov/)
Agency Address:	3737 Main Street, Suite 500, Riverside, CA 92501
Agency Phone Number:	(951) 782-4130
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

Department of Toxic Substances Control

REGULATORY AGENCY DATA

Name of Agency:	Department of Toxic Substances Control (DTSC)
Point of Contact:	HWTS Database (https://hwts.dtsc.ca.gov/search) EnviroStor Database https://www.envirostor.dtsc.ca.gov/public/
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	916-551-1313
Date of Contact:	June 25, 2025
Method of Communication:	Online Research

Summary of Communication:

The DTSC Hazardous Waste Tracking System (HWTS) was researched for hazardous waste manifest data submitted to the California DTSC. No listings were identified for the subject property. The EnviroStor database is the DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reason to investigate further. No records were identified for the subject property address on the EnviroStor database.

Copies of pertinent documents are included in Appendix B of this report.

4.2 Mapped Database Records Search

The regulatory database report provided by ERIS documents the listing of sites identified on federal, state, county, city, and tribal (when applicable) standard source environmental databases within the approximate minimum search distance (AMSD) specified by ASTM Practice E1527-21. The data from these sources are updated as these data are released and integrated into one database. The information contained in this report was compiled from publicly available sources.

The environmental database information is used to identify environmental concerns in connection with the subject property. The listings also serve to identify the known indications of the storage, use, generation, disposal, or release of hazardous substance at the subject property and the potential for contaminants to migrate onto the subject property from off-site sources in groundwater or soil in the form of liquids or vapor.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

The following table lists the sites as categorized by the regulatory database within the prescribed AMSD. The locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

DATABASE REPORT DATA

Database	AMSD Radius (mile)	Listings Identified		
		Subject Property	Adjoining Properties	Surrounding Area Sites of Concern
Federal NPL	1.00	N	N	N
Delisted NPL Site	0.50	N	N	N
Federal SEMS Site	0.50	N	N	N
Federal SEMS-ARCHIVE	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, VSQG, CESQG)	Subject and Adjoining	N	N	N
Federal IC/EC Registries	Subject Property	N	N	N
Federal ERNS Site	Subject Property	N	N	N
Federal PFAS Facility	0.50	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site (LUST/LPST)	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	Subject and Adjoining	N	N	N
State/Tribal IC/EC Registries	Subject and Adjoining	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N

State/Tribal Spills	0.25	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
State PFAS Facility	0.50	N	N	N
RCRA Non-Generators (RCRA NON GEN)	Subject and Adjoining	N	**Y**	N

4.2.2 Subject Property Listings

The subject property was not identified in the regulatory database report.

4.2.3 Adjoining Property Listings

One adjoining property to the east of the subject property was identified as an RCRA Non-Generator (RCRA NON GEN) site in the regulatory database report, as discussed below:

ADJOINING PROPERTY DATABASE LISTING

Property Name:	Sunnyside Elementary School
Address:	9972 Russell Avenue
Direction:	East
Hydrological Gradient:	Cross-Gradient
Database Listing:	RCRA NON GEN
Substance Involved:	Asbestos
Discussion:	The adjoining Sunnyside Elementary School is listed in the RCRA NON GEN database under USEPA identification number CAC003292523, classifying it as a verified non-generator of hazardous waste in 2024. According to the California Department of Toxic Substances Control Hazardous Waste Tracking System database, the recorded waste generated was asbestos in 2014. The removal and proper handling of asbestos is a routine and regulated activity that does not represent an environmental concern when conducted in accordance with applicable standards. Based on the absence of reported violations, spills, or releases, the presence of regulatory oversight, and the limited historical waste generation, this listing is not expected to represent a significant environmental concern for the subject property, and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.

Based on the findings, vapor migration is not considered an environmental concern at this time.

4.2.4 Surrounding Area Listings of Sites of Concern

No sites of concern are identified in the regulatory database report.

Based on the findings, vapor migration is not considered an environmental concern at this time.

4.2.5 Unplottable Listings

No unplottable listings of concern are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM Practice E1527-21, Partner requested the following site information from Melia Homes (User of this report).

USER RESPONSIBILITIES

Item	Provided By User
AAI User Questionnaire	Yes
Title Records, Environmental Liens, and AULs	Yes
Specialized Knowledge	No
Actual Knowledge	No
Valuation Reduction for Environmental Issues	No
Identification of Key Site Manager	Yes
Reason for Performing Phase I ESA	Yes
Prior Environmental Reports	No

5.1 Interviews

5.1.1 Interview with Owner

The owner of the subject property since 2006, identified as Iglesia de Cristo de Restauracion, was not available to be interviewed at the time of the assessment.

5.1.2 Interview with Report User

Chad Lonski, report user, was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products

in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

5.1.3 Interview with Key Site Manager

Ms. Yolanda Martinez, key site manager, indicated that they had no information pertaining to any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

The key site manager further stated that there are no USTs, ASTs, clarifiers, oil/water separators, groundwater monitoring wells, or hazardous substance use/storage/generation on the subject property to the best of their knowledge.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators, and occupants were not conducted since information regarding the potential for contamination at the subject property was obtained from other sources.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was provided with a Preliminary Title Report for review as part of this assessment

prepared by Fidelity National Title Company for the subject property.

Copies of pertinent pages are included in Appendix B of this report.

5.2.2 Specialized Knowledge

The User did not have specialized knowledge of environmental conditions associated with the subject property at the time of the assessment.

5.2.3 Actual Knowledge of the User

The User was not aware of environmental liens and/or AULs encumbering the subject property or in connection with the subject property at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

The User was not aware of any reductions in property value due to environmental issues.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or reasonably ascertainable within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was mostly sunny. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

SITE ASSESSMENT DATA

Site Assessment Performed By:	Reese Davis
Site Assessment Conducted On:	July 2, 2025

The table below provides the subject property personnel interviewed during the field reconnaissance:

SITE VISIT PERSONNEL FOR 9822 RUSSELL AVENUE (SUBJECT PROPERTY)

Name	Title/Role	Contact Number	Site Walk*
Yolanda Martinez	Iglesia de Cristo de Restauracion	714-537-0235	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste generated at the subject property is disposed of in a commercial dumpster located on the south side of the subject property. An independent solid waste disposal contractor, Republic Services, removes solid waste from the subject property. Solid waste generated at the subject property includes household-type waste. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges on the subject property are directed into the municipal sanitary sewer system. The City of Garden Grove Public Works Department services the subject property vicinity. No wastewater treatment facilities were observed or reported on the subject property. No septic systems were observed or reported on the subject property.

6.1.3 Stormwater and Surface Water Drainage

Stormwater is removed from the subject property primarily by sheet flow action across the paved surfaces towards stormwater drains located in the public right of way and via ground infiltration on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

Heating and cooling systems as well as domestic hot water equipment are fueled by electricity and natural gas provided by Southern California Edison (SCE). The mechanical system is comprised of natural gas furnaces and wall-mounted electrical air conditioning units. Hot water is provided by individual natural gas water heaters.

6.1.5 *Wells and Cisterns*

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 *Wastewater*

Domestic wastewater generated at the subject property is disposed by means of the sanitary sewer system. No industrial processes are currently performed at the subject property.

6.1.7 *Septic Systems*

No septic systems were observed or reported on the subject property.

6.1.8 *Additional Site Observations*

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 *Hazardous Substances and Petroleum Products Used or Stored at the Site*

No evidence of the use of reportable quantities of hazardous substances was observed on the subject property.

Small quantities of general maintenance supplies were found to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of maintenance supplies does not appear to pose a significant threat to the environmental integrity of the subject property at this time.

6.2.2 *Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)*

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 *Evidence of Releases*

No spills, stains, or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 *Polychlorinated Biphenyls (PCBs)*

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 *Strong, Pungent or Noxious Odors*

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 *Pools of Liquid*

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 *Drains, Sumps and Clarifiers*

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 *Pits, Ponds and Lagoons*

No pits, ponds, or lagoons were observed on the subject property.

6.2.9 *Stressed Vegetation*

No stressed vegetation was observed on the subject property.

6.2.10 *Additional Potential Environmental Hazards and Emerging Contaminants*

Partner evaluated the current subject property use during the site reconnaissance for potential environmental hazards, including Per- and Polyfluoroalkyl Substances (PFAS) impacts to the subject property. Based on the site observations, likely PFAS impacts to the subject property based on current use were not identified. Based on this information, PFAS are not considered an environmental concern at this time.

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 *Asbestos-Containing Materials (ACMs)*

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building that have not been appropriately tested are “presumed asbestos-containing material” (PACM).

A limited, visual survey of areas accessible from ground level for the presence of suspect ACM at the subject property was conducted. The objective of this visual survey was to note the presence and condition of suspect ACM listed by EPA, OSHA, and other regulatory and recognized sources as suspect ACM and/or considered friable or non-friable. Please refer to the table below for identified suspect ACM:

SUSPECT ACMs

Suspect ACM	Location	Friable Yes/No	Physical Condition
Drywall Systems, Floor Tiles, Floor Tile Mastic, Fiberglass Insulation	Throughout Building Interior	No	Good
Stucco	Throughout Building Exterior, Throughout Building Interior	Yes	Good

Prior to disturbance, Partner recommends a comprehensive asbestos survey of the property be completed to determine the presence, condition, friability and likely future condition of suspect or confirmed ACM. All suspect materials must be handled as ACM according to local, state and federal regulations until the results of sampling and analysis indicate the material is a non-ACM. According to the US EPA, ACM that is intact and in good condition can, in general, be managed safely in-place under an Operations and Maintenance (O&M) Program until removal is dictated by renovation, demolition, or deteriorating material condition.

Partner was not provided building plans or specifications for review, which may have been useful in determining areas likely to have used ACM.

6.3.2 *Lead-Based Paint (LBP)*

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm2 (or 5,000 µg/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Due to the commercial nature of use of the subject property, LBP was not considered within the scope of this assessment.

6.3.3 *Radon*

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA RADON ZONES

EPA Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Review of the US EPA Map of Radon Zones places the subject property in Zone 3. Based upon the radon zone classification, radon is not considered an environmental concern.

6.3.4 *Lead in Drinking Water*

LEAD IN DRINKING WATER SUMMARY

Water System Operator:	City of Garden Grove Public Works Department, Water Services Division
Source of Drinking Water:	Surface water imported from the Metropolitan Water District of Southern California and groundwater from eleven (11) wells in the Orange County groundwater basin
Year of Annual Water Quality Report:	2024
Compliance Status:	Water supplied is in compliance with all State and Federal regulations pertaining to drinking water standards for lead.

Water sampling was not conducted to verify water quality.

6.3.5 Microbial Growth

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g.in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Partner observed accessible, interior areas of the subject property buildings for significant evidence of microbial growth with the exceptions detailed in Section 1.5 of this report; however, this assessment should not be used as a microbial survey or inspection. Additionally, this limited assessment was not designed to assess all areas of potential microbial growth that may be affected by microbial growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) microbial growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

No obvious indications of water damage or microbial growth were observed during Partner's visual assessment.

6.3.6 Wetlands

The subject property does not appear to be a designated wetland area based on information obtained from the United States Fish and Wildlife Service's Online Wetlands Mapper; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

6.4 Adjoining Property Reconnaissance

The adjoining property reconnaissance consisted of observing the adjoining properties from the subject property premises.

6.4.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No hazardous substances or petroleum products were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.2 ASTs/USTs for Hazardous Substances or Petroleum Products

No ASTs or USTs for hazardous substances/petroleum products were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.3 Evidence of Releases

No evidence of a release was observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.4 PCBs

No PCB containing materials were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.5 Strong, Pungent, or Noxious Odors

No strong, pungent, or noxious odors were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.6 Pools of Liquid

No pools of liquid were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.7 Drains, Sumps, and Clarifiers

No drains, sumps, or clarifiers were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.8 Pits, Ponds, and Lagoons

No pits, ponds, or lagoons were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.9 Stressed Vegetation

No stressed vegetation was observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.10 Additional Potential Environmental Hazards and Emerging Contaminants

Partner evaluated the current adjoining property use/uses during the site reconnaissance for potential environmental hazards, including PFAS impacts to the subject property. Based on observations made from the subject property borders, likely emerging contaminants and PFAS impacts to the subject property from current adjoining property use/uses were not identified. Based on this information, PFAS are not considered an environmental concern.

No additional environmental hazards were observed on adjoining properties during the limited adjoining property reconnaissance.

7.0 VAPOR ENCROACHMENT CONDITIONS

Partner conducted a limited non-intrusive vapor screening on the subject property to identify, to the extent feasible, the potential for vapor encroachment conditions (VECs) in connection with the subject property. This included consideration of chemicals of concern (COC) that may migrate as vapors into the subsurface of the subject property as a result of contaminated soil and groundwater on or near the property.

This screening utilized readily available data sources previously discussed in this Phase I ESA that includes:

- the physical setting of the subject property (Section 2.4),
- standard historical sources for the subject property, adjoining, and surrounding area (Section 3.0),
- known or potentially contaminated sites as identified from information from regulatory agencies and sites on Federal, State, tribal and local databases (Section 4.0), and
- information from the site reconnaissance (Section 6.0) of the subject property and observations of the surrounding properties.

The results of our data collection, reconnaissance, and analysis are tabulated below:

POTENTIAL FOR VAPOR ENCROACHMENT TO IMPACT THE SUBJECT PROPERTY

Area of Concern	Likely or Known VEC to Subject Property
Subject Property Existing Operations or Conditions (Sections 2.0 and 6.0)	None identified that impact the subject property.
Historical Uses of the Subject Property (Section 3.0)	None identified that impact the subject property.
Adjoining Property Operations or Existing Conditions (Sections 2.3 and 6.4)	None identified that impact the subject property.
Historical Uses of Adjoining Properties or Nearby Properties (Section 3.0)	None identified that impact the subject property.
Regulatory Review of sites identified on Federal, State, tribal and Local Environmental Databases which were located in the AMSD (Section 4.0)	None identified that impact the subject property.

Based on the findings of the limited non-intrusive vapor screening, vapor intrusion is unlikely to be an issue of concern in connection with the existing structures on the subject property. As such, no further assessment is recommended.

8.0 FINDINGS AND CONCLUSIONS

Findings and Opinions

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and lead-based paint (LBP) are present. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and building occupants.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 9822 Russell Avenue in Garden Grove, Orange County, California (the “subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property; however, one BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 9822 Russell Avenue in Garden Grove, Orange County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Reviewed By:



Richard Kim
Environmental Professional

10.0 REFERENCES

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-21

Environmental Risk Information Services (ERIS), City Directory, Fire Insurance Maps, Historic Aerials, Physical Setting Report, Radius Report, Topographic Maps, June 2025

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via the internet, June 2025

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, June 2025

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, June 2025

United States Fish and Wildlife Service, National Wetlands Inventory, accessed via the internet, June 2025

United States Geological Survey, accessed via the internet, June 2025

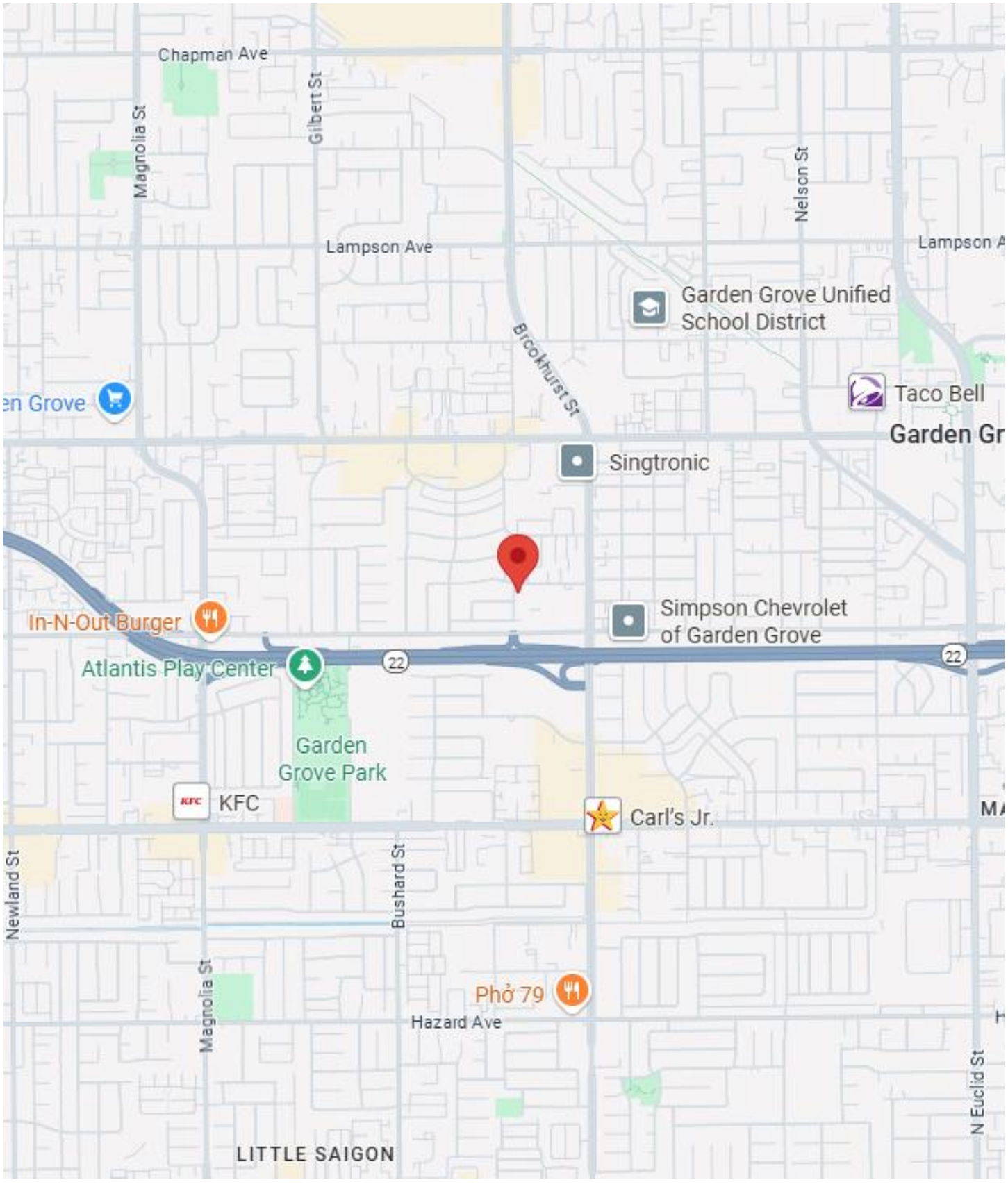
United States Geological Survey Topographic Map 2022, 7.5-minute series, accessed via the internet, June 2025

FIGURES

1: Site Location Map

2: Site Plan

3: Topographic Map



N

Drawing Not To Scale

KEY:
Subject Property

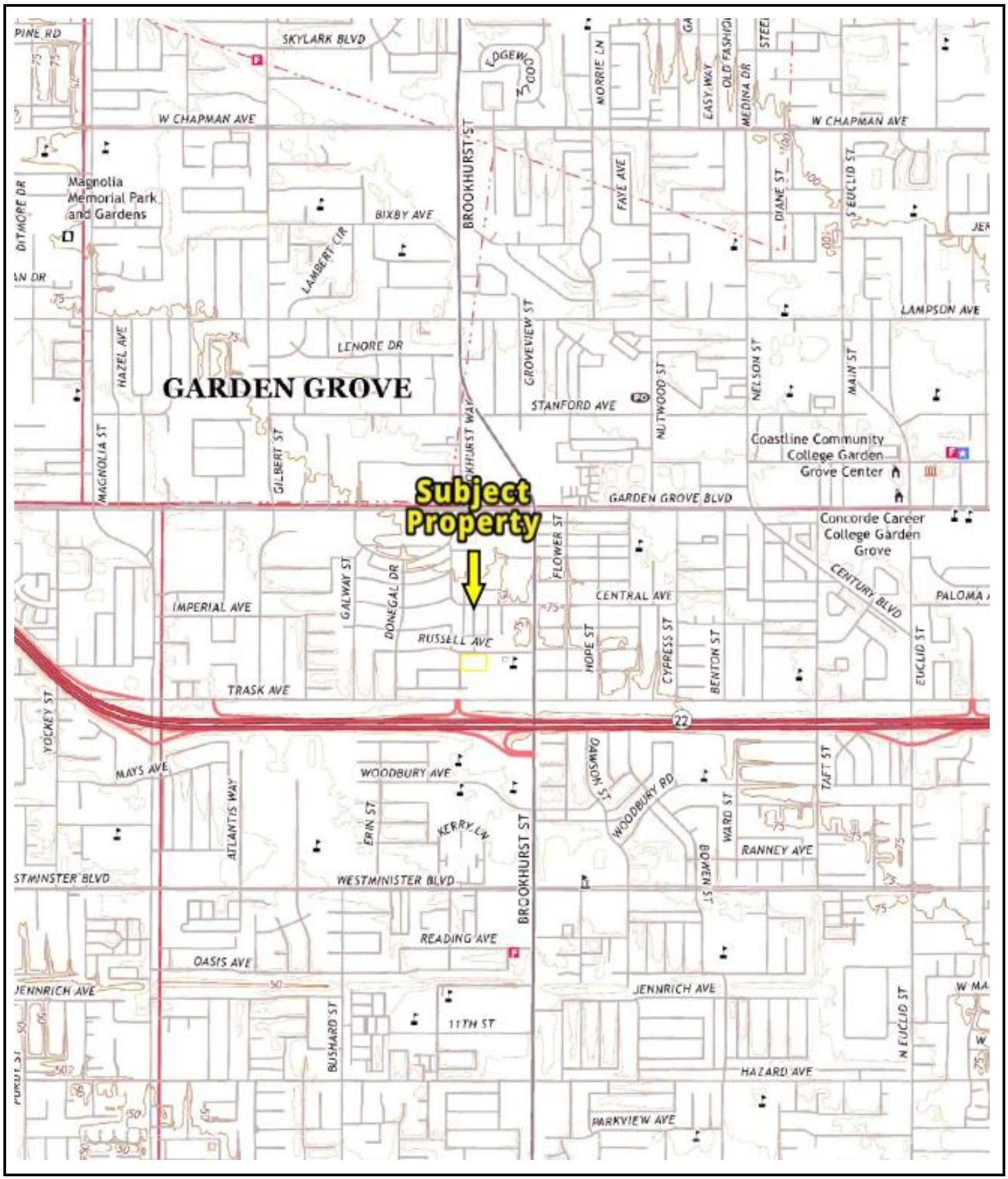
FIGURE 1: SITE LOCATION MAP
Project No. 25-500978.1

PARTNER



FIGURE 2: SITE PLAN
Project No. 25-500978.1

PARTNER



N

USGS 7.5-Minute *Anaheim, CA* Quadrangle
Created: 2022

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 25-500978.1

PARTNER

APPENDIX A: SITE PHOTOGRAPHS



1. The church viewed from Russell Avenue



2. South side of the chuch



3. West side of the church



4. Covered walkway between the church and the preschool



5. Outdoor area between church and preschool



6. View of the preschool building



7. Preschool offices



8. Eastern view of the preschool building



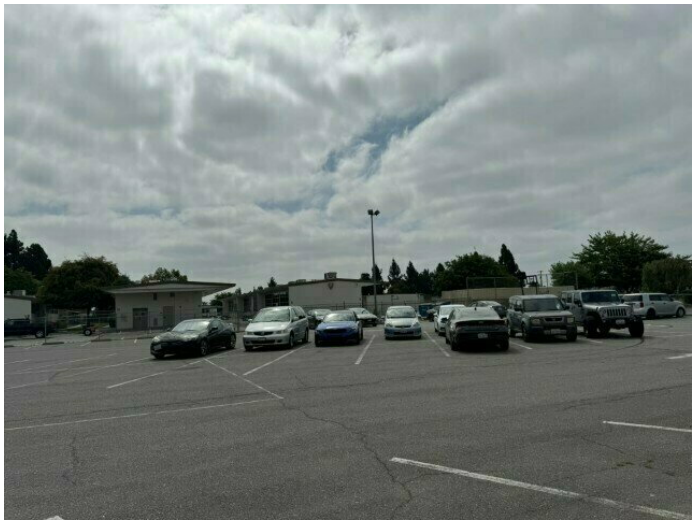
9. South side of the two-story portion of the preschool building



10. Preschool playground west of the building



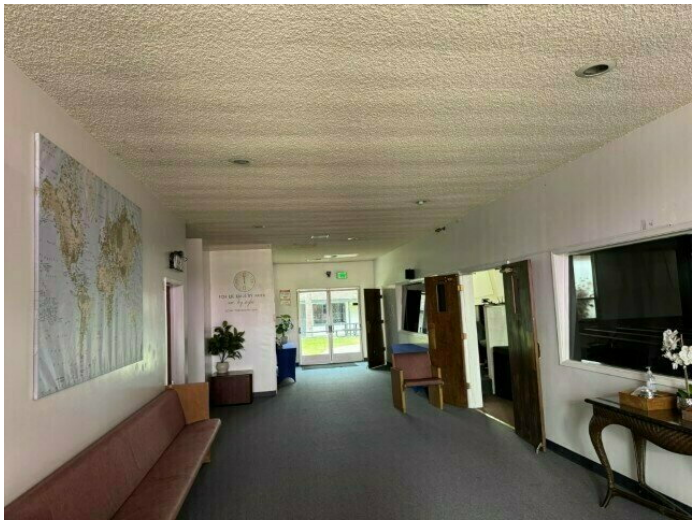
11. Maintenance storage shed



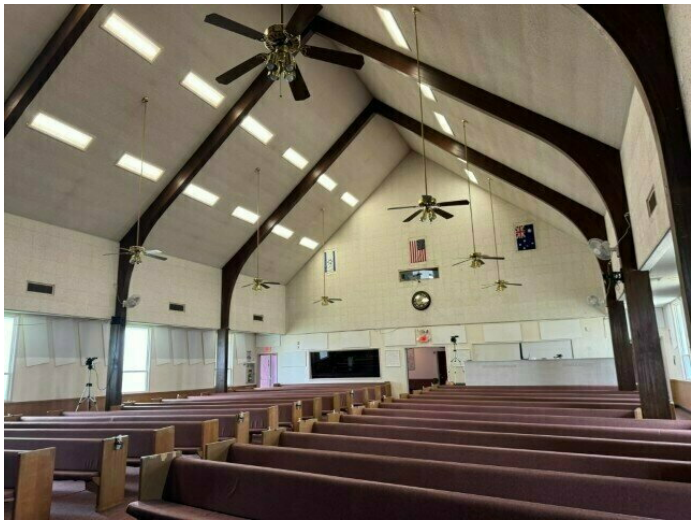
12. Parking lot at the eastern portion of the subject property



13. Parking lot at the southern portion of the subject property



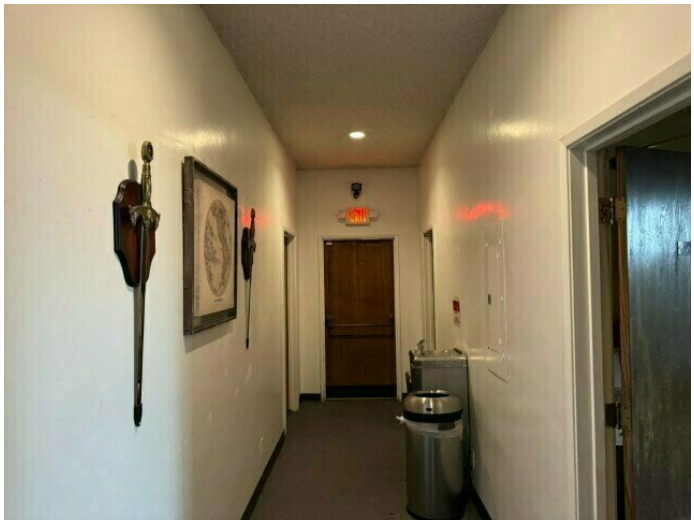
14. Lobby for the church



15. Sanctuary area of the church



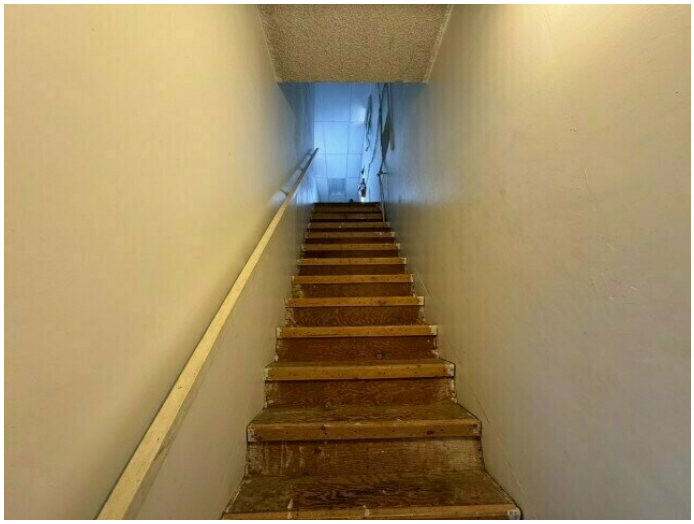
16. Church office



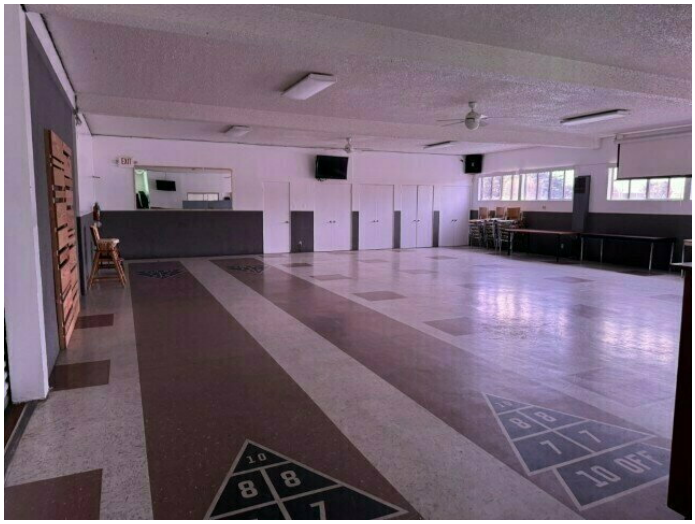
17. Church hallway



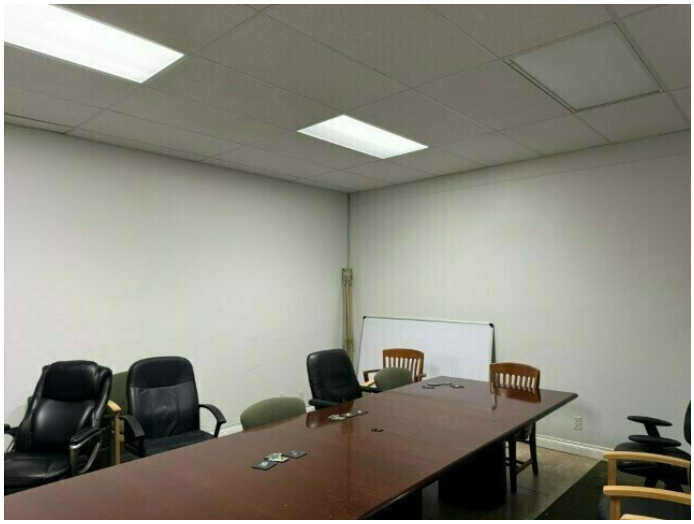
18. Church bathroom



19. Stairs to upper level of the church



20. Preschool cafeteria



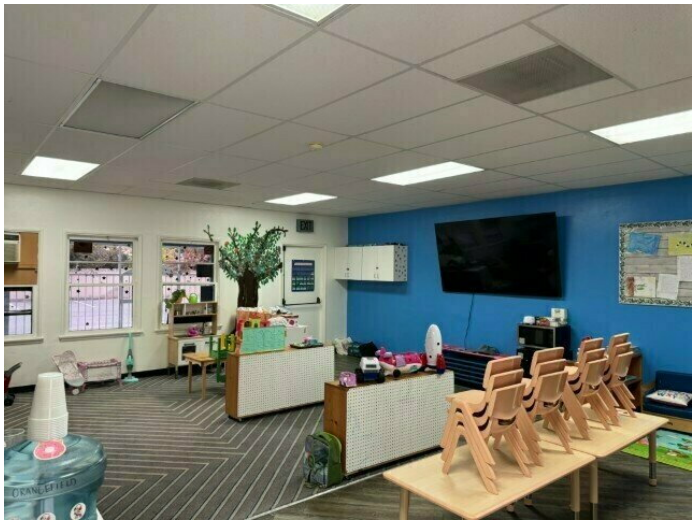
21. Conference room in the preschool



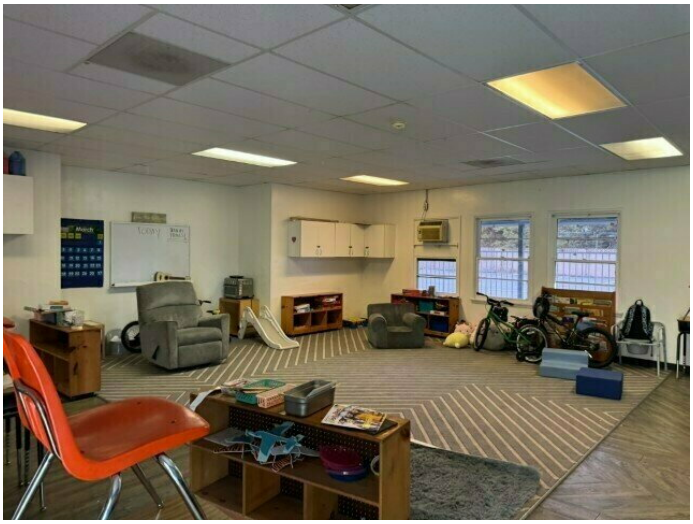
22. Preschool kitchen



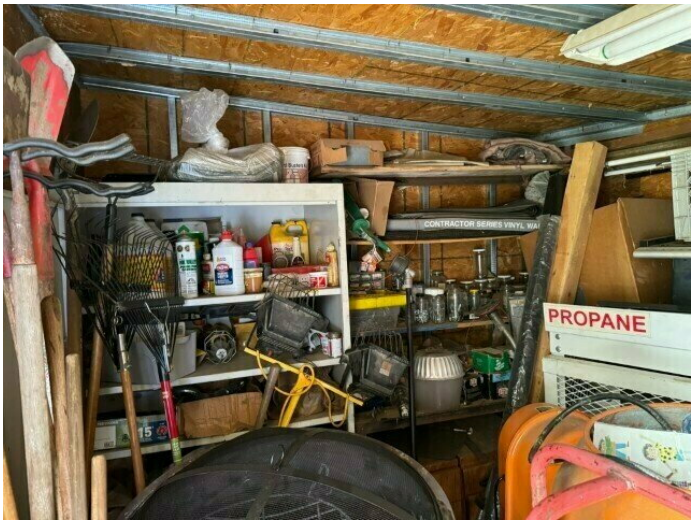
23. Preschool restroom



24. Preschool classroom



25. Preschool classroom



26. Interior of the maintenance shed



27. Stairwell to second floor of preschool



28. Second floor hallway of the preschool



29. 2nd floor preschool room



30. Wall-mounted air conditioning unit



31. Sink and janitorial area in the church



32. Fiberglass insulation and HVAC



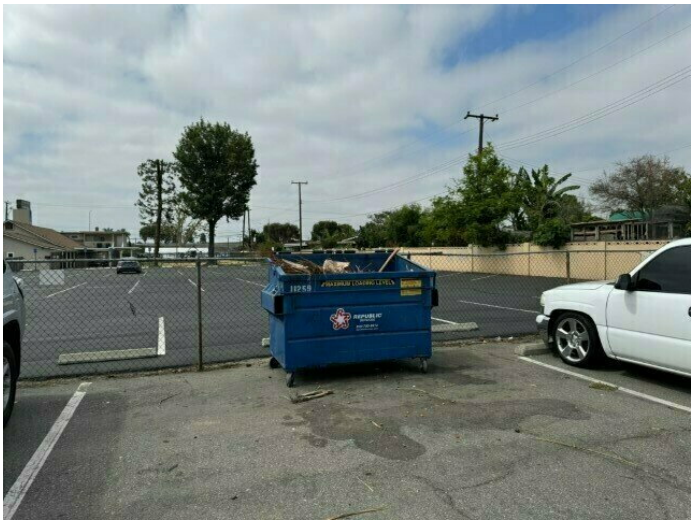
33. HVAC system



34. HVAC equipment



35. Location of water heater at the south side of the preschool building



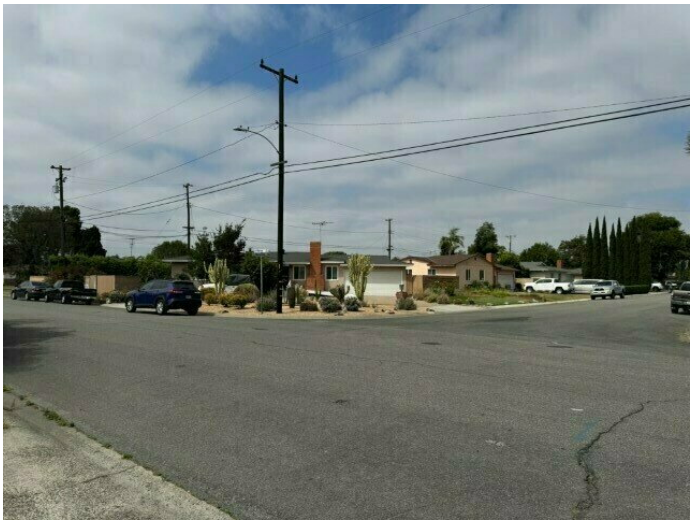
36. Dumpster at the south side of the subject property



37. Sunnyside Elementary School (9972 Russel Avenue) to the east of the subject property



38. Orange County Chinese Christian Assembly church and parking lot (9881 Trask Avenue) to the south of the subject property



39. Kerry Street and Dakota Avenue intersection to the southwest



40. Apartment complex (9801 and 9811 Russell Avenue) across Russell Avenue to the north



41. 9781 Dakota Avenue, a single-family residence, across Kerry Street to the west

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION

FIRE INSURANCE MAPS

Project Property: 9822 Russell Avenue
9822 Russell Avenue GARDEN GROVE CA 92844
Project No: 25-500978.1
Requested By: Partner Engineering and Science, Inc.
Order No: 25061300823
Date Completed: June 15, 2025

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

CITY DIRECTORY

Project Property:	*9822 Russell Avenue* *9822 Russell Avenue* *GARDEN GROVE,CA 92844*
Project No:	*25-500978.1*
Requested By:	*Partner Engineering and Science, Inc.*
Order No:	*25061300823*
Date Completed:	*June 23, 2025*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

June 23, 2025
RE: CITY DIRECTORY RESEARCH
9822 Russell Avenue
GARDEN GROVE,CA 92844

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
9775-10000 of Russell Ave
9775-10000 of Trask Ave
Search Notes:

Search Results Summary

Date	Source	Comment
2024	DIGITAL BUSINESS DIRECTORY	
2023	DIGITAL BUSINESS DIRECTORY	
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
2001	HAINES	
1996	HAINES	
1991	HAINES	
1986	HAINES	
1981	HAINES	
1975	PACIFIC TELEPHONE	
1970	PACIFIC TELEPHONE	
1967	PACIFIC TELEPHONE	
1964	PACIFIC TELEPHONE	
1958	PACIFIC TELEPHONE	
1955	PACIFIC TELEPHONE	
1951	LUSKEYS	

2024 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9801 **HARDWIN HUYNH**...*RESIDENTIAL*
9811 **ALLEN LUONG**...*RESIDENTIAL*
9811 **JACQUELINE NGUYEN**...*RESIDENTIAL*
9822 **DEVELOPMENT CENTER ORANGE**...*CHILD CARE SERVICE*
9822 **IGLESIA DE CRISTO MLLF**...*CHURCHES*
9822 **SUNFLOWER PRESCHOOL**...*CHILD CARE SERVICE*
9871 **DEBRA HILLESTAD**...*RESIDENTIAL*
9871 **STACEY MICHAEL**...*RESIDENTIAL*
9881 **C RAMIREZ**...*RESIDENTIAL*
9881 **HILARIA URBINA**...*RESIDENTIAL*
9893 **CYNTHIA LUU**...*RESIDENTIAL*
9921 **ANDY DANG**...*RESIDENTIAL*
9921 **CHRISTINE NGUYEN**...*RESIDENTIAL*
9931 **HAI HA**...*RESIDENTIAL*
9941 **LAN NGUYEN**...*RESIDENTIAL*
9943 **BAY HUYNH**...*RESIDENTIAL*
9951 **LUZ REYNOSO**...*RESIDENTIAL*
9953 **FLORENCE STEGNER**...*RESIDENTIAL*
9953 **MIKE'S POOL & SPA SVC**...*SPAS - HEALTH*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLS*

2024 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHURCH**...*CHURCHES*
9898 **RUSSELL WESTBROOK HYUNDAI-GDN**...*NEW CAR DEALERS*
9898 **UNION DODGE**...*NEW CAR DEALERS*
9898 **WEST VALLEY CHRYSLER JEEP**...*AUTOMOBILES PICK-UP TRUCKS & VANS*

2023 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9801 **NINA LE**...*RESIDENTIAL*
9811 **JACQUELINE NGUYEN**...*RESIDENTIAL*
9811 **JIMMY HUYNH**...*RESIDENTIAL*
9811 **LAN NGUYEN**...*RESIDENTIAL*
9822 **DEVELOPMENT CENTER ORANGE**...*CHILD CARE SERVICE*
9822 **IGLESIA DE CRISTO MLLF**...*CHURCHES*
9822 **SUNFLOWER PRESCHOOL**...*CHILD CARE SERVICE*
9831 **DAT TRIEU**...*RESIDENTIAL*
9841 **NATHAN KIM**...*RESIDENTIAL*
9871 **DEBRA HILLESTAD**...*RESIDENTIAL*
9881 **C RAMIREZ**...*RESIDENTIAL*
9881 **HILARIA URBINA**...*RESIDENTIAL*
9881 **IGNACIO URBINA**...*RESIDENTIAL*
9891 **NGUYEN LAU**...*RESIDENTIAL*
9921 **ANDY DANG**...*RESIDENTIAL*
9921 **CHRISTINE NGUYEN**...*RESIDENTIAL*
9921 **LICH VU**...*RESIDENTIAL*
9931 **HAI HA**...*RESIDENTIAL*
9941 **LAN NGUYEN**...*RESIDENTIAL*
9951 **HOA NGUYEN**...*RESIDENTIAL*
9953 **FLORENCE STEGNER**...*RESIDENTIAL*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLS*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLSUNIVERSITIES & COLLEGES ACADEMIC*

2023 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHURCH**...*RELIGIOUS ORGANIZATIONS*
9881 **ORANGE COUNTY CHURCH**...*CHURCHES*
9898 **RUSSELL WESTBROOK HYUNDAI GDN**...*AUTOMOBILE DEALERS-NEW CARS*

2020 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9801 **NINA LE**...*RESIDENTIAL*
9811 **JACQUELINE NGUYEN**...*RESIDENTIAL*
9811 **JIMMY HUYNH**...*RESIDENTIAL*
9811 **LAN NGUYEN**...*RESIDENTIAL*
9822 **DEVELOPMENT CENTER ORANGE**...*CHILD CARE SERVICE*
9822 **IGLESIA DE CRISTO MLLF**...*CHURCHES*
9822 **SUNFLOWER PRESCHOOL**...*CHILD CARE SERVICE*
9831 **DAT TRIEU**...*RESIDENTIAL*
9841 **NATHAN KIM**...*RESIDENTIAL*
9871 **DEBRA HILLESTAD**...*RESIDENTIAL*
9881 **C RAMIREZ**...*RESIDENTIAL*
9881 **HILARIA URBINA**...*RESIDENTIAL*
9881 **IGNACIO URBINA**...*RESIDENTIAL*
9891 **NGUYEN LAU**...*RESIDENTIAL*
9921 **ANDY DANG**...*RESIDENTIAL*
9921 **CHRISTINE NGUYEN**...*RESIDENTIAL*
9921 **LICH VU**...*RESIDENTIAL*
9931 **HAI HA**...*RESIDENTIAL*
9941 **LAN NGUYEN**...*RESIDENTIAL*
9951 **HOA NGUYEN**...*RESIDENTIAL*
9953 **MICHAEL STEGNER**...*RESIDENTIAL*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLSUNIVERSITIES & COLLEGES ACADEMIC*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLS*

2020 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHURCH**...*RELIGIOUS ORGANIZATIONS*
9881 **ORANGE COUNTY CHURCH**...*CHURCHES*
9898 **RUSSELL WESTBROOK HYUNDAI-GDN**...*AUTOMOBILE DEALERS-NEW CARS*

2016 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9801 **NINA LE**...*RESIDENTIAL*
9801 **TODD LE**...*RESIDENTIAL*
9801 **TRUNG LUONG**...*RESIDENTIAL*
9811 **JACQUELINE NGUYEN**...*RESIDENTIAL*
9811 **JIMMY HUYNH**...*RESIDENTIAL*
9811 **LAN NGUYEN**...*RESIDENTIAL*
9822 **DEVELOPMENT CENTER ORANGE**...*CHILD CARE SERVICE*
9822 **IGLESIA DE CRISTO MLLF**...*CHURCHES*
9822 **SUNFLOWER PRESCHOOL**...*CHILD CARE SERVICE*
9841 **NATHAN KIM**...*RESIDENTIAL*
9871 **DEBRA HILLESTAD**...*RESIDENTIAL*
9871 **TIMOTHY HILLESTAD**...*RESIDENTIAL*
9881 **C RAMIREZ**...*RESIDENTIAL*
9881 **HILARIA URBINA**...*RESIDENTIAL*
9881 **IGNACIO URBINA**...*RESIDENTIAL*
9881 **JOANNA URBINA**...*RESIDENTIAL*
9921 **ANDY DANG**...*RESIDENTIAL*
9921 **CHRISTINE NGUYEN**...*RESIDENTIAL*
9921 **LICH VU**...*RESIDENTIAL*
9931 **HAI HA**...*RESIDENTIAL*
9941 **LAN NGUYEN**...*RESIDENTIAL*
9951 **HOA NGUYEN**...*RESIDENTIAL*
9953 **MICHAEL STEGNER**...*RESIDENTIAL*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLS*

2016 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHURCH**...*RELIGIOUS ORGANIZATIONS*
9881 **ORANGE COUNTY CHURCH**...*CHURCHES*
9898 **UNION DODGE**...*AUTOMOBILE DEALERS-NEW CARS*

2012 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9782 **JI LEE**...*RESIDENTIAL*
9782 **OK LEE**...*RESIDENTIAL*
9822 **SUNFLOWER PRESCHOOL**...*CHILD CARE SERVICE*
9841 **MARVIN KIM**...*RESIDENTIAL*
9861 **JORGE AGUILAR**...*RESIDENTIAL*
9861 **JOSE HERNANDEZ**...*RESIDENTIAL*
9861 **ROBERTO LOZANO**...*RESIDENTIAL*
9881 **CARLOS CASTRO**...*RESIDENTIAL*
9881 **HILARIA URBINA**...*RESIDENTIAL*
9881 **IGNACIO URBINA**...*RESIDENTIAL*
9881 **JOANNA URBINA**...*RESIDENTIAL*
9881 **URBINA IGNACIO**...*RESIDENTIAL*
9921 **ANDY DANG**...*RESIDENTIAL*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*SCHOOLS*

2012 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHURCH**...*CHURCHES*
9898 **GARDEN GROVE HYUNDAI**...*AUTOMOBILE DEALERS-NEW CARS*

2008 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9782 **OK J LEE**...*RESIDENTIAL*
9801 **HIEN LUONG**...*RESIDENTIAL*
9801 **LAN BUI**...*RESIDENTIAL*
9811 **THUOI T DANG**...*RESIDENTIAL*
9822 **IGLESIA DE CRISTO MLLF**...*RELIGIOUS ORGANIZ*
9831 **CA TAN**...*RESIDENTIAL*
9831 **NHUAN N HUYNH**...*RESIDENTIAL*
9861 **DANIEL L KROGMAN**...*RESIDENTIAL*
9891 **DAWN HAWKINS**...*RESIDENTIAL*
9891 **EV VERTICAL BLIND**...*MFG DRAPERY HARDWARE/BLINDS*
9911 **HONG LE**...*RESIDENTIAL*
9911 **NGHI HOANG**...*RESIDENTIAL*
9921 **XUAN NGUYEN**...*RESIDENTIAL*
9931 **CHIN H NGUYEN**...*RESIDENTIAL*
9931 **HOAHUU NGUYEN**...*RESIDENTIAL*
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*ELEMENT, SECON SCHL*

2008 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **ORANGE COUNTY CHINESE CHURCH**...*RELIGIOUS ORGANIZ*
9898 **UNION DODGE INC**...*NEW & USED CAR DLRS*
9898 **UNION DODGE INC**...*GENERAL AUTO REPAIR RET NEW/USED AUTOMOBILES*
9898 **UNION DODGE PRE-OWNED CTR**...*USED CAR DEALERS*

2003 RUSSELL AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9782 **CHOON E LEE**...*RESIDENTIAL*
9801 **DINH PHAM**...*RESIDENTIAL*
9811 **THUOI THI DANG**...*RESIDENTIAL*
9822 **BETHEL MISSIONARY CHURCH**
9822 **CROSS COUNTY CHRISTIAN CHURCH**
9822 **CROSS COUNTY VIETNAMESE CHRSTN**
9881 **GERALD E LAND**...*RESIDENTIAL*
9891 **WILLIAM WAGONER**...*RESIDENTIAL*
9921 **KEITH B MACK**...*RESIDENTIAL*
9931 **KEITH & KIMBERLY BARKER**...*RESIDENTIAL*
9941 **THAO X DINH**...*RESIDENTIAL*
9951 **GHULAM SAKHI**...*RESIDENTIAL*
9972 **SOUTHWEST GG LITTLE LEAGUE**
9972 **SUNNYSIDE ELEMENTARY SCHOOL**...*PUBLIC ELEMENTARY AND SECONDARY SCHOOLS*

2003 TRASK AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

9881 **KINGS MISSION**
9881 **ORANGE COUNTY CHINESE CHRISTIN**
9898 **UNION DODGE INC**

2001 RUSSELL AVE

SOURCE: HAINES

9772	CHONG SANG UP
9772	CHUNG SUNG H
9772	KIM JIMMY
9782	LEE ON JOE
9801	BERNTH HAROLD
9801	BUI LAN
9801	LƯƠNG HOA
9811	DANG THUOI T
9822	CORNERSTONE CHRISTN
9822	CROSS COUNTY CHRISTIAN CHURCH
9822	CROSS COUNTY VTNMSE CHRSTN CH
9831	CHUNG DON
9831	HUYNH NHAN
9831	NGUYEN CHIN H
9831	NGUYÊN HO
9831	TAN CA
9831	• ĐINH HOÀ
9841	KIM HẠNG
9861	KROGMAN DANI L
9871	HILLESTAD TIMOTHY
9881	URBINA IGNACIO
9891	DENHAM MONDE
9891	HAWKINS DAWN
9893	XXXX
9911	HOANG NGHỊ
9911	LE HONG
9921	NGUYÊN XU
9921	OKHA PHAN
9941	STEGNER JOHN
9943	XXXXX
9951	XXXXX
9953	XXXX
9972	SOUTHWEST GARDN 71 GRV LITTLE LGE
9972	SUNNYSIDE ELEMENTARY SCHOOL
10011	AHN YOUNG

2001 TRASK AVE

SOURCE: HAINES

9670	TOYOTA OF GARDN GRV KOREAN DPT
9838	UNION DODGE INC
9881	ORANGE CO CHNSE CHRSTN ASMBLY
10041	SEXTONS AUTOMOTIVE

1996 RUSSELL AVE

SOURCE: HAINES

9772	CHONG SANG UP
9782	LEE CHOON EOP
9801	NGUYEN VAN
9801	PHẠM DINH
9811	DANG THUOI T
9811	NGUYÊN TRUNG M
9822	CORNERSTONE CHRISTN
9822	GARDN GRV CHRSTN CH
9831	LÊ DUNG DINH
9841	XXXX
9861	KROGMAN DAN ! L
9871	HILLSTAD TIMOTHY
9881	LAND GERALD E
9891	WAGONER WILLIAM
9893	XXXX
9911	XXXX
9921	MACK KEITH B
9931	BARKER KEITH
9931	BARKER KIMBERLY
9941	DINH THEO XUÂN
9943	XXXX
9951	SAKHI GHULAM
9953	XXXX
9972	SOUTHWEST GRDN GRV
9972	SUNNYSIDE ELEM SC
10011	XXXX

1996 TRASK AVE

SOURCE: HAINES

9666	QUALITY NISSAN
9666	QUALITY NISSAN PART
9881	GARDN GRV ORTHO CH
9881	PENINSULA CHRSTN SC
9881	PRESBY ORTHODOX CH
9898	PATTERSON DODGE
9898	PATTERSON DODGE PRT
10041	S&S BOOK DSTRBTRS

1991 RUSSELL AVE

SOURCE: HAINES

9762	DAVEY EDW W
9782	XXXX
9801	NGUYEN VAN
9811	DANG THUOI T
9822	BETHEL MISSIONRY CH
9822	CORNERSTONE CHRISTN
9822	GARDN GRV CHRSTN CH
9831	BUI LAURA
9831	DANG HUNG PHI
9831	HỒ THANH VAN
9841	XXXX
9861	KROGMAN DAN L
9871	HILLESTAD JOB T
9881	LAND GERALD E
9891	WAGONER ELDEN
9891	WAGONER WILLIAM
9893	XXXX
9911	MACK KEITH V
9921	WYMAN ROBERT O
9931	BARKER KEITH
9931	BARKER KIMBERLY
9931	NELSON JOHN
9941	SLOYER CHRISTINE
9941	SLOYER GARY
9943	DAVIS DANI M
9951	XXXX
9953	XXXX
9972	SOUTHWEST GRDN GRVE
9972	SUNNYSIDE ELEM SC
10011	TORRES MANUEL

1991 TRASK AVE

SOURCE: HAINES

9666	GARDN GRV DODG LSNG
9666	GARDN GRV DODGE
9666	GARON GRV HYUNDAI
9881	GARDN GRV ORTHO CH
9881	PENINSULA CHRSTN SC
9881	PRESBY ORTHODOX CH
9898	GARDN GRV MITSUBSHI
10041	SEXTONS AUTOMOTIVE

1986 RUSSELL AVE

SOURCE: HAINES

9772	TENHOFF TOM W 534-1262
9782	HIGGINS J 638-3030
9801	NGUYÊN NUONG 638-7594
9801	NGUYÊN HOA THI 636-1381
9801	SINGH GORA 638-1174
9811	BUI MUON VAN 534-0436
9811	DANG THUOI T 638-9357
9811	NGUYÊN NGA GHI 636-2113
9811	NGUYÊN THANH 636-4347
9822	CORNERSTONE CHRISTN 537-4850
9822	GARDN GRY CHRSTH CH 537-4190
9831	AUDDEN K 534-8096
9831	TRAN CHARLIE 537-0823
9841	PFAFF WALTER H 638-9127
9861	KROGMAN DANL L 534-8411
9871	HILLESTAD JOS T 537-8039
9881	LAND GERALD E 638-9980
9891	WAGONER ELDEN 530-4051
9893	HILLESTAD TJ 636-6278
9911	KAPILOFF GERALD 636-6718
9911	SHAW JAMES 539-7424
9921	HOBBS B PAUL 530-6490
9921	MORRIS TIM 534-5356
9931	XXXX
9941	SLOYER CHRISTINE 638-9337
9941	SLOYER GARY 638-9337
9943	DAVIS DANL M 638-3743
9951	XXXX
9953	XXXX
9972	SOUTHWEST GRDN GRVE 638-0463
9972	SUNNYSIDE ELEM SC 538-6158
10011	XXXX

1986 TRASK AVE

SOURCE: HAINES

9463	XXXX
9881	GARDN GRY ORTHO CH
9881	PENINSULA CHRSTN SC
9881	PRESBYTERAN ORT CH
10041	SEXTONS AUTOMOTIVE

1981 RUSSELL AVE

SOURCE: HAINES

9782	**SAMPLES JOHN C**
9801	**KEAN DANIEL K**
9801	**NGUYEN NUONG**
9801	**SINGH GORA**
9801	**TELLES DANL J**
9811	**BUI MUON VAN**
9811	**NGUYEN THANH**
9822	**GARDN GRV CH GOD**
9831	**RUDDEN K**
9841	**PFAFF WALTER H**
9861	**KROGMAN DANL L**
9871	**HILLESTAD JOS T**
9881	**LAND GERALD E**
9881	**XXXX**
9893	**XXXX**
9911	**BAKER CARL R**
9911	**HILLS RICHARD O**
9911	**HUNTER JAS**
9921	**BAUNNER GARY**
9921	**HOLMES RUSSELL F**
9931	**XXXX**
9941	**XXXX**
9943	**XXXX**
9951	**HARGIS THEODORE**
9953	**XXXX**
9972	**DOWLING DAVID L**
9972	**SOUTHWEST GRDN GRVE**
9972	**SUNNYSIDE ELEM SC**
10011	**XXXX**

1981 TRASK AVE

SOURCE: HAINES

9463	**XXXX**
9881	**ORTHDOX PRSBYTRN CH**
9881	**PRESBYTERN OATH CH**
10041	**SEXTONS AUTOMOTIVE**

1975 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	**DOWLING DAVID L**
9822	**CHURCH OF CHRIST**
9831	**FOX STEVEN**
9861	**KROGMAN DANL L**
9871	**HILLESTAD JOS T**
9881	**LAND GERALD E**
9921	**ALLEN MIKE**
9921	**SMITH BRIAN**
9931	**ROBINSON FRANK**
9972	**SOUTHWEST GARDEN GROVE LITTLE LEAGUE**
10022	**DE MAN BEAUTY SALON**

1975 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9461	**SOUZA SEBASTIAN**
9881	**ORTHODOX PRESBYTERIAN CHURCH**
10041	**KENNA TIMOTHY**

1970 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	**GRAY LENORE**
9811	**BRUCE WM L JR**
9811	**EMMONS LYNN A**
9822	**CHURCH OF CHRIST CHRISTIAN**
9831	**GRAY LENORE**
9831	**RILEY MARY JANE**
9861	**MILLER DAN**
9871	**HILLESTAD JOS T**
9881	**SCOTT J E**
9891	**DENHAM JAS A**
9893	**REMINGTON C J**
9921	**WARRELL BRAD H**
9921	**WILLARD JESS S**
9931	**ROBINSON FRANK**
9943	**BUTTERFASS KEN**
10021	**BRENNAN PATRICK**

1970 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9461	**SOUZA SEBASTIAN**
9881	**ORTHODOX PRESBYTERIAN CHURCH**
10041	**SEXTON'S AUTOMOTIVE**

1967 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	**GRAY L**
9801	**BRAUGHTON C**
9801	**BUILDING**
9801	**CLIFTON S**
9801	**FAUST M**
9801	**IRWIN W F**
9811	**APARTMENT**
9811	**CARLSEN M J**
9811	**HILL T**
9822	**CHURCH OF CHRIST**
9831	**APARTMENT**
9831	**PENA H**
9831	**RILEY M J**
9831	**WILSON B J**
9841	**CARNES D**
9841	**HENLEY ALBERT**
9861	**SCHULTZ H**
9871	**HILLESTAD J T**
9881	**SCOTT JANET E**
9891	**STEPHENS H**
9893	**COX S A**
9911	**CHAFFEE T L**
9921	**BUILDING**
9921	**DURR C J**
9921	**LANGELL B**
9931	**ROBINSON FRANK**
9943	**BUTTERFASS K**
10022	**DEMAN BEAUTY SALON**

1967 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9461	**SOUZA SEBASTIAN**
9881	**PRESBYTERIAN CHURCH**
10051	**OXENREIDER FLOYD S**

1964 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	LYONS LLOYD G
9801	APARTMENT
9801	LANPHERIE D
9811	APARTMENT
9811	A□ LAUTENSCHLAGER T
9811	GIRALDI M J
9811	RIDDLE R L
9822	CHURCH OF CHRIST
9831	APARTHENT
9831	CANTERBERRY H L
9831	KALETKA H W
9831	MAGNESS WE
9841	CARNES D
9841	HENLEY ALBERT
9861	HAYNE A JR
9871	HILLESTAD JY
9881	SCOTT JANET E
9911	CHAFFEE T L
9931	ROBINSON FRANK
9941	JOHNSON V
9943	MYERS ORVILLE
9951	BAILEY J F
9953	MACK R W
9972	SUNNYSIDE ELEM SCHL
10012	STAFFORD JB

1964 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9461	SOUZA SEBASTIAN
9881	PRESBYTERIAN CHURCH
10041	HOLTE WARREN

1958 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	**USAB E M**
9782	**DEAN RUBY L**
9801	**APARTMENT**
9811	**APARTMENT**
9811	**AYERSMAN RAYMOND E**
9811	**HUMLIE J VIRGINIA**
9811	**TAYLOR KENNETH E**
9822	**G GR CHURCH OF CHRIST**
9831	**APARTMENT**
9831	**COFFINO RITA**
9831	**JEFFERS JAMES J**
9841	**HENLEY ALBERT**
9861	**FINAL C E**
9871	**HILLESTAD J T**
9891	**O DONNELL FRANKLIN P**
9891	**SCOTT JOSEPH R**
9911	**CHAFFEE T L**
9931	**ROBINSON FRANK**
9941	**LEHMANN FELIX P JR**
9943	**VAUGHN JERRY**
9953	**SAEHLENOU HARRY**
9972	**SUNNYSIDE SCHOOL**
10012	**TRIMMELL R H**

1958 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9463	**MENDES MANUEL S**
9852	**GARDEN GROVE FARMS**
10011	**TURNER J**

1955 RUSSELL AVE

SOURCE: PACIFIC TELEPHONE

9772	**LYONS L G**
9782	**DEAN RUBY L**
9822	**G GR CHURCH OF CHRIST**
9841	**HENLEY ALBERT**
9861	**FINAL C E**
9871	**HILLESTAD J T**
9881	**CRANFILL J**
9891	**O DONNELL FRANKLIN P**
9911	**CHAFFEE T L**
9931	**ROBINSON FRANK**
9953	**MAY E W**
9972	**SUNNYSIDE SCHOOL**
10012	**TRIMMELL R H**

1955 TRASK AVE

SOURCE: PACIFIC TELEPHONE

9463	**MENDES MANUEL S**
9852	**GARDEN GROVE FARMS**
10041	**HOPKINS H N**

1951 RUSSELL AVE

SOURCE: LUSKEYS

STREET NOT LISTED

1951 TRASK AVE

SOURCE: LUSKEYS

9762	**VACANT**
9832	**GUTIERREZ DAVID**
9852	**GRDN GR FARMS LIVESTOCK FEEDERS GRDN G**
9852	**RENKEN ED .GRDN GR**
10011	**NIGHTINGALE AJ CONCRETE**

HISTORICAL AERIALS

Project Property: 9822 Russell Avenue
9822 Russell Avenue
GARDEN GROVE CA 92844

Project No: 25-500978.1

Requested By: Partner Engineering and Science, Inc.

Order No: 25061300823

Date Completed: June 18,2025

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Environmental Risk Information Services
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1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
1938	Agricultural Stabilization & Conserv. Service	1" = 500'	
1947	Fairchild	1" = 500'	
1953	Agricultural Stabilization & Conserv. Service	1" = 500'	
1963	United States Geological Survey	1" = 500'	
1972	United States Geological Survey	1" = 500'	
1981	Private	1" = 500'	
1987	United States Geological Survey	1" = 500'	
1995	United States Geological Survey	1" = 500'	
2005	United States Department of Agriculture	1" = 500'	
2009	United States Department of Agriculture	1" = 500'	
2010	United States Department of Agriculture	1" = 500'	
2012	United States Department of Agriculture	1" = 500'	
2014	United States Department of Agriculture	1" = 500'	
2016	United States Department of Agriculture	1" = 500'	
2018	United States Department of Agriculture	1" = 500'	
2020	United States Department of Agriculture	1" = 500'	
2022	United States Department of Agriculture	1" = 500'	
2024	Maxar Technologies	1" = 500'	



Year: 1938
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1947
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1953
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1963
Source: USGS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1972
Source: USGS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1981
Source: Private
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1987
Source: USGS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 1995
Source: USGS
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 2005
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

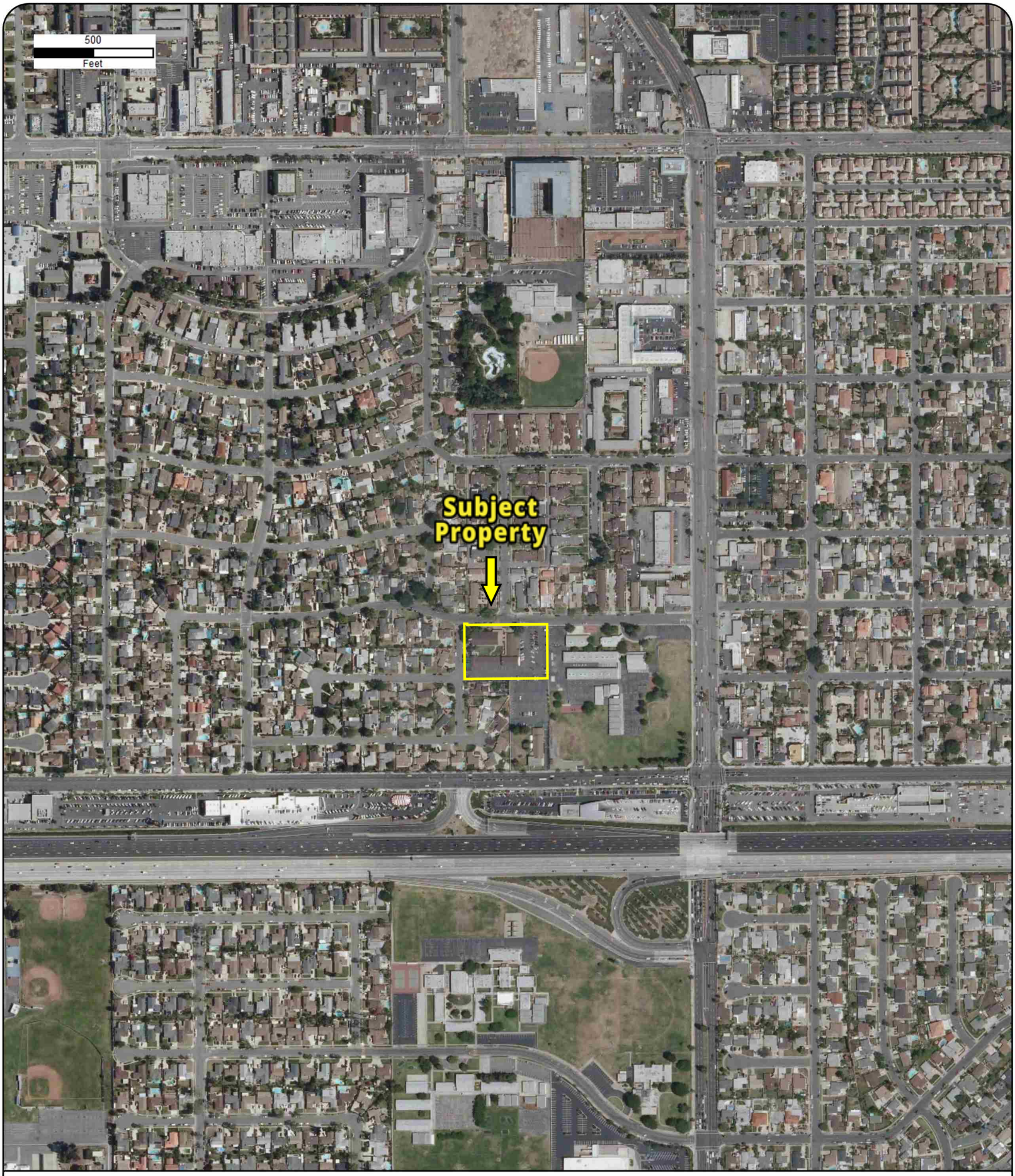


Year: 2009
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 2010
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

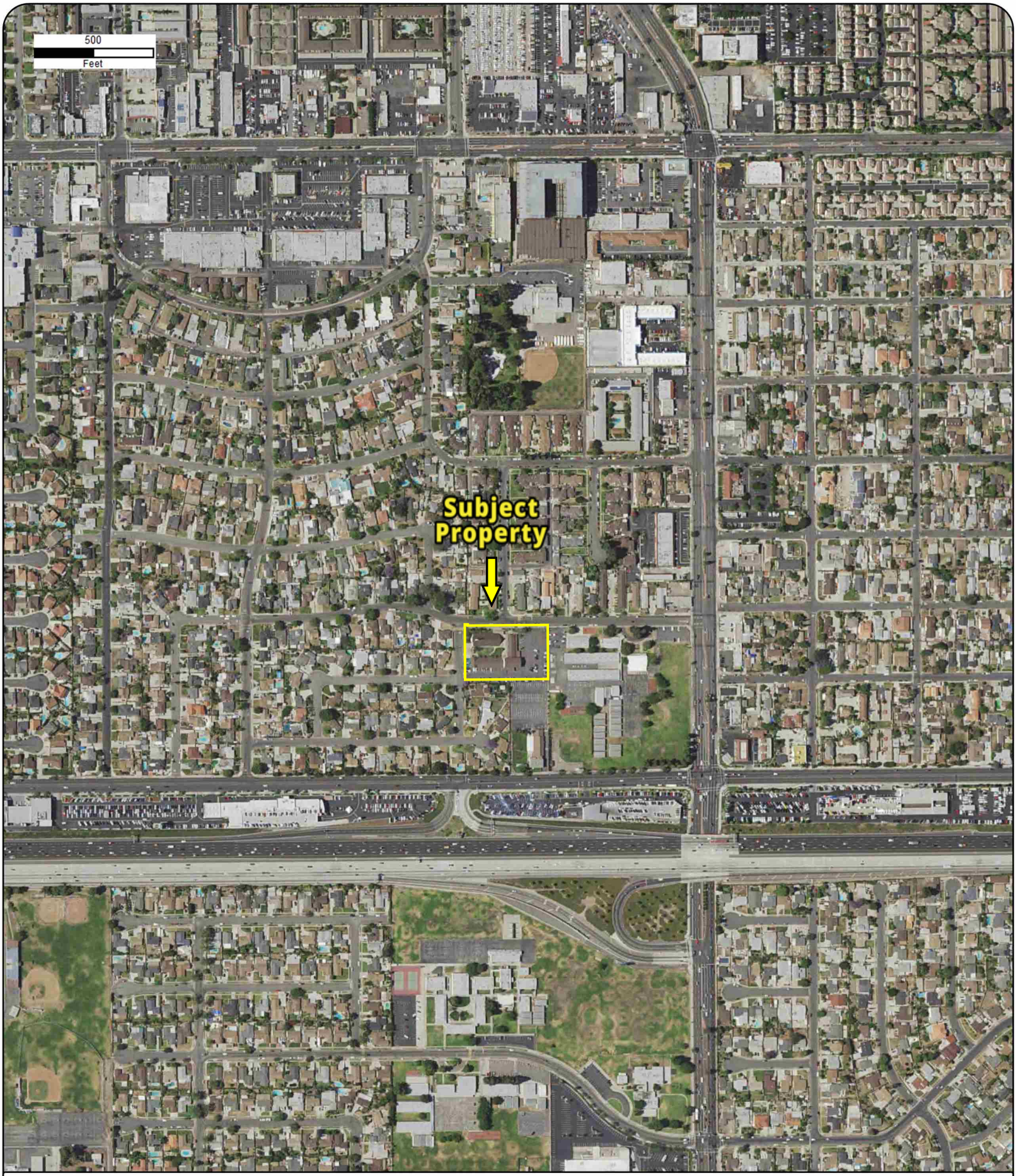


Year: 2012
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 2014
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

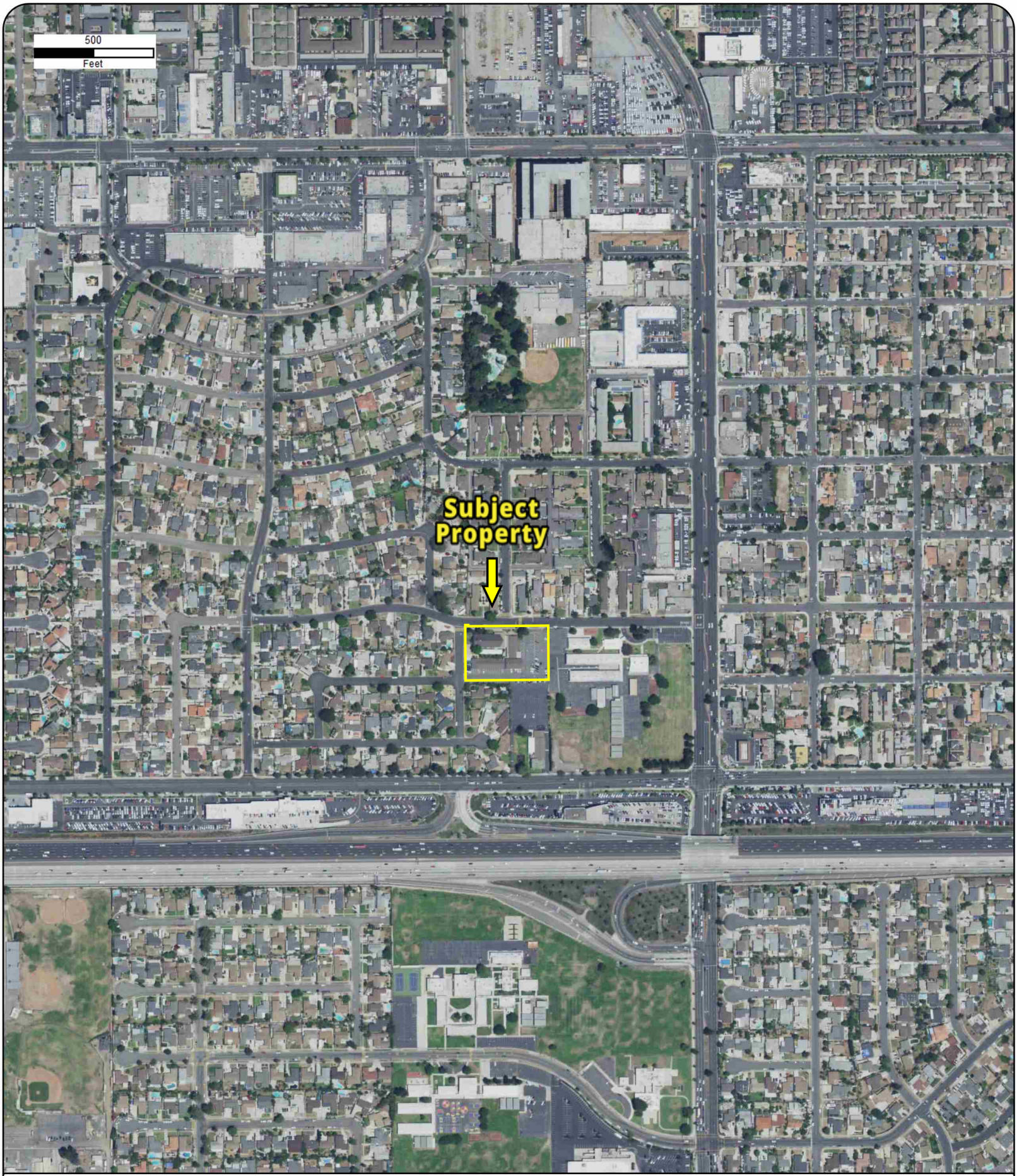


Year: 2016
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

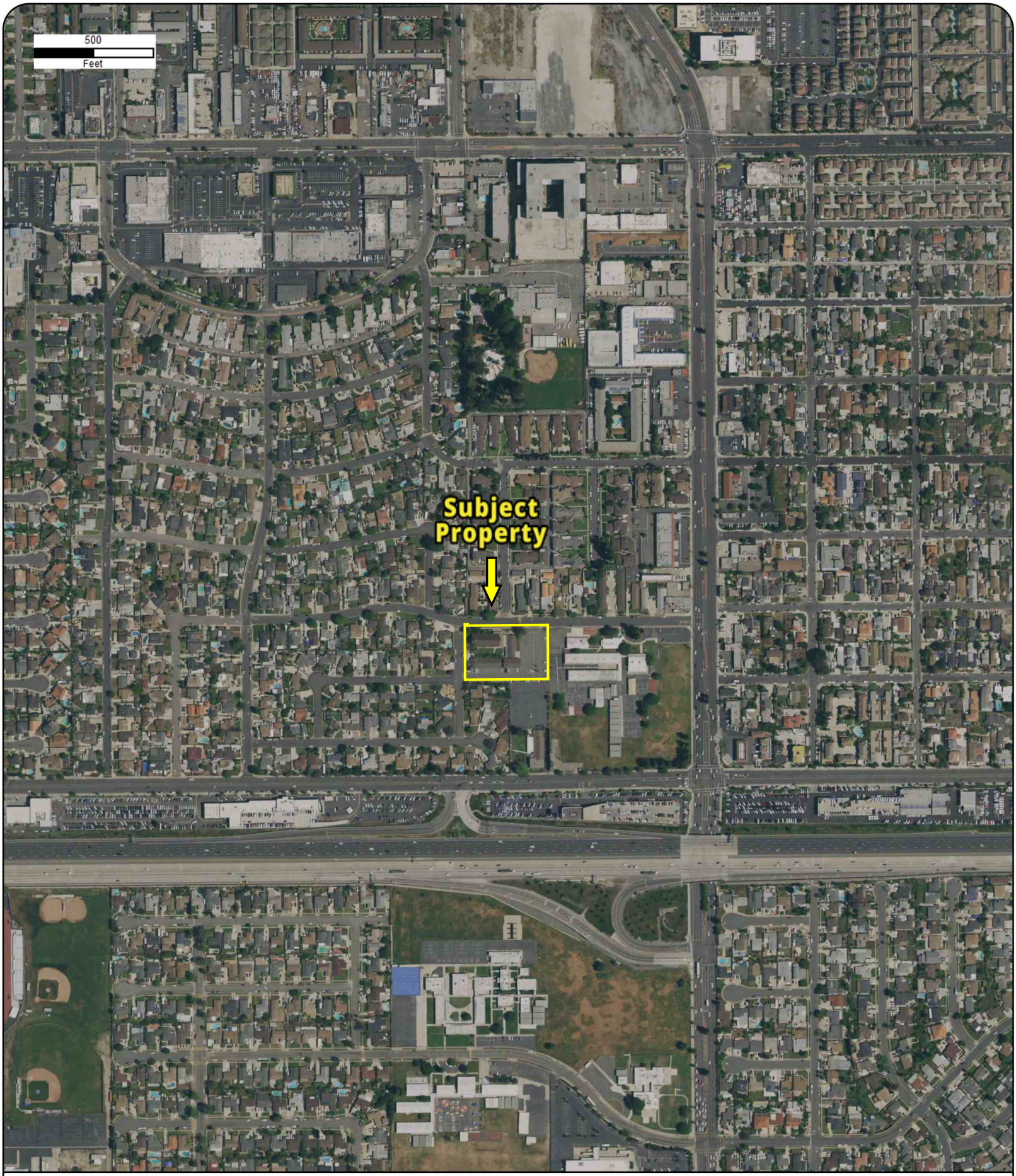


Year: 2018
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 2020
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

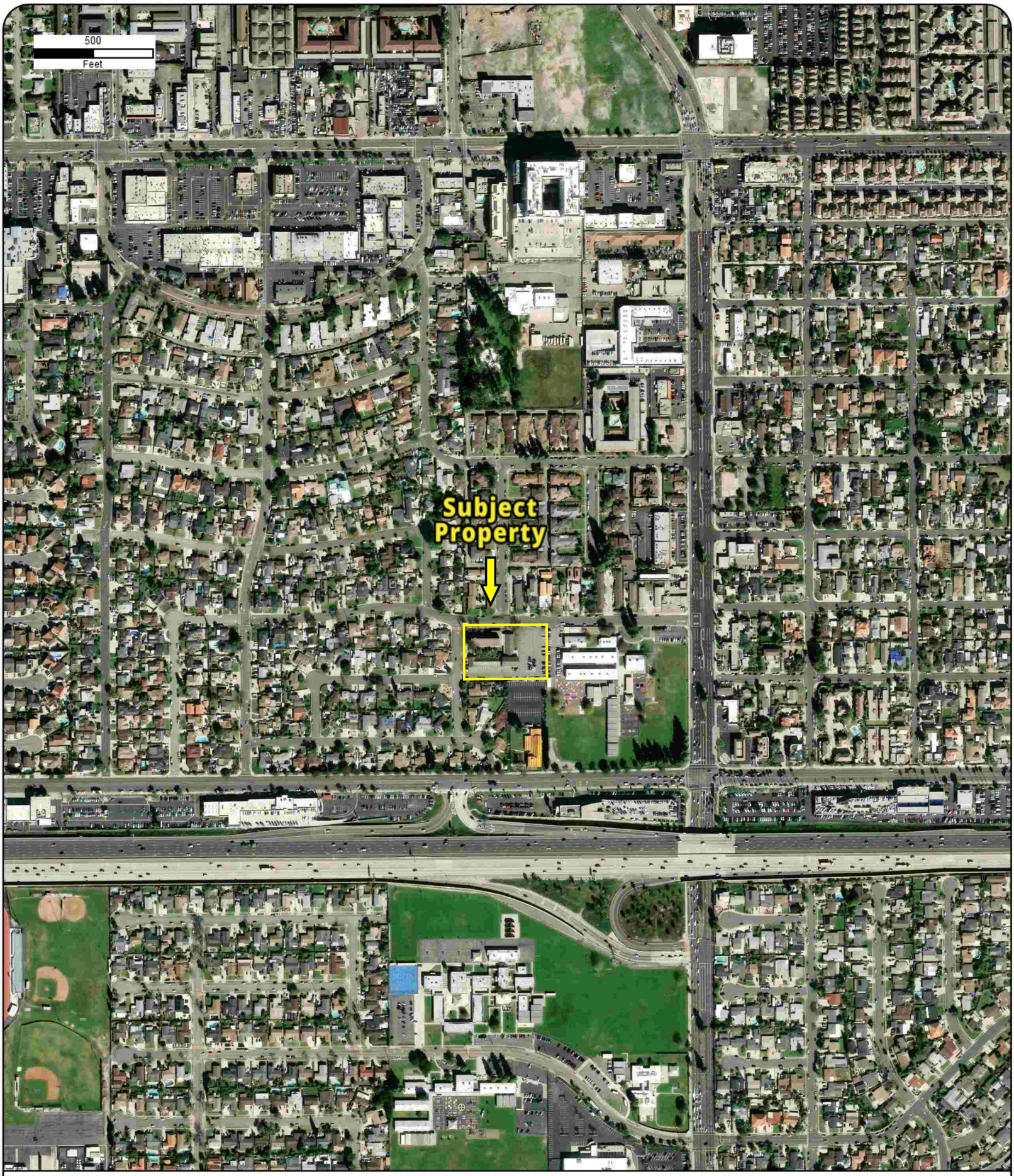


Year: 2022
Source: USDA
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER



Year: 2024
Source: MAXAR
Scale: 1" = 500'
Comment:

Address: 9822 Russell Avenue, GARDEN GROVE, CA
Approx Center: -117.95774689,33.76820027

Order No: 25061300823

PARTNER

TOPOGRAPHIC MAPS

Project Property:	9822 Russell Avenue
	9822 Russell Avenue GARDEN GROVE CA 92844
Project No:	25-500978.1
Requested By:	Partner Engineering and Science, Inc.
Order No:	25061300823
Date Completed:	June 15, 2025

Environmental Risk Information Services
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We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
1896	15
1898	15
1901	15
1935	7.5
1942	15
1949	7.5
1950	7.5
1965	7.5
1972	7.5
1974	7.5
1981	7.5
2015	7.5
2018	7.5
2022	7.5

Topographic Map Symbology for the maps may be available in the following documents:

Pre-1947

Page 223 of 1918 Topographic Instructions

Page 130 of 1928 Topographic Instructions

1947-2009

Topographic Map Symbols

2009-present

US Topo Map Symbols

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1896

Available Quadrangle(s): Anaheim, CA
Santa Ana, CA

Order No. 25061300823

Source: USGS 15 Minute Topographic Map

PARTNER



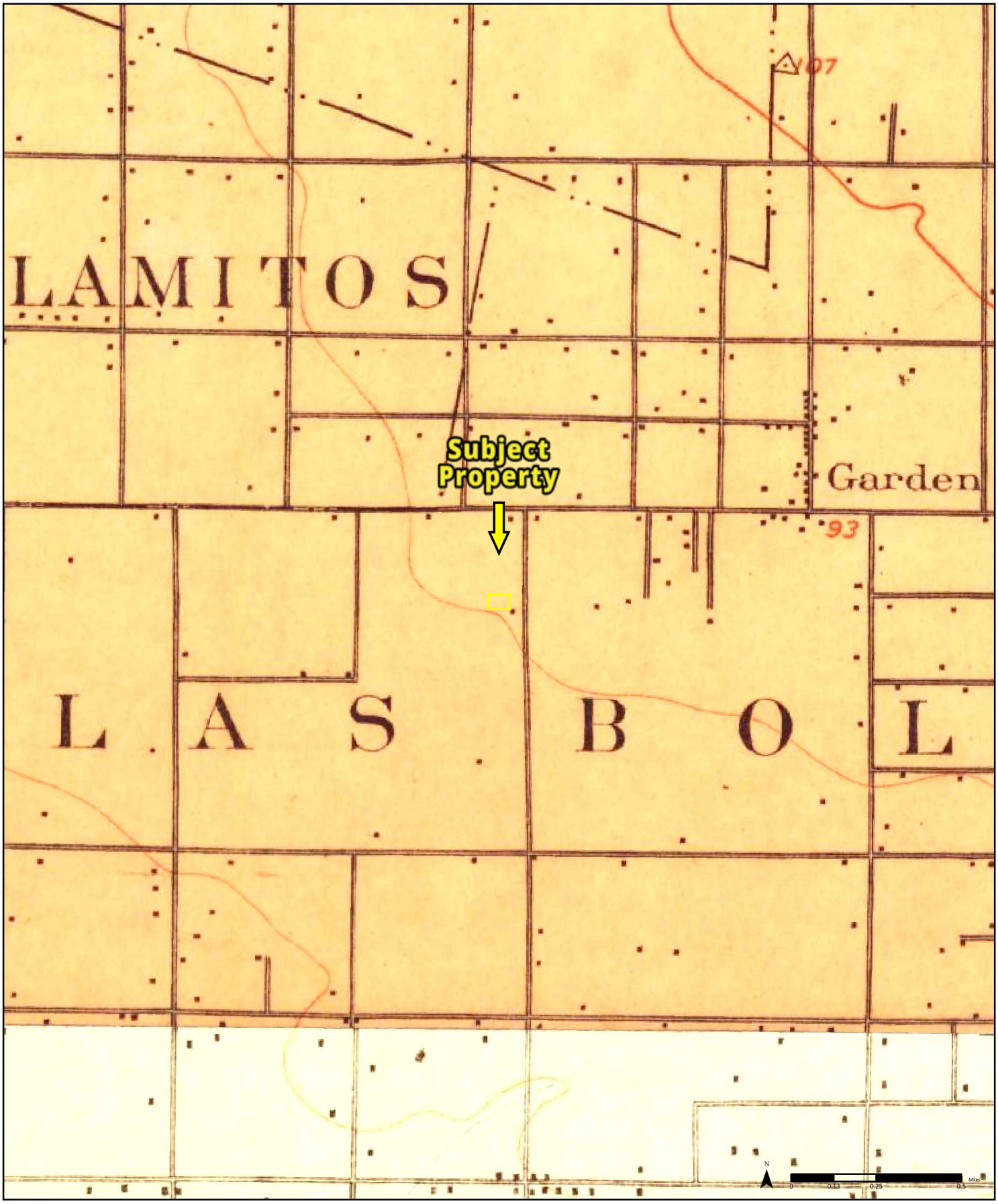
1898

Available Quadrangle(s): Anaheim, CA
Santa Ana, CA

Order No. 25061300823

Source: USGS 15 Minute Topographic Map

PARTNER



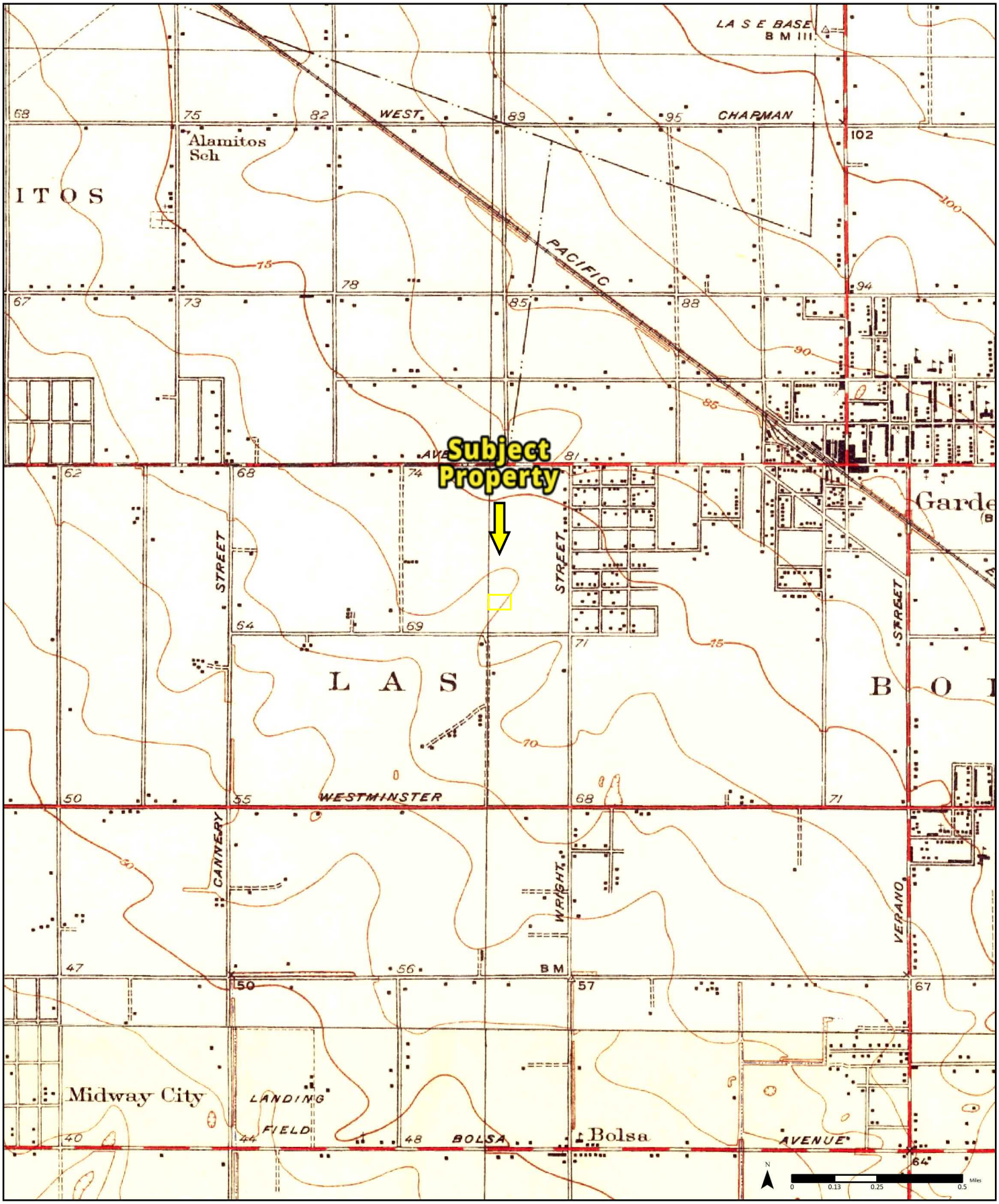
1901

Available Quadrangle(s): Anaheim, CA
Santa Ana, CA

Order No. 25061300823

Source: USGS 15 Minute Topographic Map

PARTNER



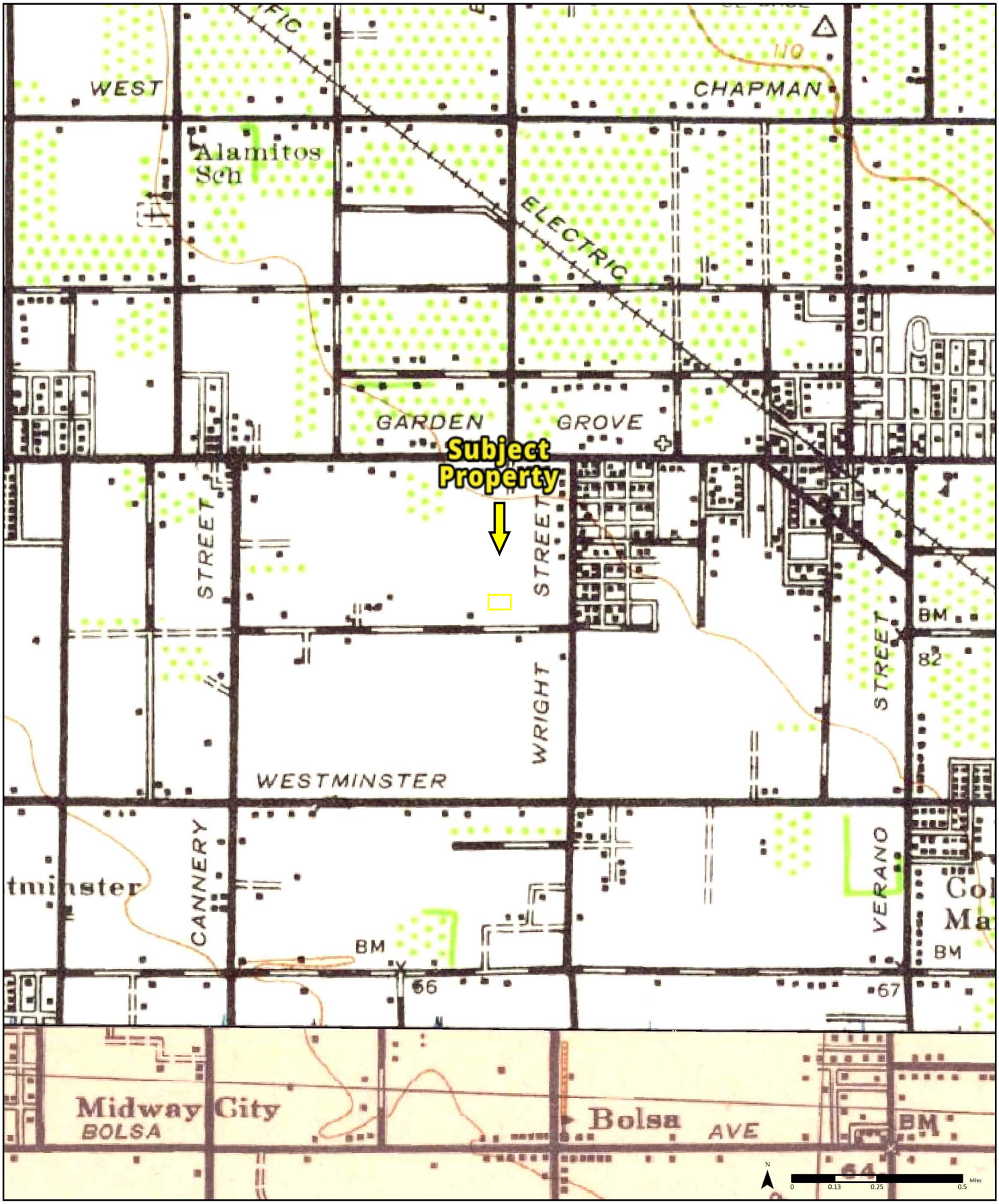
1935

Available Quadrangle(s): Garden Grove, CA
Newport Beach, CA

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



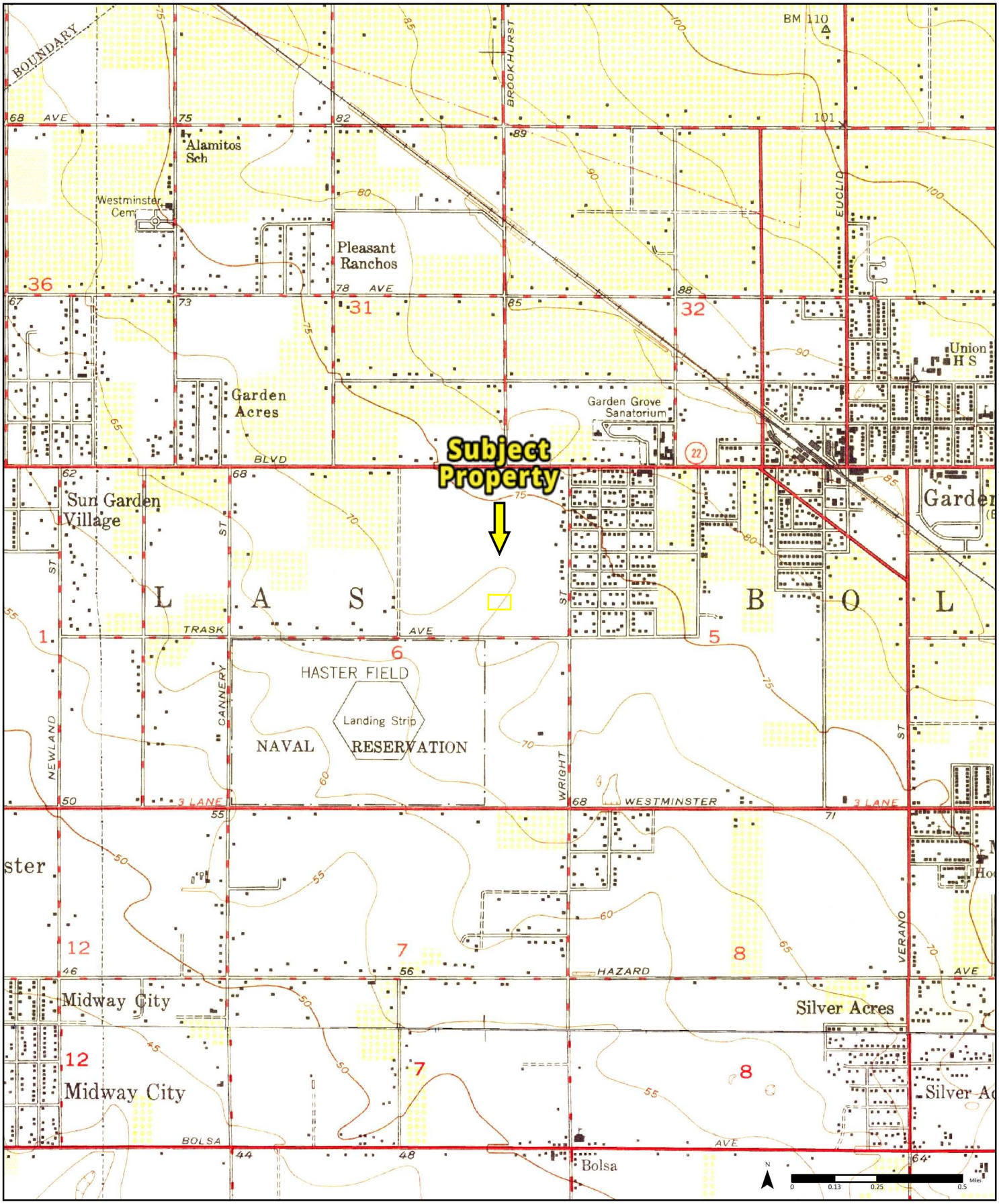
1942 (1-1942) *Aerial Photo Year: 1939* (2-1942) *Aerial Photo Year: 1939*

Available Quadrangle(s): Anaheim, CA(2-1942)
Santa Ana, CA(1-1942)

Order No. 25061300823

Source: USGS 15 Minute Topographic Map

PARTNER



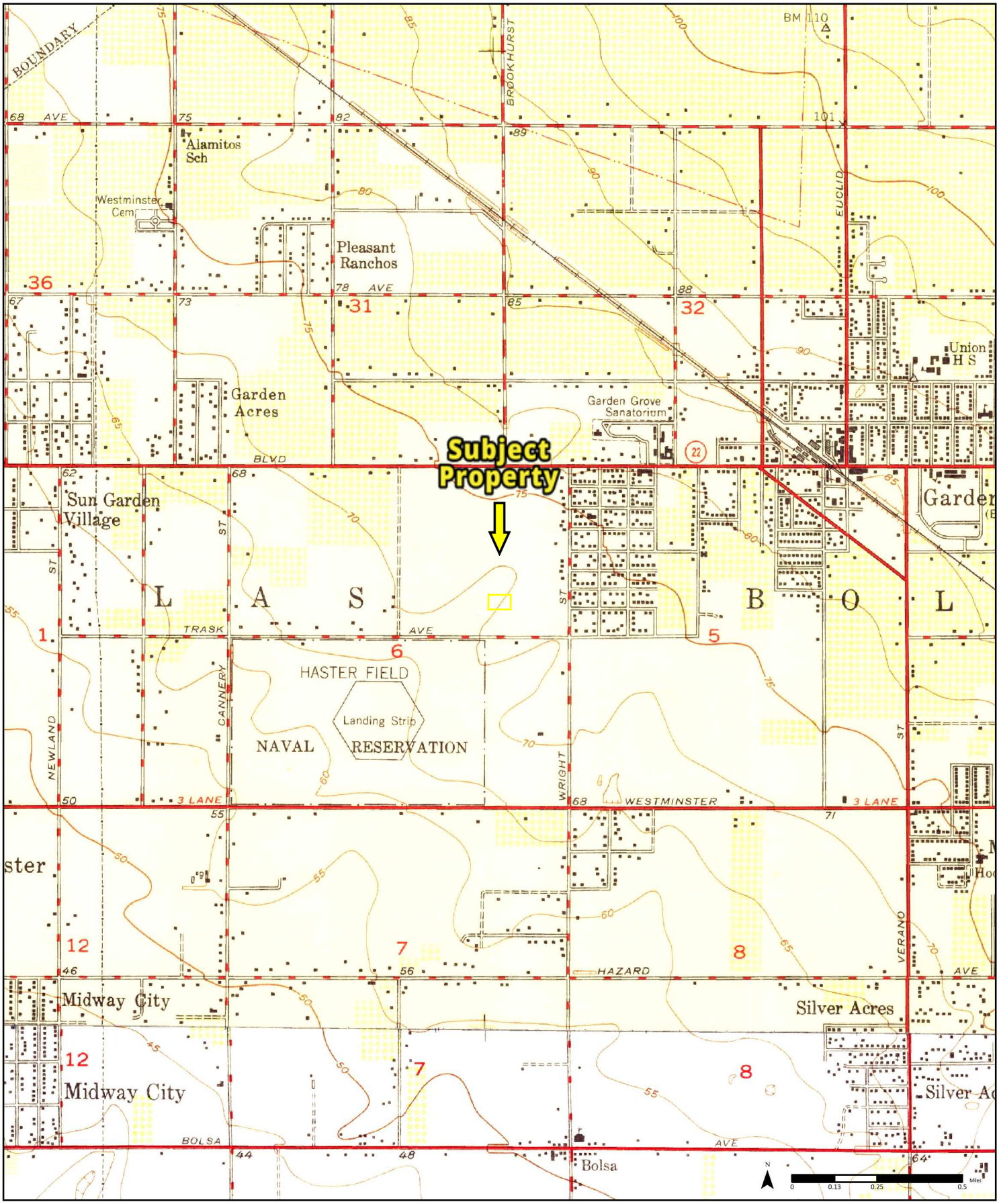
1949 (1-1949) *Aerial Photo Year: 1947* (2-1949) *Aerial Photo Year: 1947*

Available Quadrangle(s): Anaheim, CA(1-1949)
Newport Beach, CA(2-1949)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



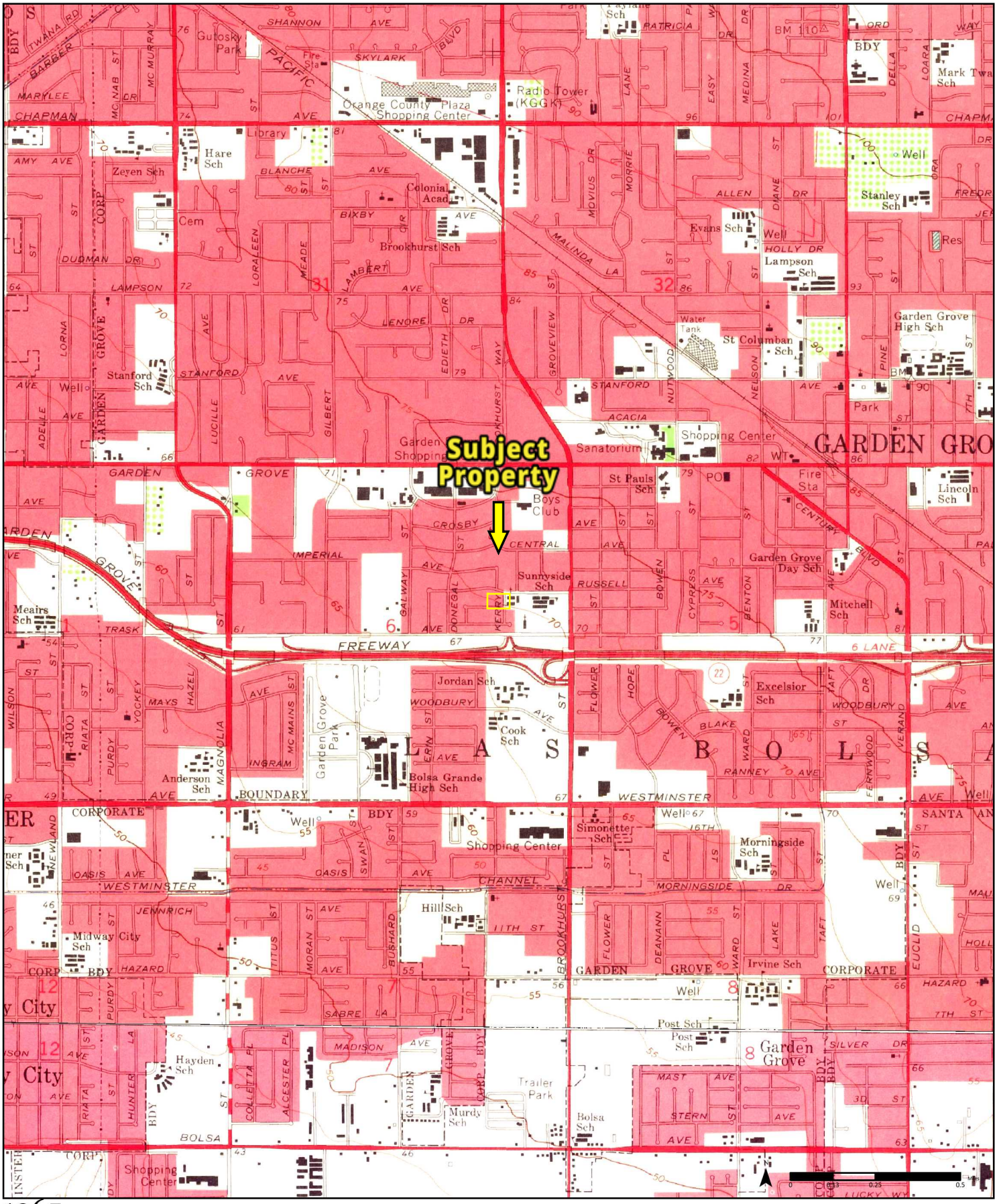
1950 (1-1949) *Aerial Photo Year: 1947* (2-1950) *Aerial Photo Year: 1947*

Available Quadrangle(s): Anaheim, CA(2-1950)
Newport Beach, CA(1-1949)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



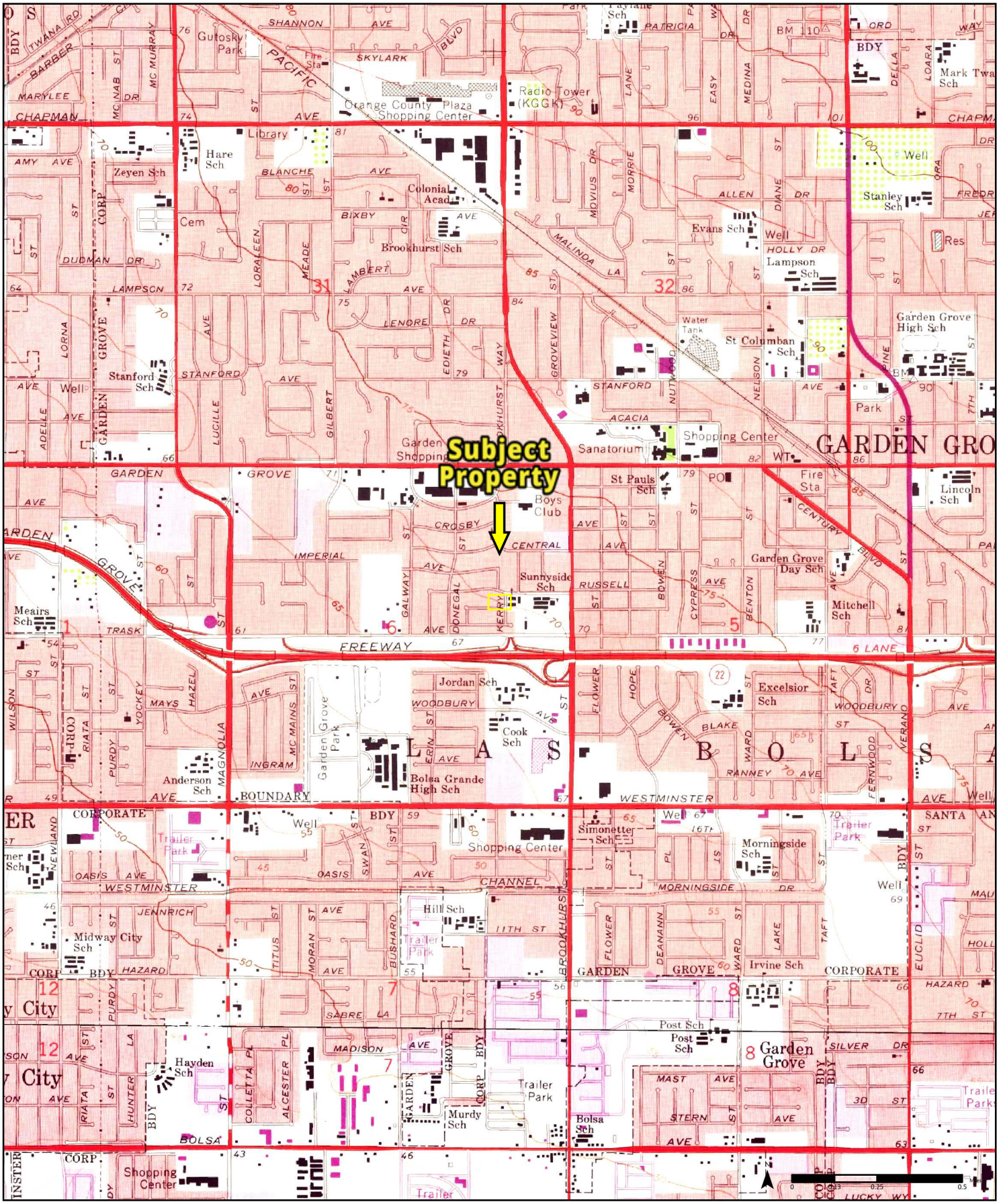
1965 *(1-1965) Aerial Photo Year: 1963* *(2-1965) Aerial Photo Year: 1963*

Available Quadrangle(s): Anaheim, CA(1-1965)
Newport Beach, CA(2-1965)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



1972

(1-1972) *Aerial Photo Year: 1972*
Photo Revision Year: 1972

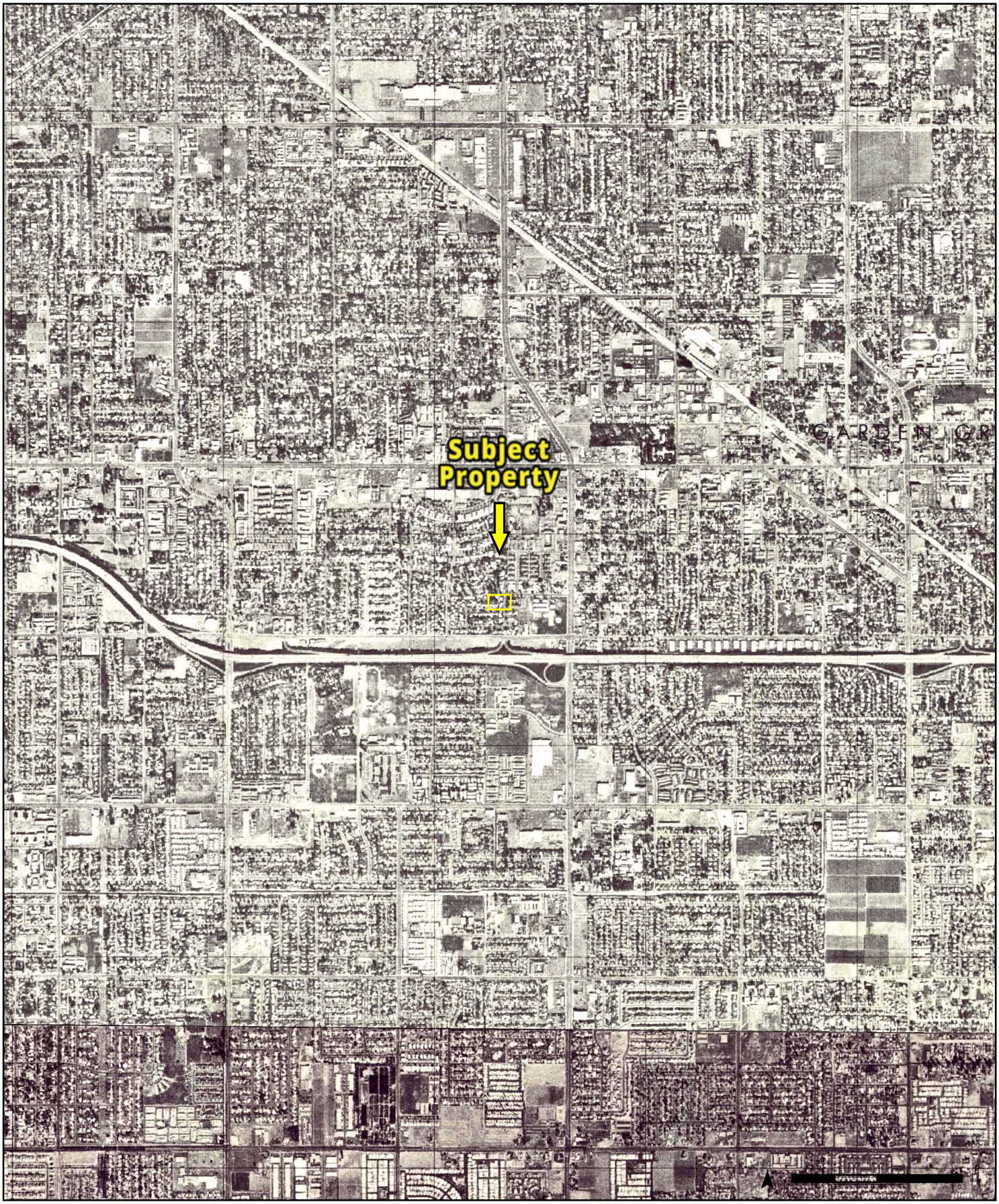
(2-1972) *Aerial Photo Year: 1972*
Photo Revision Year: 1972

Available Quadrangle(s): Anaheim, CA(1-1972)
Newport Beach, CA(2-1972)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



1974

(1-1972) *Aerial Photo Year: 1972*
Photo Revision Year: 1972

(2-1974) *Aerial Photo Year: 1974*

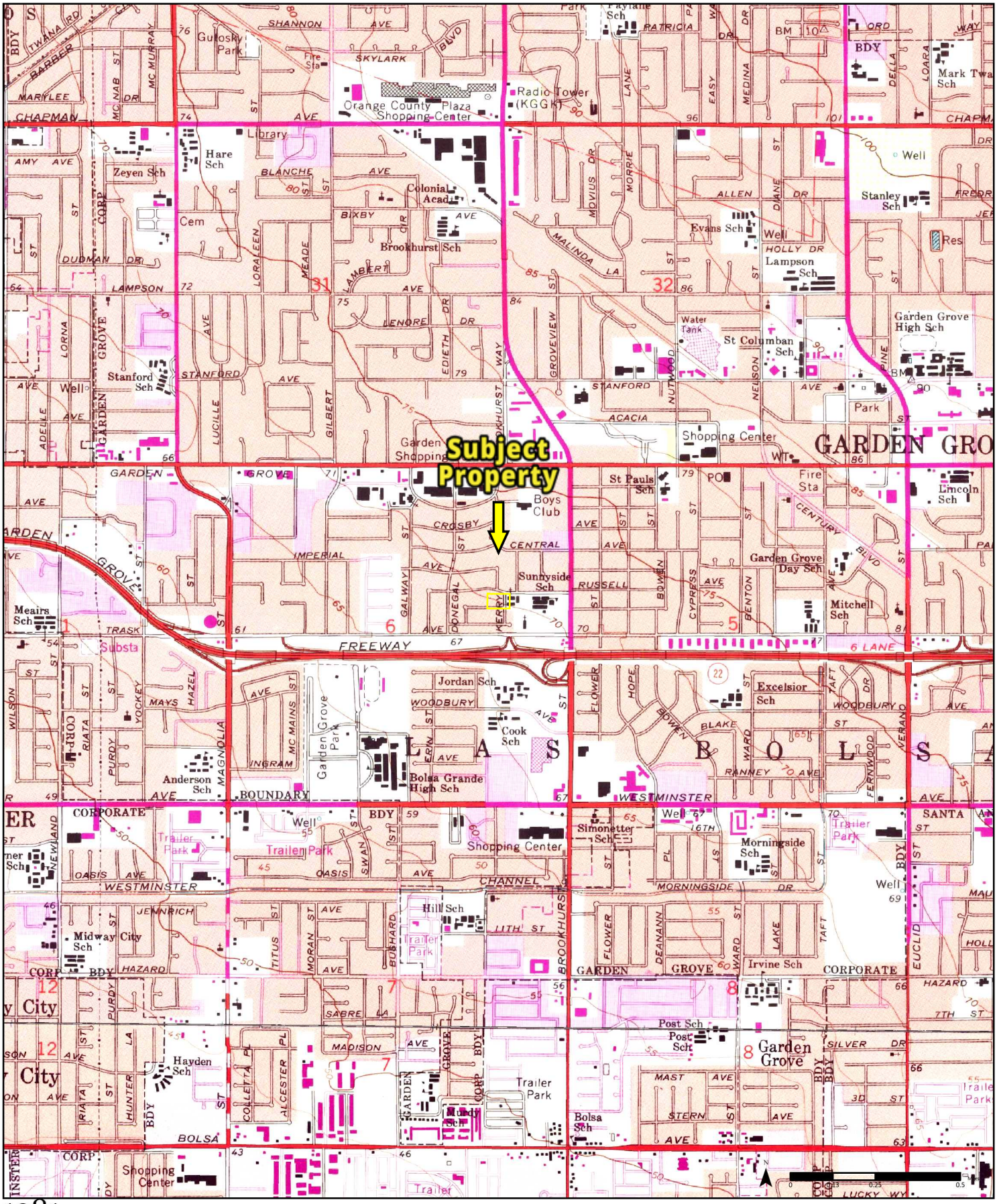
(3-1974) *Aerial Photo Year: 1974*

Available Quadrangle(s): Anaheim, CA(2-1974)
Newport Beach, CA(1-1972)
Costa Mesa, CA(3-1974)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



1981

(1-1974) *Aerial Photo Year: 1974*

(2-1981) *Aerial Photo Year: 1963*
Photo Revision Year: 1981

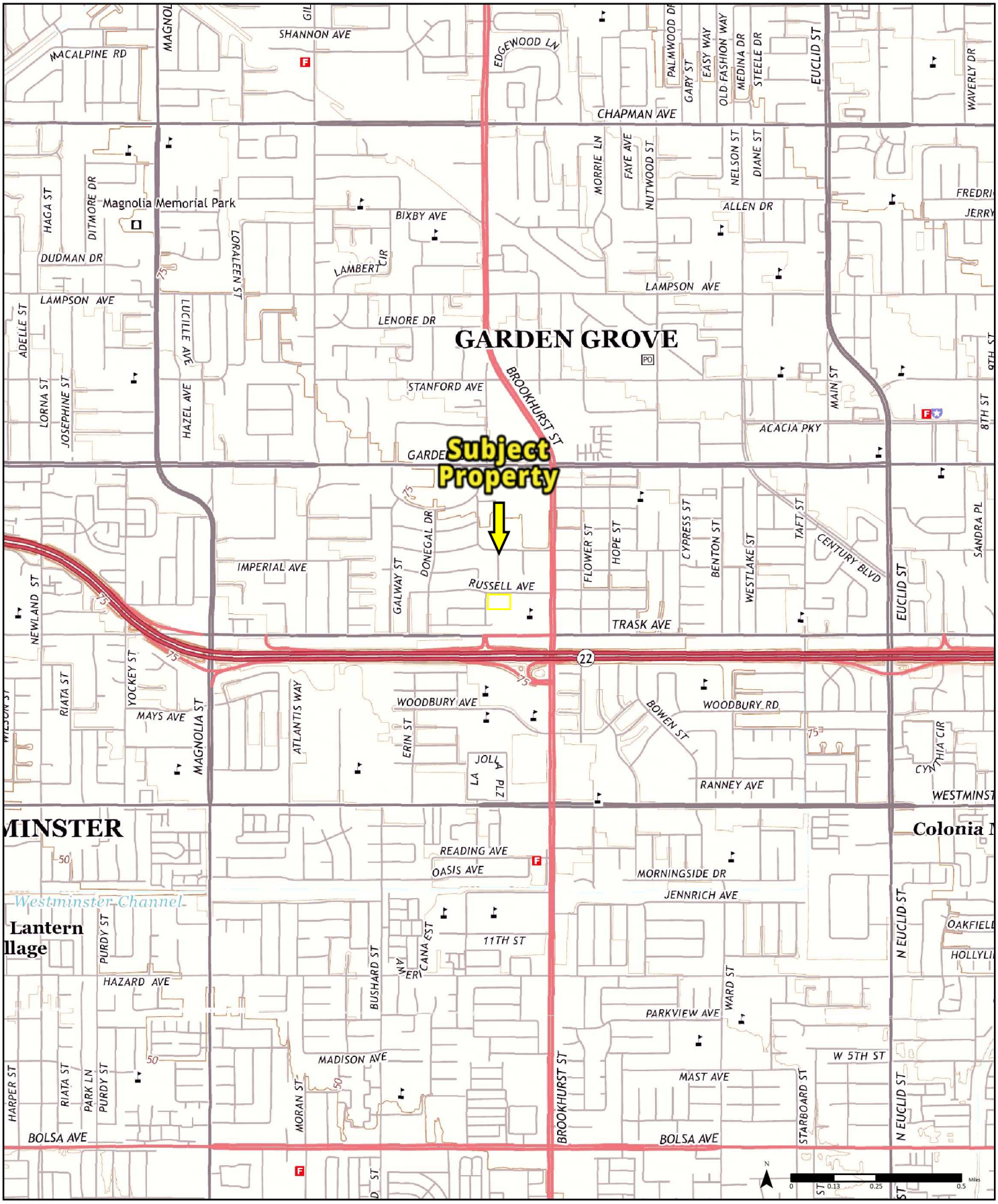
(3-1981) *Aerial Photo Year: 1978*
Photo Revision Year: 1981

Available Quadrangle(s): Anaheim, CA(2-1981)
Costa Mesa, CA(1-1974)
Newport Beach, CA(3-1981)

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



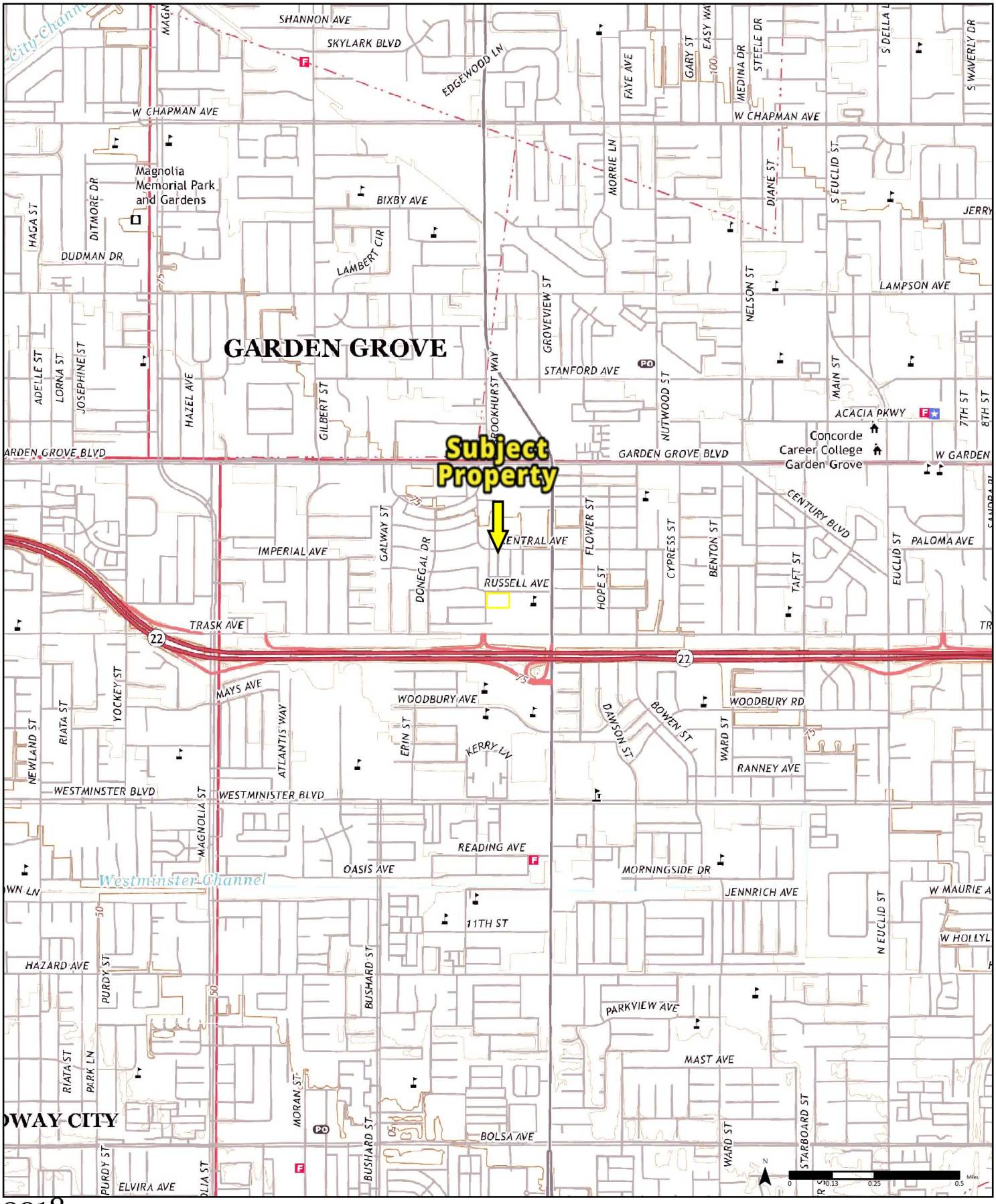
2015

Available Quadrangle(s): Anaheim, CA
Newport Beach, CA

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



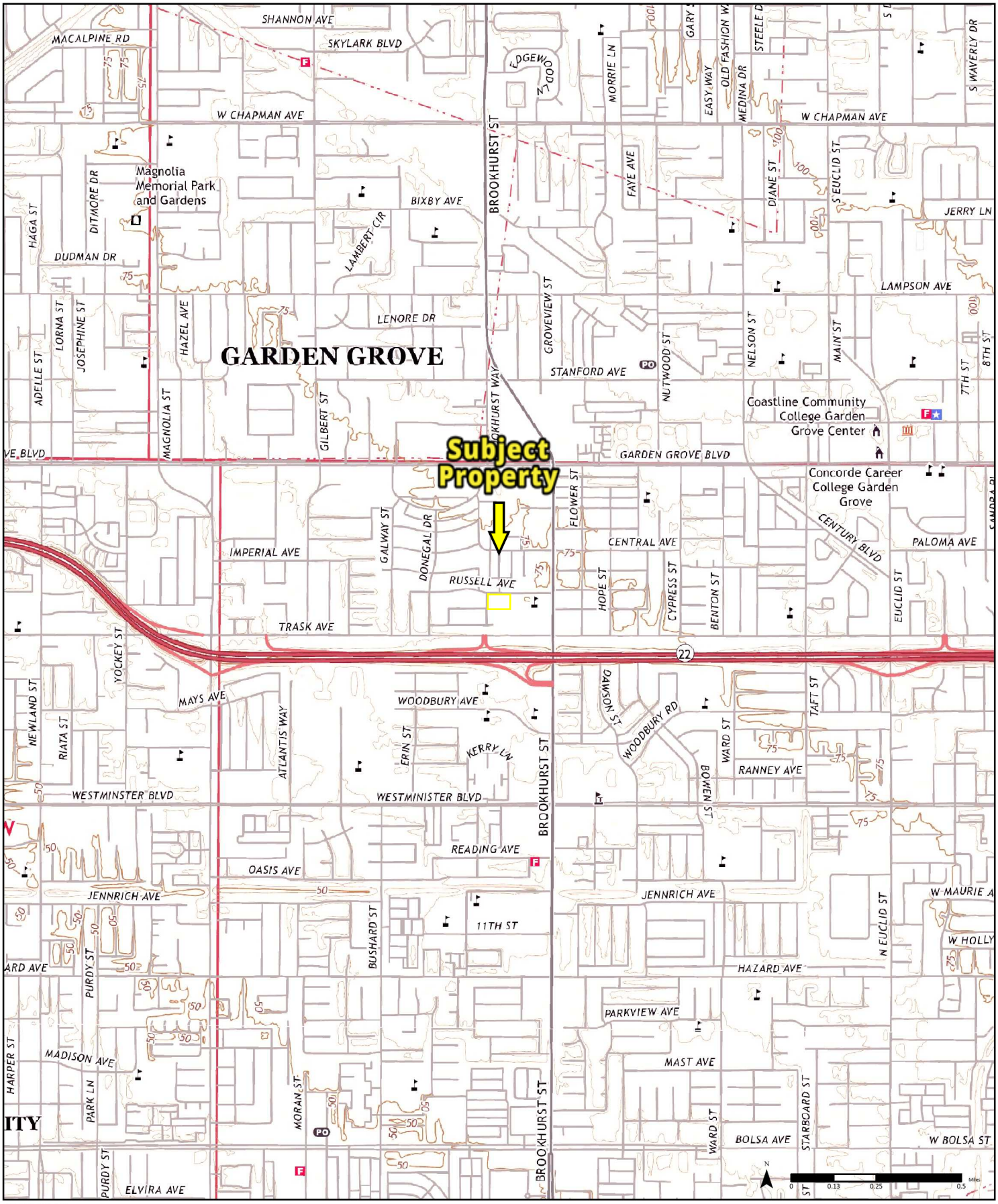
2018

Available Quadrangle(s): Anaheim, CA
Newport Beach, CA

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER



2022

Available Quadrangle(s): Anaheim, CA
Newport Beach, CA

Order No. 25061300823

Source: USGS 7.5 Minute Topographic Map

PARTNER

Outlook

Re: 9822 Russell Avenue [#795590]

From Planning Help <planning@ci.garden-grove.ca.us>
Date Tue 7/1/2025 2:35 PM
To Davis, Reese <reese.davis@partneresi.com>

CAUTION: This message originated from outside the Partner organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Reese Davis,

Thank you for your inquiry.

The number value at the end of the R-1 zoning designation refers to the minimum lot size for the zoning district. For example, the "7" in R-1-7 requires a minimum 7,200 SF lot area per the R-1 Single Family Development Standards Table identified in the Garden Grove Municipal Code (GGMC).

If you have any other inquiries please do not hesitate to contact us.

Regards,

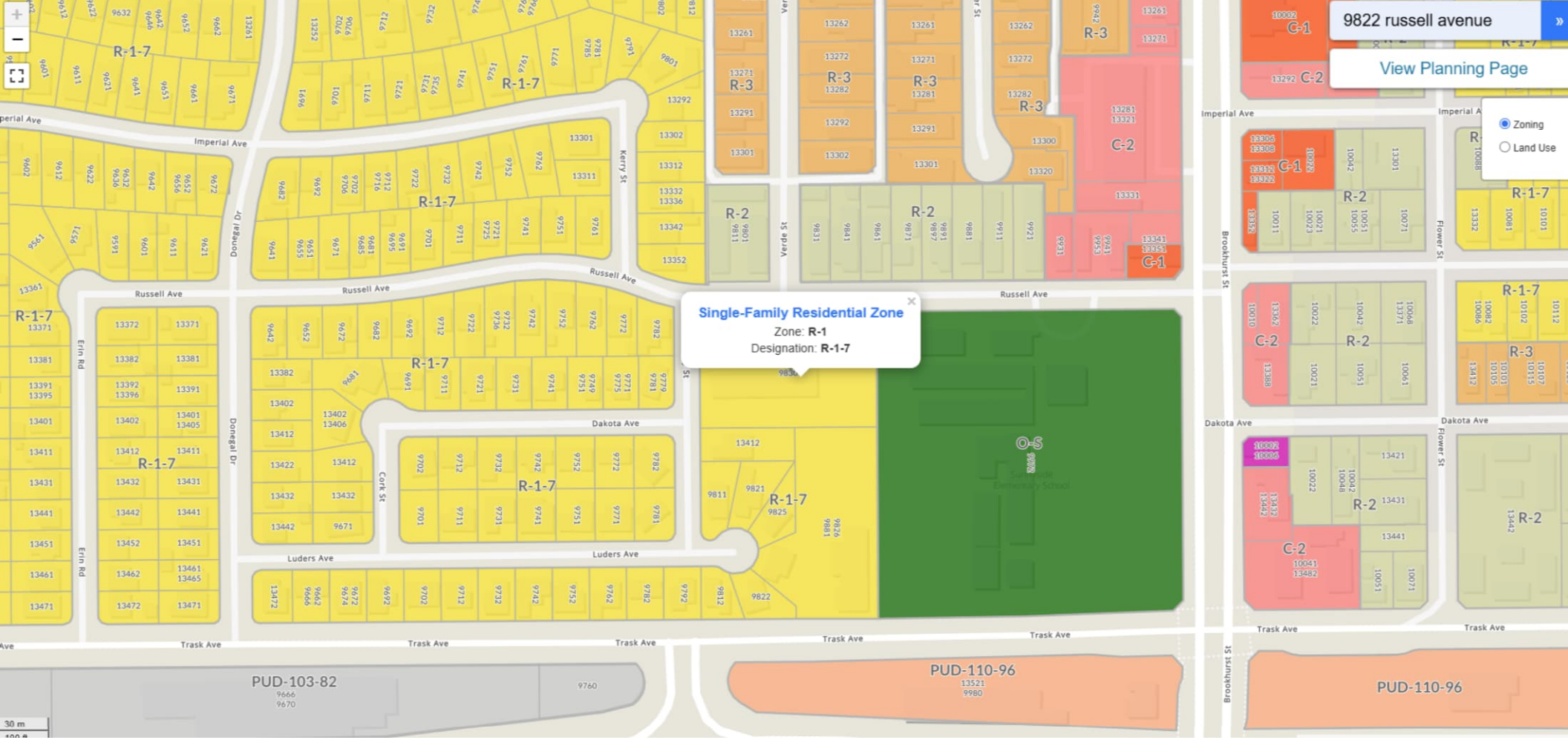
City of Garden Grove | Planning Services Division
11222 Acacia Pkwy, Garden Grove, CA 92840
(714) 741-5312
Planning Contact Portal

Regards,

Zachary Hernandez

Planning Aide ▌Planning Services Department
City of Garden Grove
11222 Acacia Parkway
Garden Grove, CA 92840
zacharyh@ggcity.org

We hope this response has sufficiently answered your questions. If not, please do not send another email. Instead, reply to this email.


9822 russell avenue
View Planning Page
Zoning
Land Use
Single-Family Residential Zone
Zone: R-1
Designation: R-1-7
R-1-7
R-2
R-3
C-1
C-2
O-S
Russell Ave
Imperial Ave
Dakota Ave
Luders Ave
Trask Ave
Donegal Dr
Erin Rd
Kerry St
Cork St
Verde St
Flower St
Brookhurst St
PUD-103-82
PUD-110-96
30 m

ORANGE COUNTY FIRE AUTHORITY

Prevention Field Services
1 Fire Authority Road
Irvine, CA 92602
CRTK@ocfa.org

RECORDS REQUEST INVOICE

PAID

To: Reese Davis – Partner ESI

Number of Pages (including cover): 1

Date: 6/30/2025

COMMENTS: The information you requested for **9822 RUSSELL AV** in the city of **GARDEN GROVE** is ready. Your fee for this request is $2.50.

***** PAY ONLINE! *** To ensure I receive a copy of the receipt, please use the link provided in the email only (do not use previously saved payment links)**

If you prefer not to pay online, please send a check payable to ORANGE COUNTY FIRE AUTHORITY and a **SELF-ADDRESSED, STAMPED ENVELOPE** to: *Orange County Fire Authority, Atten: Iris Vicent/Prevention Field Services, 1 Fire Authority Rd, Irvine CA 92602* and the records will be mailed to you. If you prefer your records to be emailed to you, please send payment only and indicate the email address you would like the records sent to.

Orange County Fire Authority

Public Records Request - Fire Safety Inspection

06/30/2025

1 Fire Authority Road • Irvine, CA 92602 • 714-573-6000

Filter: Address: 9822 RUSSELL AVE GARDEN GROVE, CA, Historical Inspection Included

Business Records At: 9822 RUSSELL AVE GARDEN GROVE, CA 92844

Bid#: 124299 DBA: IGLESIA DE CRISTO DE RESTAURACION Status: Active

9822 RUSSELL AVE, GARDEN GROVE, CA 92844

Last Inspection Date: 06/03/2025

Inspection Type: Routine Inspection Business Type: Church, mosque, synagogue, temple, chapel

No Violations Noted - BID:124299

Permits - BID:124299

Bldg	Permit #	Permit Description	Issued Date	Exp. Date	Occ. Load
	AL1R	Liquefied Petroleum Gas Reissuance	06/03/2025		
	AP23R	Assembly, >300 Occupants - Reissuance	06/03/2025		450

RUSSELL	9822			1
STREET NAME	ADDRESS	APT. NO.		CARD NO.

081-2 BUILDING PERMIT

Department of Building
B. C. Adams
Director

CITY OF GARDEN GROVE

ZONING AND BUILDING

Use Zone R-4 | Variance No. C-435
Map No. 08 | Main Use 1 | Acc. Use X
Set Back - C/L ST 50 | C/L ST 25
Side Yard Rt 6'4" | Projection
Side Yard Lt 6'0" | Projection
Rear Yard | No Parking Sp. Reqd. 157
Zoning Approved By | Date
Group R-3 Type V | Plan Ck. 11
Remarks:

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location	5/4/57	[illegible]
Reinforcing		
Roof Shtg.	4/25/57	OK
Rough Frame	5/14/57	[illegible]
Lath or Drywall	5/24/57	[illegible]
Plas. Brown Ct.	6/13/57	[illegible]
Final	7-9-57	[illegible]
Utility Release		

Remarks:

FEES

Building Permit $ 40.00 | Rec'd By [illegible]
Plan Check 1/3/57 $ 20.00 | Rec'd By [illegible]
Remarks:

Permit Authorized By [illegible] | Date 7/15/57

Routing: #1 Bldg. Inspector #2 Office File #3 Statistics #4 Owner

For Applicant to Fill In (Print Only) | 1

Permit No. 106

Job Address 9822 Russell St.
Lot No. [illegible] Tract No. [illegible] Blk. No.
Please Attach Metes & Bounds (2 Copies)

Owner CHURCH OF CHRIST
Owner's Address 9827 Russell Street
Description of Work Church Classrooms
Use of Building Church Classrooms
Area of Building 5412
Valuation $ 20,000.00
Arch. or Engr. E. E. Clements
Address 13725 Lakeland Rd. Whittier
Contractor Owner
Address [illegible]

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating building construction.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee Church of Christ Date 1/30/57
Address 9827 Russell St.

VALIDATION BY CASHIER

Plan Check
Bldg. Pt.

RELOCATION

PRESENT BLDG. ADDRESS Contact: Mr. Ronald Newman
MOVING CONTRACTOR c/o L. B. Gill Development Co.
ADDRESS c/o E. S. Leedy - Garfield 5241

INSPECTION FEE	RECEIPT NUMBER	
SURVEY	DATE REC'D	REC'D BY
CASH DEP.	DATE REC'D	REC'D BY
RELOCATION AUTHORIZED BY		DATE

CERTIFICATE OF OCCUPANCY

2

DEPARTMENT OF BUILDING
B. C. ADAMS, Director

CITY OF GARDEN GROVE
11391 ACACIA

PERMIT NO. [illegible]

JOB ADDRESS [illegible] GROUP [illegible] TYPE [illegible]

USE OF BUILDING [illegible] DATE [illegible]

USE ZONE [illegible] APPROVED BY [illegible]

ZONING REMARKS

Floor load sign installed per Section 2308 Yes ☐ No ☐

Room capacity sign installed per section 3301 (1) Yes ☐ No ☐

The above described building has been inspected and found to comply with the provisions of the Uniform Building Code.

ISSUED TO [illegible] ADDRESS [illegible]

Authorized By [illegible] DATE [illegible]

Notice! Post in a Conspicuous Place on the Premises

DATE 5-17-57 OUR PLUMBING NO. 6214 S

Garden Grove
~~[illegible]~~ BLDG. PERMIT NO. 106

OWNER'S NAME Garden Grove Church of Christ

JOB ADDRESS 9822 Russell

LOT NO.

DATE PLUMBING APPROVED 5-18-57

GARDEN GROVE SANITARY DISTRICT

By A. E. Murray

BUILDING PERMIT

Department of Building
B. C. Adams
Director

CITY OF
GARDEN GROVE

ZONING AND BUILDING

Map No.	APO	Var. No.
Use Zone R-1	Main Use ✓	Acc. Use
St. Set Back - PL		PL
Side Yard Rt		Projection
Side Yard Lt		Projection
Rear Yard		No. Parking Sp. Reqd.

NO CHANGE

Zoning Approved By [signature] Date 5/20/59

Group B Type V Plan Ck. [signature]

Remarks: Plans attached
See attached letter

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location SEC BACK		
Reinforcing		
Roof Shtg.		
Rough Frame		
Lath or Drywall		
Plas. Brown Ct.		
Final	10-15-62	[signature]
Utility Release		

Remarks:

FEES

Building Permit	$ 1.00	Rec'd By
Plan Check	$ —	Rec'd By

Remarks:

Permit Authorized By [signature] Date 5/20/59

For Applicant to Fill In (Use Ink)

Job Address 9822 Russell St Permit No. 6358

Lot No. Tract No. Blk. No.

Please Attach Metes & Bounds (2 Copies)

Owner Church of Christ

Owner's Address 9822 Russell St

Description of Work New ☐ Add'n ☐ Remodel ☒ Relocate ☐

Use of Building Remodel Toilet Room to Furnace Rm.

Area of Building — Valuation $ 75.00

Arch. or Engr. Address

Contractor Owner Phone

Address

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating building construction.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee [signature] Date 5-20-59

Address Lic. No.

PUBLIC WORKS

Street Imp.

Address By Date

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

INSPECTION FEE RECEIPT NUMBER

SURETY DATE REC'D REC'D BY

CASH DEP. DATE REC'D REC'D BY

RELOCATION AUTHORIZED BY DATE

Routing: #1 Bldg. Inspector #2 Office File #3 Statistics #4 Owner

P-1461

CHECKED EXCAVATION FOR CONTINUOUS FOOTINGS. 6" TO 10" FILL, ALL EXCAVATIONS ARE MINIMUM 12" INTO UNDISTURBED EARTH.

PLOT PLAN

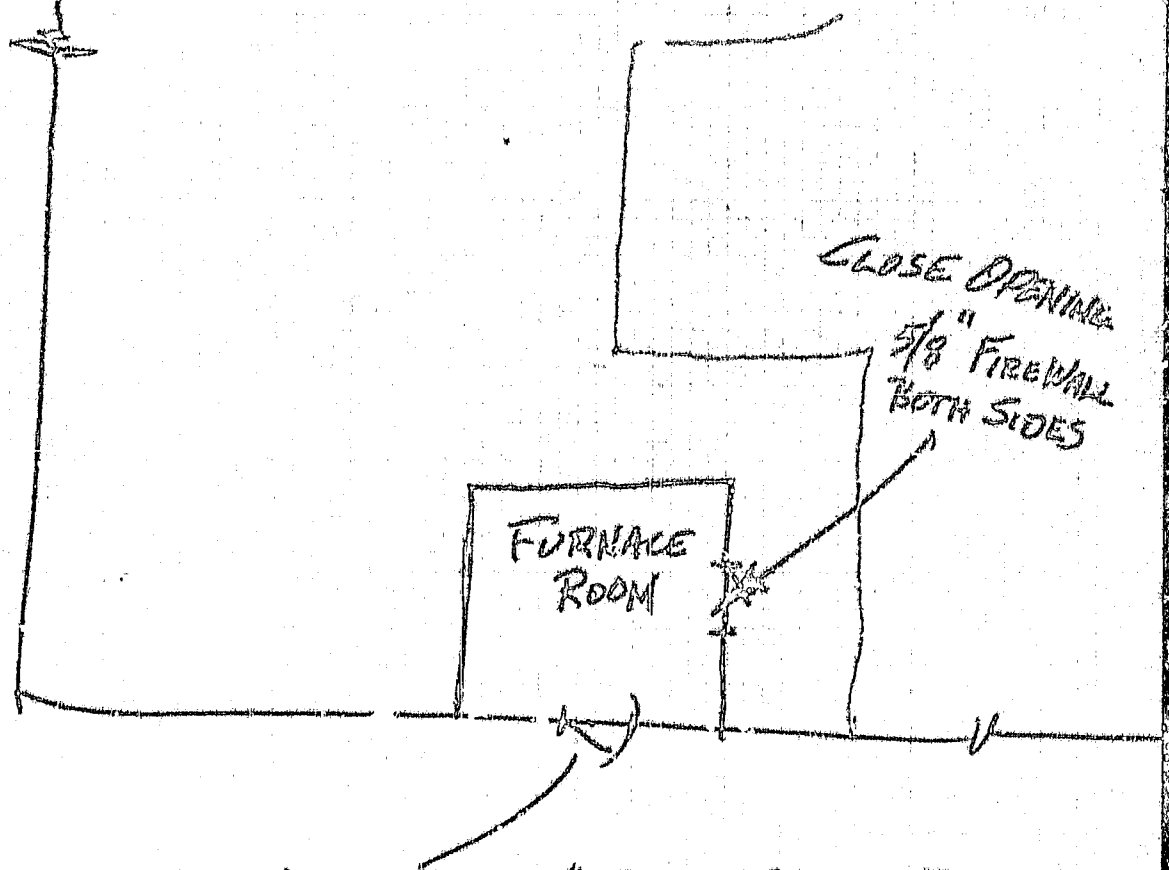
Department of Building
B. C. Adams
Director

CITY OF
GARDEN GROVE

Job Address 9827 Russell | Permit Number 6358

Lot | Tract | Blk.

DIMENSION PLOT PLAN COMPLETELY SHOWING
ALL BLDGS. ON THE LOT AND THEIR USE



I certify the information furnished hereon is complete and correct. By_____ Date_____

Routing: #1 Building Inspector #2 Office File #3 Owner

BUILDING PERMIT

Department of Building — **CITY OF GARDEN GROVE**

B. C. ADAMS, Director

ZONING AND BUILDING C-267

Use Zone	Main Use	Acc. Use	Var. No.
R1	—		C-435

St. Set Back - 12' PL 25' PL

N Side Yard 16' Projection

S Side Yard 50' Projection

E Rear Yard 20' No Parking Sp. Reqd. 126

Zoning Approved By RDP Date 9-21-61

Group B-2 Type VIH Plan Ck. BOA ELM

Remarks:

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
1st Foundation and Location SLM	11-30-61	[illegible]
Reinforcing		
Roof Shtg.		
Rough Frame		
Lath or Drywall		
Plas. Brown Ct.		
Other		
Land Use		
Final		
Utility Release		

FEES

Plan Check ELM 8-7-61 $64.00 Building Permit $128.00

Bond $ Expiration Date

Permit Authorized By JS Date 10-30-61

For Applicant to Fill in (Use Ink) PC-6111

Job Address 9822 Russell [redacted] Permit No. 16931

Lot No. Tract No. Blk No.

Please Attach Metes & Bounds (2 Copies)

Owner Church of Christ (Christian)

Owner's Address 9822 Russell

Description of Work New ☑ Add'n ☐ Remodel ☐ Relocate ☐

Use of Building Sanctuary

Area of Building 6800 sq ft Valuation $ 54,500.00

OCT 30-61 11 001 M 128.00

Validation

Arch. or Engr. A. TURNER Address

Contractor AL. MAHONEY Phone KE 5-7993

Address 1123 W. NORTH ST. ANAHEIM

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating building construction.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee [signature] Date 8/7/61 Lic. No.

Address

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR ADDRESS

PUBLIC WORKS

Street Address OE By [signature] 8-7-61

	REQUIRED	PROVIDED
Record of Survey		
R/W Dedication		
Bonds		
Encroachment Permit		

Remarks

Routing: #1 Bldg. Inspector #2 Office File #3 Statistics #4 Owner

DENNIS

7/2/62

Bldg ok except door bolts on panic
Hdw on main Entry South entry
Fire boors in storage area from Furnace
Room - Stair well to be part of Furnace Room
with separation at Northern level
Fire boor + Seperation to stairs as
Shown on plan -
13 parking spaces + Masonary fence
See plans Ltg -

PLOT PLAN

Department of Building
B. C. Adams
Director

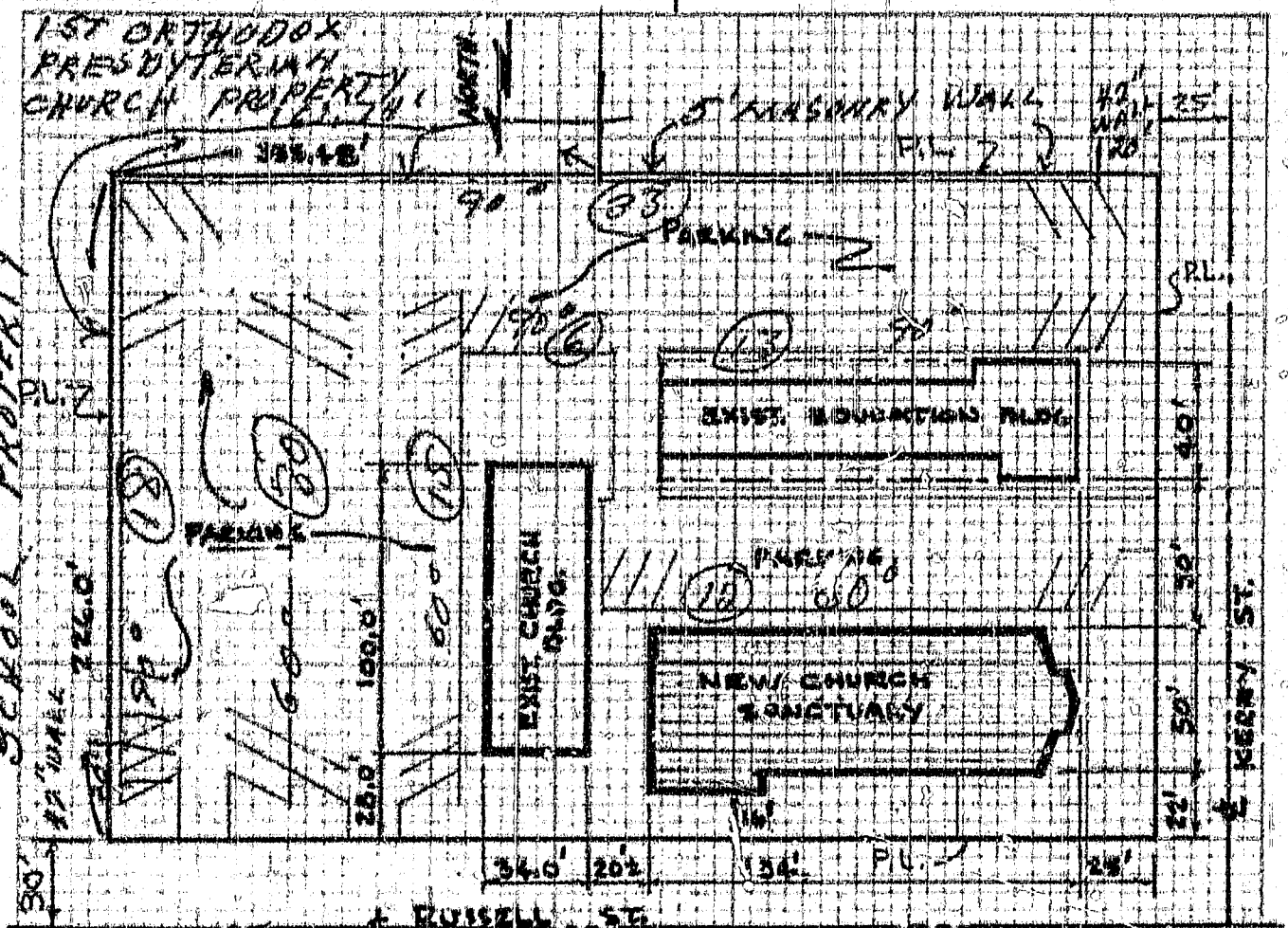
CITY OF
GARDEN GROVE

Job Address 9822 Russell

Permit Number 16951

Lot Tract Blk. 67

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE



I certify the information furnished hereon is complete and correct.

Routing: #1 Building Inspector #2 Office File #3 Owner By: [signature] Date 9/21/61

PLUMBING PERMIT

Department of Building
B. C. Adams
Director JE 7-4200

CITY OF GARDEN GROVE

For Applicant to Fill in (Use Ink)

Job Address 9822 Russell

Permit No. 26212

Lot No. Tract No. Blk. No.

Owner Church of Christ

Owner's Address 9822 Russell

Plumbing Contractor

Contractor's Address

Phone City Lic. No.

Use of Bldg.

New Bldg. ☐ Old Bldg. ☐

Validation JUN 27-62 11 061 M*****4.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violaton of the workman's compensation laws of the State of California.

Signature of Permittee Reece B. Clark Date 27 June 62

Address 9712 Shawnee

PERMIT FEES

No.	TYPE OF FIXTURE OR ITEM	EACH	#	FEE
	Water Closet (Toilet)	$1.00		
	Bath Tub	1.00		
	Shower	1.00		
	Lavatory (Wash Basin)	1.00		
	Kitchen Sink	1.00		
	Garbage Disposal	1.00		
	Laundry Tub or Tray	1.00		
	Water Heater	1.50		
	Slop Sink	1.00		
	Floor Sink	1.00		
	Floor Drain	1.00		
	Dish Washer	1.00		
	Drinking Fountain	1.00		
	Urinal	1.00		
	Gas System — Outlets	1.00		
	House Sewer	1.00		
	Lawn Sprinklers	2.00	2	00
	Swimming Pool Piping	1.00		
	Sand Traps	1.00		
	Automatic Washing Mach.	1.00		
	Water Softeners	1.50		
	Backwash	1.50		
	Issuance of Permit		2	00
	TOTAL FEE	$	4	00

Permit Authorized By [signature] Date 6-22-62

APPROVALS	DATE	INSPECTOR
SOIL PIPING		
GROUND PLUMBING		
ROUGH PLUMBING		
GAS PIPING		
GAS VENT		
SEPTIC TANK or Cesspool		
SEWER		
GAS TEST		
MAIN DRAIN AND VACUUM LINES		
WATER HEATER		
BACKWASH		
FINAL	7-11-62	R1991b
UTILITY CO. NOTIFIED		

Routing: #1 Plumbing Inspector #2 Office File #3 Owner Bldg. Permit #

When Copper piping is used in Bldg. then all piping must be Copper for Cannot mix metals.

You must install Copper to all Sprinkler Labs assembly

6-28-62 Pr 570

PLUMBING PERMIT

Department of Building
B. C. Adams
Director JE 7-4200

CITY OF GARDEN GROVE

PERMIT FEES

No.	TYPE OF FIXTURE OR ITEM	EACH	$	FEE
7	Water Closet (Toilet)	$1.00	7	00
	Bath Tub	1.00		
	Shower	1.00		
9	Lavatory (Wash Basin)	1.00	9	00
1	Kitchen Sink	1.00	1	00
	Garbage Disposal	1.00		
1	Laundry Tub or Tray	1.00	1	00
2	Water Heater	1.50	3	50
	Slop Sink	1.00		
5	Floor Sink	1.00	5	00
	Floor Drain	1.00		
	Dish Washer	1.00		
1	Drinking Fountain	1.00	1	00
1	Urinal	1.00	1	00
1	Gas System 4 Outlets	1.00	1	00
	House Sewer	1.00		
	Lawn Sprinklers	2.00		
	Swimming Pool Piping	1.00		
	Sand Traps	1.00		
	Automatic Washing Mach.	1.00		
	Water Softeners	1.50		
	Backwash	1.50		
	Issuance of Permit		2	00
	TOTAL FEE		$ 31	50

Permit Authorized By [illegible] Date 11-15-61

For Applicant to Fill in (Use Ink)

Job Address 9822 RUSSELL ST. Permit No. 24244

Lot No. Tract No. Blk. No.

Owner Church Christ

Owner's Address 9822 Russell

Plumbing Contractor [illegible]

Contractor's Address 549 S [illegible]

Phone KE 54846 City Lic. No.

Use of Bldg. Church

New Bldg. ☒ Old Bldg. ☒ SANCTUARY

Validation NOV 15-61 11 003 M****31.50

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee [illegible] Date Nov 14 61

Address

APPROVALS	DATE	INSPECTOR
SOIL PIPING		
GROUND PLUMBING	11-23-61	Riggio
ROUGH PLUMBING	3-16-62	Riggio
GAS PIPING		
GAS VENT		
SEPTIC TANK or Cesspool		
SEWER		
GAS TEST	6-22-62	Riggio
MAIN DRAIN AND VACUUM LINES		
WATER HEATER		
BACKWASH		
FINAL	7-11-62	Riggio
UTILITY CO. NOTIFIED		

Routing: #1 Plumbing Inspector #2 Office File #3 Owner Bldg. Permit # 16931

PLUMBING PERMIT

HEATING, VENTILATION, REFRIGERATION & AIR CONDITIONING PERMIT

1

DEPARTMENT OF BUILDING
B. C. ADAMS - DIRECTOR
JEfferson 7-4200

CITY OF
GARDEN GROVE

FOR APPLICANT TO FILL IN (USE INK)

JOB ADDRESS: 9822 Russell

PERMIT NO.: 1048

LOT NO.:

TRACT NO.:

OWNER: Chruch of Christ

OWNER'S ADDRESS:

CONTRACTOR: Sheet Metal Engineering

CONTRACTOR'S ADDRESS: 1441 S. Los Angeles St. Anaheim

PHONE: PR 48120 CITY LIC. NO.: 205

USE OF BUILDING: Church

NEW BUILDING [x] OLD BUILDING [ ]

VALIDATION: FEB 20 62 11 049 H ★★★★31.50

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing.
I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

SIGNATURE OF PERMITTEE: [signature] DATE:

ADDRESS:

PERMIT FEES

NUMBER	TYPE OF FIXTURE OR ITEM	EACH	FEE
	FURNACE	$1.00	
	WARM AIR OUTLET	.25	
	FURNACE VENTS	1.00	
	GAS PIPING ____ OUTLETS	1.00	
	MISC. APPLIANCES	1.00	
32	COMMERCIAL HEATING	2.00	6 00
29	COMMERCIAL WARM AIR OUTLETS	.50	14 50
3	COMMERCIAL FURNACE VENTS	2.00	6 00
4	EXHAUST OUTLETS	1.00	4 00
	REPAIR, ALTERATION OR ADDITION TO HEATING SYSTEM	1.00	
	VENTILATION SYSTEM	3.00	
	RESTAURANT KITCHEN HOOD	3.00	
	CONDENSING UNIT 20 H.P. OR LESS	2.00	
	CONDENSING UNIT TO 50 H.P.	5.00	
	CONDENSING UNIT OVER 50 H.P.	10.00	
	REPAIR OR ALTERATION TO REFRIGERATION SYSTEM	3.00	
	EVAPORATIVE COOLERS	1.00	
	ISSUANCE OF PERMIT		1 00
	TOTAL FEE	$	31 50

PERMIT AUTHORIZED BY: [signature] DATE: 2-20-62

BUILDING PERMIT NO.:

ROUTING:
#1 INSPECTOR #2 OFFICE FILE #3 OWNER

APPROVALS	DATE	INSPECTOR
FURNACE Duct	2-20-62	[signature]
REGISTER OUTLETS		
FURNACE VENTS		
GAS PIPING		
MISC. APPLIANCES		
EXHAUST OUTLETS		
RESTAURANT KITCHEN HOOD		
VENTILATION SYSTEM		
CONDENSING UNIT 20 H.P. OR LESS		
CONDENSING UNIT 50 H.P.		
CONDENSING UNIT OVER 50 H.P.		
FINAL	7-11-62	[signature]
UTILITY CO. NOTIFIED		

ELECTRIC PERMIT

Department of Building
B. C. Adams
Director

CITY OF
GARDEN GROVE
JE 7-4200

LOT NO. TRACT NO.

	NUMBER	EA.	FEE
New Residence Sq. Ft.		.01	
Residential Garage Sq. Ft.		.005	
Services		1.00	
Meters		1.00	
Fixtures 1st 20		.20	4 00
Fixtures, Additional		.10	8 70
Fixtures, Mercury Vapor		1.00	
Outlets, 1st 20		.20	4 00
Outlets, Additional		.10	3 10
Any Pole		2.00	
Dryer		1.00	
Dishwasher		1.00	
Furnace		1.00	
Garbage Disposal		1.00	
Fan		1.00	
Heater Inc. 1650 W	2	.50	1 00
Domestic Range		1.00	
Domestic Oven		1.00	
Motors—Not Over 1 H.P.	4	1.00	4 00
Motors Over 1 Not Over 3 H.P.	1	1.50	1 50
Motors Over 3 Not Over 8		2.00	
Motors Over 8 Not Over 15		2.50	
If Not Listed Above, See Code			
2 fans		1.00	2 00
Permit Fee			2 00
Total Fee			30 30

Authorized By [signature] Date 11-20-61

Applicant Fill in (use ink)
Job Address: 9822 RUSSELL ST.

Electric Permit No. 16347

Owner: CHURCH OF CHRIST
Owner's Address: 9822 RUSSELL ST.

New Bldg. ☑ Old Bldg. ☐ Use—

Electrical Contr.: F&M ELECTRIC Co.
Address: 702 So. Los Angeles ST. ANAHEIM
Phone: KES-6210 State License No. 145775

Validation: NOV 20-61 11 002 M ****30.30

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating electrical wiring.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee [signature] Date 11-20-61

SIGNS

One Sign—1 Transformer		2.00	
Additional Sign, Same Location		1.00	
Additional Transf. or flashers, Time Clock		1.00	
Lamp Holding Devices, 1st 20		.05	
Lamp Holding Devices, Next 100		.03	
Sign and 1 Transformer, Moved			
Altering or Changing Lettering			
For Connecting (Hook-up)			
Permit Fee			2 00
Total Fee			

	Date	Inspector
Conduit		
Wiring	5-7-62	[signature]
Fixtures		
U. G.	11-22-61	[signature]
Sign Footing		
Final	5-15-62	[signature]
Utility Notified		

Service Size Amp. Wire Conduit

Building Permit No.

GARDEN GROVE CHURCH of CHRIST

(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
DAVID W. WEAD, MIN. OF ED.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 • JEFFERSON 7-4190

June 27, 1962

Mr. Barney Adams
Building Dept.
City of Garden Grove

Dear Mr. Adams:

This letter is an acknowledgment to your office that at such time as traffic conjestion makes it necessary, and it is requested by the City of Garden Grove, this congregation will conform to the letter of the zoning ordinance by providing eleven additional off-street parking spaces for our church facilities.

very sincerely,

Richard L. Miller,
Minister

RUSSELL		9822			2
STREET NAME		ADDRESS	APT. NO.		CARD NO.

Fence work

8-15-62

CHURCH OF CHRIST.
9822 RUSSELL

(L 5)

No1. - 5' FENCE (160') — INCOMPLETE SOUTH PL.
(EAST PL) SCHOOL
FENCE REQUIRED ?

No2. OFF STREET (12 SPACES) INCOMPLETE AT
BETWEEN NEW SANCTUARY AND
EXISTING CHURCH EDUCATION. BLDG.

No3. PANIC HUND REQUIRED AT
(N) DOOR. (No) 4 DR. ?
Main entrance

~~No4 FIRE DOOR'S — (2)~~

~~K - DOOR REMOVED TO BOTTOM OF STAIRS PER MENDENHALL.~~

PASTOR
DICK MILLER

August 22, 1962

Rev. Dick Miller
Church of Christ
9822 Russell
Garden Grove, California

Re: C-269
C-435

Dear Sir:

In reference to building permits 6358 and 16931 which have not received final building approval.

Please notify this Department within 7 days, in writing, when you intend to complete these permits.

Yours very truly,

William K. Miller
Senior Building Inspector

WKM:ks

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
DAVID W. WEAD, MIN. OF ED.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 JEFFERSON 7-4190

August 26, 1960

Mr. William K. Miller,
Senior Building Inspector
City of Garden Grove, 11391 Acacia St.
Garden Grove, California

Dear Mr. Miller:

This letter is in reference to your correspondence of August 22, 1962 regarding C-269 and C-435. We realize that this problem regarding permits 6358 and 16931 is current and it will receive prompt attention.

We have not been able to have a building committee meeting to appropriate the needed funds but this situation will be handled within a matter of days and the contractor will be instructed to make the necessary changes.

Thank you very much for your patience and understanding with regard to this matter.

Very sincerely,

Richard L. Miller

Richard L. Miller, minister

RLM/dw

Received
Aug 31-62

October 1, 1962

Reverend Richard L. Miller
Garden Grove Church of Christ
9822 Russell Street
Garden Grove, California

Dear Reverend Miller:

Your letter of September 20th requesting one-year extension of time for construction of a wall on the south side of the Church property and for completion of Church parking lot at 9822 Russell Street was considered by the Garden Grove City Council on September 25th.

This is to advise you that the Council did approve your request for one-year extension of time for completion of those two items.

Very truly yours,

CITY OF GARDEN GROVE

Ruben Wiesner
CITY CLERK

GW:rs

cc: Building Department

September 7, 1962

Mr. Richard L. Miller
9022 Russell Street
Garden Grove, California

Dear Sir:

I have reviewed the entire file on the construction of the Church sanctuary at 9022 Russell Street.

The site has not been completed in accordance with the ordinances or the approved plans. It will be necessary to complete construction of fences and parking areas in accordance with the approved plans and to remove the illegal exit hardware at the main entrance and to complete the exits in accordance with the approved plans. The hardware is required on the exits in accordance with the Uniform Building Code. It will be necessary to remove all locks and any means of locking the exit doors before the building is occupied for assembly. The safety of the occupants is at stake and it is necessary that the illegal exits be corrected before the building is used for any assembly.

The elimination of fencing and required parking can be done only under a variance procedure. This Department has previously taken a liberal approach, allowing a few weeks or months for the construction of such facilities when the situation warranted. The Department does not have the authority to make exceptions to the Zoning Ordinance and we refer you to the variance procedure should you feel the elimination of required fencing be justified.

Your immediate attention to these matters will be greatly appreciated.

Kindly notify this office in writing within seven days of the action you intend to take regarding the fencing and parking. We expect immediate action on the exit hardware as the safety of occupants of the building is my prime concern as I hope it is yours.

Very truly yours,

Bernard S. Adams
Director
Building Department

jm

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
DAVID W. WEAD, ASST. MIN.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 • JEFFERSON 7-4190

RECEIVED
CITY OF GARDEN GROVE
Oct 7 3 32 PM '63

October 7, 1963

THE CITY COUNCIL
Garden Grove, California

Gentlemen and Mrs. Barr:

We are writing at this time persuant to your letter of October 3, 1963 in which you suggest we submit a revised letter concerning the block wall and the parking area on our church property.

In our previous letter we made a request for an extension of one year for construction of the block wall. This request was made because our compliance to the requirement at this time would impose an extremely difficult financial burden upon the congregation. In another twelve months our constituency will be larger and all the extra bills and unforseen expenses of occupancy of the new building will be paid. It will then be possible for us to make a successful appeal for funds for the construction of the wall.

In earlier correspondence an appeal was made for an extension of time for the 11 or 12 additional parking spaces until there was a need for them. We endeavored to give full assurance that at such time as they were needed we would remove the lawns, landscaping, sprinkling system, etc. and put them in. Our request for extension with regard to this requirement is made primarily on the basis of three important considerations:

(1) The esthetic beauty of the church grounds would be greatly affected. The courtyard between the buildings is beautifully landscaped.

(2) The need for these 11 or 12 spaces has not yet been apparant even on such days of large attendance such as Easter Sunday and Christmas. Only last Sunday we had a capacity attendance of 388 in one service and prompted by the present concern over this matter an actual count was made of the empty spaces in the parking lot now provided. It was discovered there were 48 empty spaces in spite of the large attendance.

(3) A safety factor is involved which, undoubtedly, should be a prime consideration. The Educational Building on the south side of the area involved houses a nursery and classrooms for preschool through sixth grade. These children, in spite of supervision, will be darting across to the church sanctuary which is situated on the north side of the courtyard. With automobiles backing in and out of the area a distinct danger would be created.

We believe it would be a shame to destroy the landscaped beauty of the courtyard and a tragedy to produce a safety hazard for the Sunday School children for want of 11 or 12 more black-topped parking spaces when fully 1/3 to 1/2 of our existing paved parking remains unused. We therefore ask that an extension be granted until such time as the space is actually needed for its required use.

Again we wish to thank you for your very thoughtful consideration of this matter and would prayerfully request a favorable decision.

Very Sincerely,

Richard L. Miller, Minister

"Giving diligence to keep the unity of the Spirit in the bond of peace." Eph. 4:3

City of Garden Grove

INTER-DEPARTMENTAL MEMORANDUM

To	HARRY R. PIERCE	From	ORLEAN C. MILLER
Dept.	BUILDING	Dept.	BUILDING
Subject	CHURCH OF CHRIST - 9822 RUSSELL ST. EXTENSION OF EXISTING ONE YEAR EXTENSION FOR COMPLIANCE OF OFF-STREET PARKING AND BLOCK WALL.	Date	OCTOBER 7, 1963

A brief review of this project is as follows:

On October 10, 1961 we issued a permit for the construction of a sanctuary. The sanctuary has 378 fixed seats and requires 39 fixed seats in their left. Our Code requires one space per each three fixed seats, therefore minimum required parking 126 spaces which is that the approved plan provided - the minimum of 126 spaces. This permit also required a masonry fence as stipulated in the Municipal Code between this lot and adjoining residential property. Final inspections on this project was completed during the month of June, 1962.

On June 27, the minister of this church, Richard L. Miller sent our department a letter stating that they would put in the additional eleven parking spaces than required to do so by the City of Garden Grove - twelve was what was required.

On August 22, 1962, our department notified Reverend Miller in writing that he had not received final inspection on his building. We requested him to notify our department within seven days that he intended to complete the permits issued.

On August 28, 1962 Reverend Miller answered by stating that they would have a building committee meeting to appropriate the necessary funds and that the situation would be taken care within a matter of days.

On September 7, 1962 Mr. Adams of our department wrote a letter to Reverend Miller stating they were utilizing a building that had illegal locking devices on their exit doors, a required fence had not been installed, that the required off-street parking had not been provided, and that the site had not been completed in accordance with Ordinances or the approved plans. Mr. Adams advised Reverend Miller that if he did not wish to comply with the requirements on the fence that he could apply through the Planning Department on a variance procedure. This letter again requested Reverend Miller to reply within seven days as the above.

On September 20, 1962, Reverend Miller wrote directly to the City Council c/o Mayor Donald requesting a year extension on the parking and fence requirements. On October 1, 1962, he was notified by the City Clerk that the Council had granted a two year extension, the locking devices were changed to comply with F.D.D.

SUMMARY:

The requirements for off-street parking and the fence have been known by this church for two years dated from the date of issue of permit. These requirements are shown on all approved plot maps and on the permit itself. The parking requirements are the same imposed on all churches having been constructed in Garden Grove in the past few years and there have been many. I see no justification for requiring several churches to provide our minimum and not requiring this specific one. This has been a hardship for all of them I am sure-but they have provided them.

The fence is also a requirement of our Municipal Code and again has been provided by all churches having been built in the past few years. However, another delay after two years knowledge of the requirement serves no useful purpose. Therefore, it is suggested that this fence be installed or that as suggested in Mr. Adams letter of September 7, 1962, a variance be requested for waiver or bonding as provided in the Municipal Code.

Stewart G. Miller

cc

cc: W.K. Miller - Senior Building Inspector

Mr. Dudley Lapham

City Administrator

Block Wall and Parking for
Garden Grove Church of Christ

Harry E. Peiron

Building

October 11, 1963

I see no objection to an extension of one year for construction of the block wall since we have received no complaints from the adjacent property owner concerning the lack of the wall. However, I would recommend that the request be granted as a final extension.

Concerning the 12 parking spaces which are required by the Municipal Code, it is my opinion that they should be provided at this time. The aesthetic and safety considerations referred to in Rev. Miller's letter should have been taken into account in the original design and of course, these problems can still be surmounted by the acquisition of adjoining property. I believe the point raised concerning "no apparent need" to be an invalid one since, if property owners were permitted to provide the required number of parking spaces only when they believe the need for off-street parking is apparent, the intent of the off-street parking regulations would soon be negated and the enforcement of these regulations under such a provision would be an impossible task.

Harry E. Peiron

jc
cc: Cline Martin
✓Stewart Miller

HRP

September 18, 1963

Reverend Richard L. Miller
Garden Grove Church of Christ
9872 Russell Street
Garden Grove, California

Dear Sir:

Reference is made to your letter of September 20, 1962 in which you requested from the City Council a one year extension to complete your required parking area and a block wall fence. On October 1, 1962 you were notified by letter from the City Clerk that the City Council had approved your request for a one year extension on September 25, 1962.

This letter is a reminder that your requested time extension expires on September 25, 1963 at which time we are to make an inspection for compliance. The extension of time for one year to complete your original permit was a time requested by you. This in essence was your guarantee to the City Council that you would comply on or before the date you specified. Therefore, it is anticipated that our inspection on September 26, 1963 will indicate that compliance has been accomplished.

Very truly yours,

Stewart O. Miller
Zoning Technician

cr
cc: Gwen Wiesner - City Clerk
Harry W. Peirce - Director Building Dept.
William K. Miller - Senior Building Inspector

June 18, 1964

Reverend Richard L. Miller
Garden Grove Church of Christ
[illegible] Russell Street
Garden Grove, California

Dear Sir:

Your request to the City Council for waiver of eleven parking spaces has been referred to this department for review.

Recently, the Planning Department prepared an amendment to the Municipal Code which permits churches to count curbside parking spaces as contributing to required off-street parking.

The Planning Commission has recommended approval of this amendment, which will be considered by the City Council on July 7, 1964. Should the Council adopt the amendment, your requested waiver will be unnecessary.

We will advise you of the Council's action.

Yours very truly,

James C. Casper

James C. Casper
Assistant Planning Director

[illegible]

[illegible] Building Department
[illegible]

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
GARY N. DAVIS, YOUTH MIN.

9522 RUSSELL STREET • GARDEN GROVE, CALIFORNIA, 92642 • P. O. BOX 188 • JEFFERSON 7-4190

APR 16 10 12 PM '64

April 15, 1964

City Council of Garden Grove
11391 Acacia
Garden Grove, California

Dear Sirs:

We deeply appreciated the six month delay for construction of a block wall along the portion of our parking lot that borders an R-1 property. This wall was completed about March 1 of this year.

Our previous letter asked, in addition to this delay, a waiver of the requirement for eleven more parking spaces. It has been found that even on days of largest attendance, such as Easter Sunday, March 29, our present off-street parking provision is more than adequate, there being several parking stalls left unused. We would therefore petition the council's consideration of our request for waiver of these eleven spaces.

Earlier correspondence has shown in detail other reasons for our request. Should this correspondence not be readily available for your reconsideration, we would be most happy to reassemble those facts in another letter.

The city has been very considerate and very generous and we are extremely grateful.

Respectfully,

Richard L. Miller

RLM:m

April 8, 1964

Reverend Richard Miller
Garden Grove Church of Christ
9822 Bascoll Street
Garden Grove, California

Dear Mr. Miller:

Reference is made to the City Council meeting of October 15, 1963 in which you received a six month extension of time to comply with the off-street parking and fencing requirements. I wish to advise you that the six month extension terminated March 26, 1964.

Our inspector, Mr. Ken Miller, will make an inspection of the property on April 13, 1964 unless you would prefer another date. If you prefer a different date, please contact Mr. Ken Miller or myself prior to this time.

Sincerely yours,

Stewart O. Miller
Zoning Technician

cc
cc: Owen Kiesner - City Clerk
Barry E. Peirce - Director Building & Safety
Ken Miller - Sr. Building Inspector

9822 Russell

October 18, 1963

Reverend Richard L. Miller
Garden Grove Church of Christ
Post Office Box 145
Garden Grove, California

Dear Reverend Miller:

I am pleased to confirm the action of the Garden Grove City Council taken October 15, 1963, on request of the Church for an extension of time to comply with the requirements of construction of a block wall along a portion of the southerly boundary of the Church parking lot and for compliance with parking requirements.

The City Council did grant a six-month extension of time for completion of these two items.

Very truly yours,

CITY OF GARDEN GROVE

GWEN V. IFSNER
CITY CLERK

cc:

Building Department

RUSSELL	009822			3
STREET NAME	ADDRESS	APT. NO.		CARD NO.

September 18, 1963

Reverend Richard L. Miller
Garden Grove Church of Christ
9122 Cassell Street
Garden Grove, California

Dear Sir:

Reference is made to your letter of September 23, 1962 in which you requested from the City Council a one year extension to complete your required parking area and a block wall fence. On October 1, 1962 you were notified by letter from the City Clerk that the City Council had approved your request for a one year extension on September 25, 1962.

This letter is a reminder that your requested time extension expires on September 25, 1963 at which time we are to make an inspection for compliance. The extension of time for one year to complete your original permit was a time requested by you. This in essence was your guarantee to the City Council that you would comply on or before the date you specified. Therefore, it is anticipated that our inspection on September 26, 1963 will indicate that compliance has been accomplished.

Very truly yours,

[illegible] L. Miller
[illegible] Commission

cc:
[illegible] - City Clerk
[illegible] - Director [illegible]
[illegible] - [illegible]

APPLICATION FOR A

BUILDING PERMIT

DEPARTMENT OF BUILDING, GARDEN GROVE, CALIF.

CODE 1-7-0-1-0 INFORMATION PROVIDED BY BLDG. DEPT.

EXTERIOR WALL MATERIAL	ROOF FRAMING MATERIAL
PARTITIONING MATERIAL	ROOF COVERING MATERIAL
LOT WIDTH / LOT DEPTH	NO. OF EXISTING BLDGS. ON LOT
USE ZONE R-1 / FIRE ZONE / OCCUPANCY / TYPE	
REQ'D SET BACKS: FRONT 2'-6" / RIGHT SIDE / LEFT SIDE / REAR: TO ℄ HOLE	
SITE PLAN NO. / USE PERMIT OR VARIANCE NO. / PARK SPACES REQ'D	

Zoning Approved By ELM Date 2-16-66

Remarks: PLAN ATTACHED

PUBLIC WORKS

Street Address [illegible] By [illegible]

	REQUIRED	PROVIDED
Record of Survey		
R/W Dedication	[illegible]	
Bonds	[illegible]	
Encroachment Permit	[illegible]	

Remarks

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location	3-7-66	[illegible]
Reinforcing		
Roof Shtg.		
Rough Frame		
Lath or Drywall		
Plus Brown Ct.		
Other		
Land Use		
Final	4-15-67 [illegible]	
Utility Release		

VALUATION NOTE: INCLUDE LABOR, MAT. WIRING, PLUMB, HEAT, ETC. $ 550

FEES

Plan Check	$ 2.50	Building Permit	$ 5.00
Bond	$	Expiration Date	

Permit Authorized By ELM Date 2-16-66

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN. PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE. NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

Job Address: 9822 Russell St

Permit No. 014355 A

5-2997

Lot No. — Tract No. — Blk No.

CONTRACTOR: Owner — STATE LIC. NO.

MAILING ADDRESS: 9822 Russell St — TEL. NO. JE7-4190

☐ ARCH. ☐ ENGR. — STATE LIC. NO.

MAILING ADDRESS — TEL. NO.

OWNER: Church of Christ — TEL. NO. JE7-4190

MAILING ADDRESS

NEW ☑ ADD'N ☐ ALTER. ☐ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) — NO. OF STORIES — NO. OF DWELLING UNITS

PRESENT BLDG. USE — PROPOSED BLDG. USE

FEB 16-66 11 018 M*****2.50

Validation FEB 16-66 11 019 M*****5.00

DESCRIBE WORK TO BE DONE: POLE SIGN

OWNER-BUILDER PERMIT RESTRICTIONS: An owner-builder must reside within the building for which this permit is issued, (accessory buildings excepted). Said building may not contain more than 3 dwelling units. Otherwise, this permit can be issued only to a contractor licensed in the State of California and a business license must be procured from the City of Garden Grove.

WORKMEN'S COMPENSATION INSURANCE REQUIREMENTS: A certificate or duplicate thereof of workmen's compensation insurance must be on file with the City of Garden Grove prior to the issuance of this permit unless: 1. This permit is for less than $100 valuation or, 2. The applicant qualifies as an owner-builder and signs the statement below -

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California.

SIGNATURE: Church of Christ
D.E. Shaw Laugh
Chairman Board of Trustees

(or) CERTIFICATE ON FILE

APPLICANT'S CERTIFICATION: I have carefully read and examined the above application and find the same to be true and correct. All provisions of the laws and ordinances of the City of Garden Grove and State of California will be complied with whether specified herein or not.

Signature of Permittee — Date — BUS. LIC. NO.

Address

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR — ADDRESS

PLOT PLAN

Department of Building

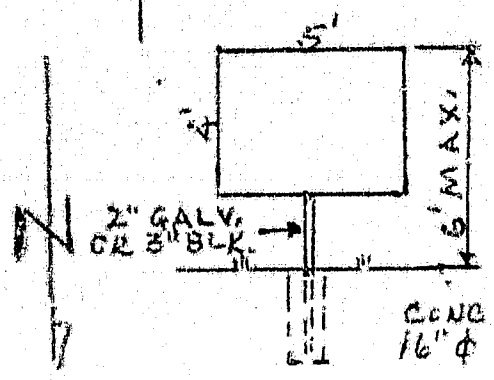
CITY OF GARDEN GROVE

Job Address	Permit Number
9822 RUSSELL	14355-A

Lot | Tract | Blk.

S-2997

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE



CHURCH BLDG

CHURCH BLDG

NO PROJECTION

RUSSELL ST

I certify the information hereon is complete and correct.

Routing: 1 Building Inspector 2 Office File 3 Owner

Church of Christ

By C.E. Hackney Date 2-16-66

ELECTRICAL PERMIT

DEPARTMENT OF BUILDING AND SAFETY

GARDEN GROVE, CALIFORNIA PHONE: 537-4200

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN, PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE. NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

JOB ADDRESS: 9822 RUSSELL

ELECTRIC PERMIT NO.: 014356 A

OWNER: CHURCH OF CHRIST

PHONE:

OWNER'S ADDRESS: SAME

CITY:

NEW BUILDING OR ADDITION AREA: POLE SIGN

EXISTING BUILDING REMODEL AREA:

OCCUPANCY GROUP:

USE OF BUILDING AND OR NUMBER OF UNITS:

ELECTRICAL CONTRACTOR: OWNER

PHONE:

ADDRESS:

CITY:

STATE LICENSE NO.:

VALIDATION: FEB 16 66 11 020 M ******4.00

I HAVE CAREFULLY READ THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF STATE AND LOCAL LAWS COVERING THIS TYPE OF CONSTRUCTION WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. NO PERSON SHALL BE EMPLOYED IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA.

SIGNATURE OF PERMITTEE: X Church of Christ

DATE: N.E. Frankhauser Ch Trustee

LOT NO. TRACT NO.

IF NOT LISTED BELOW SEE CODE	NUMBER	EACH	FEE
Residential (I & H) sq. ft		.01	
Garage, Resid. (J) sq. ft		.005	
Service, Single Phase		$1.00	
Service, Three Phase		1.00	
Meters, Single Phase		1.00	
Meters, Three Phase		1.00	
Pole, Power, Light, etc.		2.00	
Sub-Panels 1 Φ		1.00	
Sub-Panels 3 Φ		1.00	
Outlets 1st 20		.20	
Outlets Over 20		.10	
Fixtures 1st 20		.20	
Fixtures Over 20		.10	
Fixtures, High Voltage Type		1.00	
Radiant Heat		1.00	
Washer		1.00	
Dryer		1.00	
Hot Water Heaters		1.00	
Dishwasher		1.00	
Domestic Range or Oven		1.00	
Motors Not Over 1 HP		1.00	
Motors Over 1 Not Over 3 HP		1.50	
Time Clock		1.00	
Sign 2 Transformer Ballast	1	2.00	2.
Each Additional Transformer Ballast		1.00	
Sign Hookup		1.00	
ISSUANCE OF PERMIT			
TOTAL FEE			4.00

BRANCH CIRCUIT PANEL: CIRCUITRY

FIR NO	BRKR SIZE	WIRE SIZE	NOMENCLATURE	NO OF OUTLET	WATTS L1	WATTS L2	WATTS L3
1							
2							
3							
4							
5							
6							

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Underground		
Conduit		
Wiring		
Ceiling Heat Cable		
Fixtures		
Service		
Final	[illegible]	[illegible]
Utility Notified		

[illegible] WIRE RIG CONDUIT

[illegible] WIRE 4 WIRE

[illegible] WIRE RIG CONDUIT

[illegible] ECM | DATE 2-16-66 | [illegible] PERMIT NO. 14355 | [illegible] PERMIT NO. 2997 | VENT HEAT AIR COND PERMIT NO.

EL-101-65

The North 256 feet of the East 378 feet of that part of the South half of the Southeast quarter of the Northeast quarter of Section 6, Township 5 South, Range 10 West, in Rancho Las Bolsas, as said Northeast quarter of Section 6 is shown on a map of Tract 1539, recorded in book 45, pages 29 to 31 inclusive, Miscellaneous Maps, records of said County, lying West of the East 10 acres of said South half;

Except therefrom that portion lying within the land described in deed to George M. Thomas and Naomi Ruth Thomas, husband and wife, as joint tenants, recorded January 6, 1953, in book 2432, page 164, Official Records.

NOTE: Said land is described on the County Tax Assessment Roll for the fiscal year 1964-65 as A. P. No. 98-081-19; CA 18-03[illegible].

CITY OF GARDEN GROVE

MEMO-GRAM

TO: MR. LAPHAM, MR. PEIRCE, MR. HANDY & MR. MARTIN

DATE 9-25-63 196__

SUBJECT:

REFERENCE:

- ☐ FOR YOUR APPROVAL/SIGNATURE
- ☐ AS YOU REQUESTED
- ☐ PLEASE RETURN/HANDLE
- ☐ PLEASE ACKNOWLEDGE

The attached request was considered by City Council 9-24-63 and deferred one week for review and recommendation.

~~Please review and forward any reports you may have on the matter to Mr. Lapham so that this may be listed for further consideration by City Council 10-1-63.~~

See attached letter from Stewart

FROM Gwen

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
DAVID W. WEAD, MIN. OF ED.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 • JEFFERSON 7-4190

RECEIVED
CITY OF GARDEN GROVE
SEP 19 3 25 PM '62

September 20, 1962

The City Council
c/o George B. Honold, Mayor
11391 Acacia Street
Garden Grove, California

Dear Sirs:

I am writing with regard to the completion of our building program and asking that the council give consideration to a continuance of one item of this program.

We are asking a delay of one year for the construction of a wall approximately 175 feet in length on the south side of our property and the completion of our parking.

We have completed and have passed inspection on all other items concerning this building program. Your favorable consideration of this item will be deeply appreciated.

Very Sincerely,

Richard L. Miller

Richard L. Miller, minister

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH OF GARDEN GROVE)

RICHARD L. MILLER, MINISTER
DAVID W. WEAD, ASST. MIN.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 • JEFFERSON 7-4190

SEP 23 8 51 AM '63

September 21, 1963

City Council
Garden Grove, California
c/o Owen Wiesner, City Clerk

Dear Gentlemen and Mrs. Barr:

Being aware of the fact that the time is drawing near for our compliance to the requirement of the construction of a block wall along approximately one-half of the southerly boundary of our church parking lot, we respectfully request of the council an extension for a period of one year.

The financial strain necessitated upon the congregation by the construction of this wall would be extremely difficult to bear at this time. We would appreciate very much your favorable consideration of this request.

Thanking you very much. I remain,

Sincerely yours,

Richard L. Miller

Richard L. Miller
Minister

RLMsm

GARDEN GROVE CHURCH of CHRIST
(CHRISTIAN CHURCH)

RICHARD L. MILLER, MINISTER
DON GALLUP, MIN. OF ED.

9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA • P. O. BOX 185 • JEFFERSON 7-4190

Address: 9822 Russell St. Garden Grove, California

Legal description of Land:

The North 256 feet of the east 378 feet of that part of the south half of the south east quarter of the northeast quarter of section 6, township 5 south, range 10 west in the Rancho Las Bolsas, county of Orange, state of California, as said northeast quarter of section 6 is shown on a map of tract no. 1539 recorded in Book 45, pages 29-31 inclusive of miscellaneous maps, records of said county, lying west of the east 10 acres of said south half.

Expect therefrom that portion thereof lying within the land described in deed to: George M. Thomas and Hanni Ruth Thomas, Husband and Wife as Joint Tenants, Recorded January 6, 1953 in Book 2432, Page 164, Official Records.

CITY OF GARDEN GROVE

TO: Cline Martin & Harry Pierce DATE 10-8-63 196

SUBJECT:

REFERENCE:

- ☐ FOR YOUR APPROVAL/SIGNATURE
- ☐ AS YOU REQUESTED
- ☐ PLEASE RETURN/HANDLE
- ☐ PLEASE ACKNOWLEDGE

MEMO-GRAM

Would you please review the attached and submit any comments that you may have on the request to Mr. Lapham by Friday morning, 10-11-63...as this matter will be placed on the City Council Agenda of 10-15-63.

Thanks -- Gwen

FROM

GENERAL TESTING & INSPECTION AGENCY, INC.

LUMBER INSPECTION · FIELDWORK · CONSULTATION · LABORATORY

2019 N. KILPATRICK · PORTLAND 17, OREGON
P. O. BOX 5622 · BUtler 5-3631

REPORT AND CERTIFICATE Page 1 of 1
of the Continuous Inspection of the
Glued Laminated Structural Members

Date Dec. 28, 1961
No. 6-5420-TS

FOR: CHURCH OF CHRIST, Garden Grove, California
A. TURNER, Arch/Engr.
A. L. MAHONEY

AT: TIMBER STRUCTURES, INC.
P.O. Box 3782, Portland, Oregon

Their No. 611787

MATERIAL TALLY

2 A-1 7" x 15" & Var. - 32'10-1/4" Elev/20' 0" span of 20 & var. lams 9' 6" Radius

2 A-2 7" x 15" & Var. - 33' 2-1/2" Elev/20' 0" span of 20 & var. lams 9' 6" Radius

6 A-3 7" x 15" & Var.- 33' 6-3/8" Elev/20' 0" span of 20 & var. lams 3/4" 9' 6" Radius

1 C-1 11" taper to 4" square - 36' 0" of 7 lams 1-5/8" No Camber

SPECIFICATIONS: Finish: For AITC ARCHITECTURAL Appearance Data:

LUMBER - ALL DOUGLAS FIR GRADED IN ACCORDANCE WITH W. C. L. A. RULES 15 & W. C. L. A. & U. S. C. SPECS FOR GLULAM MBRS.

Spec. Combo #5 All lams Select Structural. Slope of grain top & bottom 10% 1:16 except C-1 All lams full length

Moisture 7-16%-5% Max VarScarfs 1:10 well scatter in tension area
Glue C-1 Exterior, Mil-A-397-8,
Special Bal. Casein, MMM-A-125

All lams Sel Str grain slope top & bottom 10% 1:16 Except C-1 all lams full length scarf 1:10 well scattered Moisture 7-12% RM 2730 L Batch 285-1 Monsanto 2914 Lot 2451

MARK PCS.	LUMBER GRADE M C	TEMPERATURE DB - RH - LBR GLUE	GLUE WT.	ASSEMBLY ST-PULIN CLAMP	OPEN-CLOSED		CURE	CLAMP PRESS.	REMARKS
(4) A-3	5 7-12%	53° 52% 64° 70°	85#	8:00 8:40 9:00	40	60	12 hrs	115#	12-21
(2) A-3	✓	✓	✓	9:25 10:05 10:35	35	60	✓	✓	✓
(1) C-1		60° 58% ✓	✓	1:00 1:30 2:00	25	55	110	✓	✓
(2) A-1 (2) A-2	5 7-12%	55 54% 63° 70°	85#	8:00 8:40 9:05	40	65	12 hrs	115#	12-22

THIS IS TO CERTIFY THAT THE WORKMANSHIP, LUMBER, AND GLUE IN THE GLUED LAMINATED STRUCTURAL MEMBERS AS COVERED BY THIS REPORT WERE CONTINUOUSLY INSPECTED BY THE UNDERSIGNED AND FOUND TO CONFORM TO THE PLAN, SPECIFICATIONS, AND CODES:

per Timber Structures, Inc. shop print 611787. Standard Specifications for Structural Glued Laminated Lumber 1960

UNIFORM BUILDING CODE

Alan D. Hadley Chief Insp
COUNTERSIGNED TITLE

RHM

CERTIFIED BY Floyd R. Thorp
INSPECTOR

THIS CERTIFICATE REFERS ONLY TO THE FORM & CONDITION OF THE MATERIAL AT TIME OF INSPECTION. WE ASSUME NO LIABILITY FOR LOSS OR DAMAGE DUE TO ERRORS OR FAULT OF INSPECTORS. NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED OFFICER OR SUPERVISOR

DATE 5-24-62 OUR SEWER NO. 8426-L

BUILDING PERMIT NO. 16931

OWNER'S NAME Church of Christ

JOB ADDRESS 9822 Russell

LOT NO.

DATE SEWER APPROVED 5-28-62

GARDEN GROVE SANITARY DISTRICT

By R. C. [illegible]

APPLICATION FOR A

BUILDING PERMIT

DEPARTMENT OF BUILDING, GARDEN GROVE, CALIF.

INFORMATION PROVIDED BY BLDG. DEPT.

EXTERIOR WALL MATERIAL L355 ROOF FRAMING MATERIAL

WOOD WOOD

PARTITIONING MATERIAL ROOF COVERING MATERIAL

WOOD COMPO

LOT WIDTH 226' LOT DEPTH 335' NO. OF EXISTING BLDGS ON LOT 3

USE ZONE R-1 FIRE ZONE 3 HOUSING PANEL 63 TYPE V

REQ'D SET BACKS FRONT — RIGHT SIDE 63'6" LEFT SIDE — REAR —

SITE PLAN NO — USE PERMIT OR VARIANCE NO — PARK SPACES REQ'D —

Zoning Approved By Tom Date 6-8-65

Remarks: PLANS

PUBLIC WORKS

Street Address OK By

	REQUIRED	PROVIDED
Record of Survey		
R/W Dedication		
Bonds		
Encroachment Permit		

Remarks

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location	9-1-65 / 9-2-65	
Reinforcing		
Roof Shtg.	11-17-65	
Rough Frame	12-20-65	
Lath or Drywall	2-21-66	
Plbg. Brown Ct		
Other		
Land Use		
Final	5-11-66	
Utility Release	5-11-66	

VALUATION NOTE: [illegible] BLDG. MAT. $ 1.67 [illegible]

E.C. 5-10-65 FEES

Plan Check	$82.75	Building Permit	$16.50
Bond	$	Expiration Date	

Permit Authorized By E.C. Date 8-23-65

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN. PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE. NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

Job Address 9822 RUSSEL ST. 377 S/B

Permit No. B11371 A

Lot No. Tract No. 1539

Blk No. PC-1258

CONTRACTOR A. C. MAHONEY

STATE LIC. NO. 178001

MAILING ADDRESS 1151 E. 17TH ST. ANAHEIM

TEL. NO. 537-7993

ARCH. JAMES R. WILDE

STATE LIC. NO. 1899

MAILING ADDRESS 12522 BROOKHURST

TEL. NO. 539-8973

OWNER CHURCH OF CHRIST

TEL. NO.

MAILING ADDRESS 9822 RUSSEL ST.

NEW ☐ ADD'N ☐ ALTER ☒ REPAIR ☐ DEMOLISH ☐

FLOOR AREA SQ. FT. [illegible] NO. OF STORIES 2 NO. OF DWELLING UNITS

PRESENT BLDG. USE PROPOSED BLDG. USE

AUG 23 [illegible] *** 165.50

Validation 1700 MAY 20 65 B 11 083 11 *** 82.75

DESCRIBE WORK TO BE DONE SOCIAL HALL PLANS INTERIOR ALTERATION TO EXISTING CLASSROOMS

OWNER BUILDER PERMIT RESTRICTIONS. An owner-builder must reside within the building for which this permit is issued, (accessory buildings excepted). Said building may not contain more than 3 dwelling units. Otherwise, this permit may be issued only to a contractor licensed in the State of California and a business license must be procured from the City of Garden Grove.

WORKMEN'S COMPENSATION INSURANCE REQUIREMENTS. A certificate or duplicate thereof of workmen's compensation insurance must be on file with the City of Garden Grove prior to the issuance of this permit unless: 1. This permit is for less than $100 valuation or, 2. The applicant qualifies as an owner builder and signs the statement below.

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California.

SIGNATURE A. C. Mahoney

CERTIFICATE ON FILE

APPLICANT'S CERTIFICATION. I have read and examined the above application and find the same to be true and correct. All provisions of the laws and ordinances of the City of Garden Grove and State of California will be complied with whether specified herein or not.

Signature of Permittee Date BUS. LIC. NO.

Address

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR ADDRESS

9-7-65
Footings on w end of Exist. Bldg + 2'4" footing inside
OK to Pour. A.D.

11-30-65
O.K.'d to wrap exterior of new building. A.D.

12-6-65
OK to cover arcade sheathing O.K. A.D.

PLOT PLAN

Department of Building

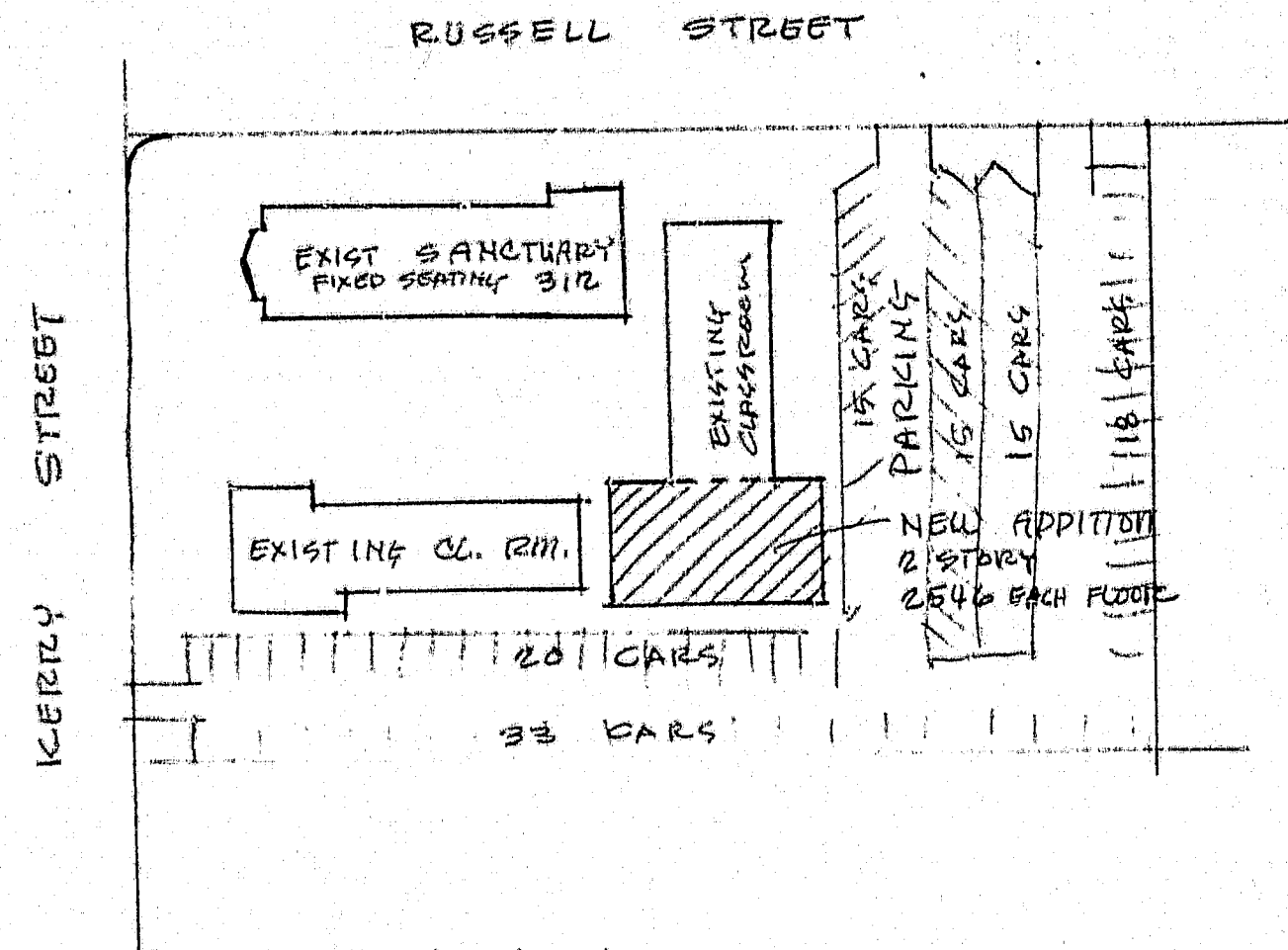
CITY OF GARDEN GROVE

Job Address	Permit Number
9822 RUSSELL STREET	1135

Lot | Tract: 1539 | Blk.

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE

NORTH



I certify the information hereon is complete and correct.

Routing: #1 Building Inspector 2 Office File #3 Owner

By _____ Date _____

ELECTRICAL PERMIT

[illegible]RTMENT OF BUILDING AND SAFETY

[illegible]ROVE, CALIFORNIA PHONE: 537-4200

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN, PRESS FIRMLY, BE SURE ALL COPIES ARE LEGIBLE, NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

JOB ADDRESS: 9822 Russell St

ELECTRIC PERMIT NO.: 011522 A

OWNER: Church of Christ

PHONE:

OWNER'S ADDRESS: Same

CITY:

NEW BUILDING OR ADDITION — AREA	EXISTING BUILDING REMODEL AREA	OCCUPANCY GROUP	USE OF BUILDING AND OR NUMBER OF UNITS
5160 SQ. FT.	SQ. FT.	Church	Church Rms

ELECTRICAL CONTRACTOR: F & M Electric Co

PHONE: 535-6210

ADDRESS: 702 So Anaheim Blvd

CITY:

STATE LICENSE NO.: 415775

VALIDATION: AUG 31-65 11 003 M ****43.00

LOT NO. TRACT NO.

IF NOT LISTED BELOW SEE CODE	NUMBER	EACH	FEE
Residential (I & H) sq. ft.		.01	
Garage, Resid. (J) sq. ft.		.005	
Service, Single Phase	1	$1.00	1.00
Service, Three Phase		1.00	
Meters, Single Phase	1	1.00	1.00
Meters, Three Phase		1.00	
Pole, Power, Light, etc.		2.00	
Sub-Panels 1 ϕ	1	1.00	1.00
Sub-Panels 3 ϕ		1.00	
Outlets 1st 20	20	.20	4.00
Outlets Over 20	172	.10	17.20
Fixtures 1st 20	20	.20	4.00
Fixtures Over 20	72	.10	7.20
Fixtures, High Voltage Type		1.00	
Radiant Heat		1.00	
Washer		1.00	
Dryer		1.00	
Hot Water Heaters		1.00	
Dishwasher	1	1.00	1.00
Domestic Range or Oven		1.00	
Motors Not Over 1 HP Disp	2	1.00	2.00
Motors Over 1 Not Over 3 HP		1.50	
[illegible]	1	1.00	1.00
U.G. Pull Box	1	1.00	1.00
Time Clock		1.00	
Sign Tran. or 1 Ballast		1.00	
Each Additional Tran. or Ballast		1.00	
Sign Hookup		1.00	
ISSUANCE OF PERMIT			2.00
TOTAL FEE			43.00

I HAVE CAREFULLY READ THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF STATE AND LOCAL LAWS COVERING THIS TYPE OF CONSTRUCTION WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. NO PERSON SHALL BE EMPLOYED IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA.

SIGNATURE OF PERMITTEE: X Austin Lodge

DATE: Aug-31-65

BRANCH CIRCUIT PANEL: CIRCUITRY

CIR. NO.	BRKR. SIZE	WIRE SIZE	NOMENCLATURE	NO. OF OUTLET	WATTS L1	WATTS L2	WATTS L3
1							
2							
3							
4							
5							
6							

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Underground	[illegible]	
Conduit 11-15-65	12-3-65	[illegible]
Wiring	12-3-65	[illegible]
Ceiling Heat Cable		
Fixtures		
Service	3-E-66	[illegible]
Final	3-E-66	[illegible]
Utility Notified	5-17-66	CR

SINGLE PHASE SERVICE SIZE: AMPS WIRE RIG CONDUIT

THREE PHASE SERVICE SIZE: 3 WIRE 4 WIRE AMPS WIRE RIG CONDUIT

PERMIT AUTHORIZED BY: [illegible]

DATE: [illegible] 011551 A

DIRECTING PERMIT NO.

SIGN PERMIT NO.

VENT, HEAT, AIR COND PERMIT NO.

FL-101

RUSSELL	009822			4
STREET NAME	ADDRESS	APT. NO.		CARD NO.

Identify mains & Battery switches
also sub Panel Breakers

3-2-66

PLUMBING PERMIT

Department of Building
[illegible]

CITY OF
GARDEN GROVE

1

For Applicant to Fill In (Use ink)

Job Address 9822 Russell

Permit No. 011503

Lot No. Tract No. Blk. No.

Owner Church of Christ

Owner's Address 9822 Russell

Plumbing Contractor H. L. Burxis

Contractor's Address 549 So. Anaheim Blvd.

Phone 535 4840 City Lic. No.

Use of Bldg. Church

New Bldg. ☑ Old Bldg. ☐

Validation AUG 30-65 11 032 M****24.50

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee H. L. Burxis Date 8-30-65

Address

PERMIT FEES

NO.	TYPE OF FIXTURE OR ITEM	EACH	$ FEE
3	Water Closet (Toilet)	$1.50	4 50
	Bath Tub	1.50	
	Shower	1.50	
2	Lavatory (Wash Basin)	1.50	3 00
2	Kitchen Sink	1.50	3 00
2	Garbage Disposal	1.50	3 00
1	Laundry Tub or Tray	1.50	
1	Water Heater	1.50	1 50
1	Slop Sink	1.50	1 50
	Floor Sink	1.50	
	Floor Drain	1.50	
	Dish Washer	1.50	
2	Drinking Fountain	1.50	3 00
1	Urinal	1.50	1 50
1	Gas System — Outlets	1.50	1 50
	House Sewer	1.50	
	Lawn Sprinklers (Single Dwelling Only)	2.00	
	Swimming Pool Piping	1.50	
	Sand Traps	1.50	
	Automatic Washing Mach.	1.50	
	Water Softeners	1.50	
	Backwash — Trap	1.50	
	Water Lateral	1.50	
	Backflow Protective Devices	2.00	

Issuance of Permit 2 00

TOTAL FEE $ 24 50

Permit Authorized By [illegible] Date 5 3[illegible]

APPROVALS	DATE	INSPECTOR
SOIL PIPING		
GROUND PLUMBING		
ROUGH PLUMBING	12-9-65	R 99
GAS PIPING		
GAS VENT		
SEPTIC TANK or Cesspool		
SEWER		
GAS TEST		
MAIN DRAIN AND VACUUM LINES		
WATER HEATER		
BACKWASH		
WATER LATERAL		
FINAL		
UTILITY CO. NOTIFIED	5 17 66	CR

ROUTING: #1 Plumbing Inspector #2 Statistics #3 Owner #4 Office File Bldg. Permit # 1135[illegible]

HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING PERMIT

1

DEPARTMENT OF BUILDING
HARRY R. PEIRCE - DIRECTOR
537-4200

CITY OF
GARDEN GROVE

FOR APPLICANT TO FILL IN (USE INK)

JOB ADDRESS 9822 Russell St. | PERMIT NO. 012685 A

LOT NO. | TRACT NO.

OWNER Church of Christ

OWNER'S ADDRESS

CONTRACTOR Kinney Heating

CONTRACTOR'S ADDRESS 1441 S. Gramercy CITY Anaheim

PHONE 774-9120 CITY LIC. NO. 963

USE OF BUILDING Church

NEW BUILDING ☐ OLD BUILDING ☐

VALIDATION OCT 29-65 11 229 M****19.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing. I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

SIGNATURE OF PERMITTEE [signature] DATE

ADDRESS

PERMIT FEES

NUMBER	TYPE OF FIXTURE OR ITEM	EACH	FEE
	FURNACE — RESIDENTIAL	$1.00	
	WARM AIR OUTLET	.25	
	FURNACE VENTS	1.00	
	GAS PIPING ____ OUTLETS	1.00	
3	COMMERCIAL HEATING	2.00	6 00
12	COMMERCIAL WARM AIR OUTLETS	.50	6 00
3	COMMERCIAL FURNACE VENTS	2.00	6 00
	EXHAUST OUTLETS	1.00	
	REPAIR, ALTERATION OR ADDITION TO HEATING SYSTEM RES. OR COMM.	1.00	
	VENTILATION SYSTEM	3.00	
	RESTAURANT KITCHEN HOOD	3.00	
	CONDENSING UNIT 20 H.P. OR LESS	2.00	
	CONDENSING UNIT TO 50 H.P.	5.00	
	CONDENSING UNIT OVER 50 H.P.	10.00	
	REPAIR OR ALTERATION TO REFRIGERATION SYSTEM	3.00	
	EVAPORATIVE COOLERS	1.00	
	ISSUANCE OF PERMIT		1 00
	TOTAL FEE		$ 19 00

PERMIT AUTHORIZED BY [signature] DATE 10-29-65

ROUTING

#1 INSPECTOR #2 [illegible] #3 OWNER

BUILDING PERMIT NO.

APPROVALS	DATE	INSPECTOR
FURNACE		
REGISTER OUTLETS		
FURNACE VENTS		
GAS PIPING		
DUCTS 12"		[illegible]
EXHAUST OUTLETS		
RESTAURANT KITCHEN HOOD		
VENTILATION SYSTEM		
CONDENSING UNIT 20 H.P. OR LESS		
CONDENSING UNIT 50 H.P.		
CONDENSING UNIT OVER 50 H.P.		
FINAL		
UTILITY CO. NOTIFIED		

HEATING, VENTILATING, REFRIGERATION & AIR CONDITIONING PERMIT

DEPARTMENT OF BUILDING
HARRY R. PEIRCE - DIRECTOR
237-4200

CITY OF GARDEN GROVE

FOR APPLICANT TO FILL IN (USE INK) 013482 A

JOB ADDRESS 9822 Russell

PERMIT NO.

LOT NO. TRACT NO.

OWNER Church of Christ

OWNER'S ADDRESS 9822 Russell St.

CONTRACTOR Kinney Heating

CONTRACTOR'S ADDRESS 1441 S. Anaheim, Anaheim

PHONE 774-8120 CITY LIC. NO. 963

USE OF BUILDING

NEW BUILDING [1] OLD BUILDING [ ]

VALIDATION DEC 21-65 11 033 M*****4.00

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating plumbing. I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

SIGNATURE OF PERMITTEE Bill Henning DATE

ADDRESS

PERMIT FEES

NUMBER	TYPE OF FIXTURE OR ITEM	EACH	FEE
	FURNACE — RESIDENTIAL	$1.00	
	WARM AIR OUTLET	.25	
	FURNACE VENTS	1.00	
	GAS PIPING _____ OUTLETS	1.00	
	COMMERCIAL HEATING	2.00	
	COMMERCIAL WARM AIR OUTLETS	.50	
	COMMERCIAL FURNACE VENTS	2.00	
	EXHAUST OUTLETS	1.00	
	REPAIR, ALTERATION OR ADDITION TO HEATING SYSTEM RES. OR COMM.	1.00	
	VENTILATION SYSTEM	3.00	
1	RESTAURANT KITCHEN HOOD	3.00	3 00
	CONDENSING UNIT 20 H.P. OR LESS	2.00	
	CONDENSING UNIT TO 50 H.P.	5.00	
	CONDENSING UNIT OVER 50 H.P.	10.00	
	REPAIR OR ALTERATION TO REFRIGERATION SYSTEM	3.00	
	EVAPORATIVE COOLERS	1.00	
ISSUANCE OF PERMIT			1 00
TOTAL FEE		$	4 00

PERMIT AUTHORIZED BY [signature] DATE 12-21-65

ROUTING:

#1 INSPECTOR #2 OFFICE FILE #3 OWNER

BUILDING PERMIT NO.

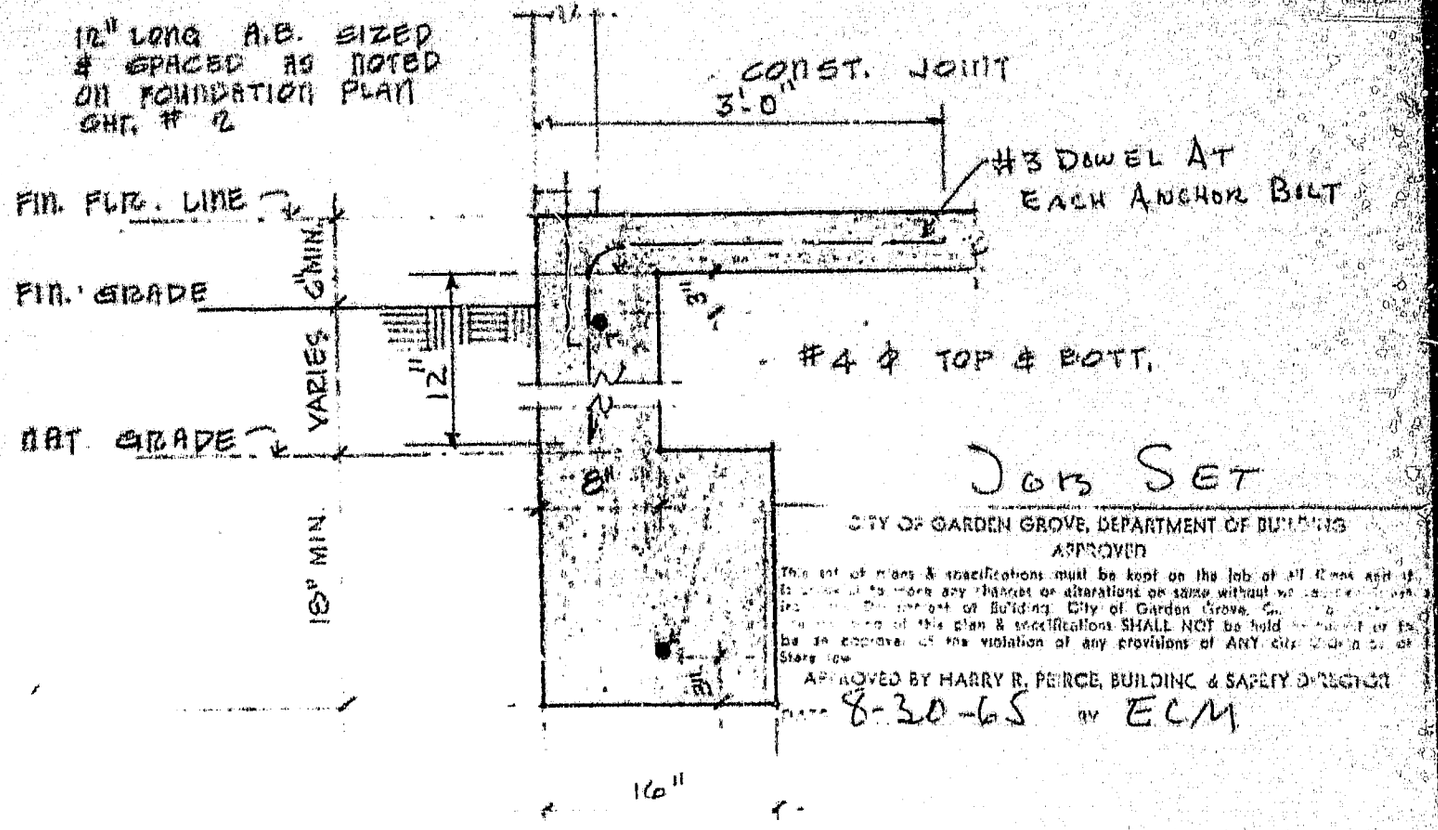
APPROVALS	DATE	INSPECTOR
FURNACE		
REGISTER OUTLETS		
FURNACE VENTS		
GAS PIPING		
DUCTS		
EXHAUST OUTLETS		
RESTAURANT KITCHEN HOOD		
VENTILATION SYSTEM		
CONDENSING UNIT 20 H.P. OR LESS		
CONDENSING UNIT 50 H.P.		
CONDENSING UNIT OVER 50 H.P.		
FINAL		
UTILITY CO. NOTIFIED		

ADDENDA DRAWING #1 — JOB [illegible]

CHURCH OF CHRIST - GARDEN GROVE, CALIF.

JAMES R. [illegible] architect & associates
[illegible]

8/26/65



JOB SET

CITY OF GARDEN GROVE, DEPARTMENT OF BUILDING
APPROVED
This set of plans & specifications must be kept on the job at all times and it is [illegible] to make any changes or alterations on same without [illegible] Department of Building, City of Garden Grove, [illegible] of this plan & specifications SHALL NOT be held [illegible] to be an approval of the violation of any provisions of ANY city [illegible] or Stare law.
APPROVED BY HARRY R. PEIRCE, BUILDING & SAFETY DIRECTOR
DATE 8-30-65 BY ECM

TYPICAL 2 STORY EXT. WALL FOOTING
SCALE: 1" = 1'-0"

NOTE: CONSTRUCTION JOINT PERMITTED @ BOTTOM OF FLR SLAB PROVIDED A.B. ARE EXTENDED TO 12" LONG W/ MIN 5" EMBEDMENT INTO FOOTING STEM WALL.
WHERE VERTICAL CONSTRUCTION JOINTS ARE PROVIDED @ SPREAD FOOTINGS @ INTERSECTION OF EXISTING BUILDING PROVIDE A MIN. 18" LAP OF T.&B. REINF. STL IN STEM FOOTING & REINF. STEEL IN SPREAD FOOTING.

BUILDING PERMIT

Department of Building **CITY OF GARDEN GROVE**

HARRY R. PEIRCE, Director

ZONING AND BUILDING

Use Zone	Main Use	Acc. Use	Var. No.

St. Set Back - PL PL

Side Yard Projection

Side Yard Projection

Rear Yard Stories Parking Reqd.

Zoning Approved By Date

Group Type Plan Ck.

Remarks:

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location		
Reinforcing		
Roof Shtg.		
Rough Frame		
Lath or Drywall		
Plas. Brown Ct.		
Other		
Land Use		
Final	1-24-64	[illegible]
Utility Release		

FEES

Plan Check $ Building Permit $ 500

Bond $ Expiration Date

Permit Authorized By CK Date 1/21/64

For Applicant to Fill in (USE INK)

Job Address 9822 Russell Permit No. 25599

Lot No. Tract No. Blk No.

Please Attach Metes & Bounds (2 Copies)

Owner ~~R. L. Miller~~ CHURCH OF CHRIST

Owner's Address 12771 Village Rd. G. G.

Description of Work New ☑ Add'n ☐ Remodel ☐ Relocate ☐

Use of Building Block Wall.

Area of Building Valuation $ 570.

Validation JAN 21-64 11 112 M*****5.00

Arch. or Engr. Address

Contractor ~~Cast~~ Coast Masonery Phone LI 41517

Address 8062 Garden Grove Blvd - G. G.

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all ordinances and State laws regulating building construction.

I hereby certify that I am properly registered with and/or licensed as required by the City of Garden Grove and/or State of California, or that I am the legal owner of the above described property, and I certify that in the performance of the work for which this permit is issued I shall not employ any person in violation of the workmen's compensation laws of the State of California.

Signature of Permittee [signature] Date 1-22-64

Address Lic. No.

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR ADDRESS

PUBLIC WORKS

Street Address O. K. By JCJ

	REQUIRED	PROVIDED
Record of Survey	Non Required	
R/W Dedication		
Bonds		
Encroachment Permit		

Remarks JCJ

Routing: #1 Bldg. Inspector #2 Office File #3 Statistics #4 Owner

1

PLOT PLAN

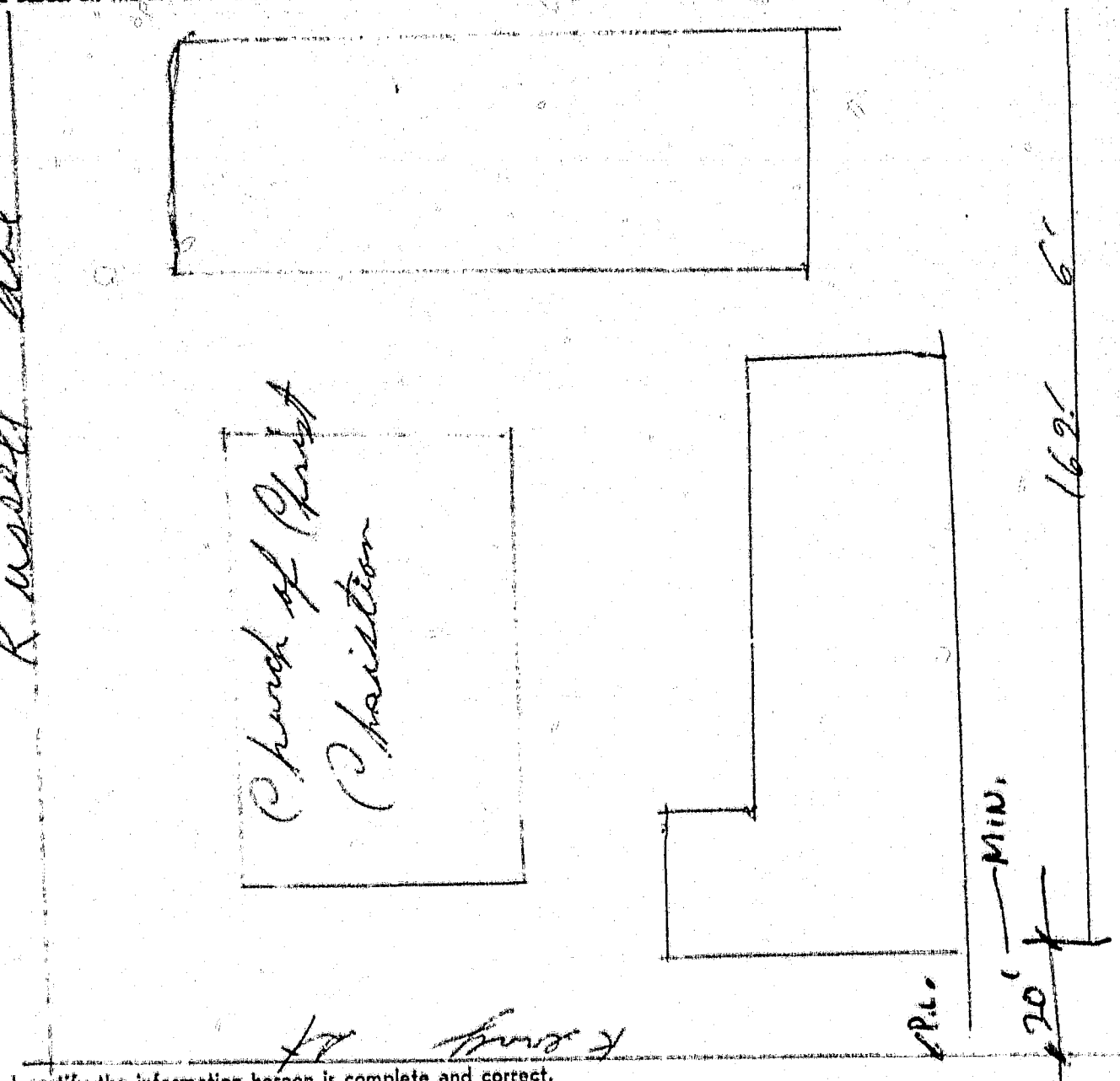
Department of Building

CITY OF GARDEN GROVE

Job Address	Permit Number
9822 Russell	25599

Lot	Tract	Blk.

DIMENSION PLOT PLAN COMPLETELY SHOWING ALL BLDGS. ON THE LOT AND THEIR USE



I certify the information hereon is complete and correct.
Routing: #1 Building Inspector #2 Office File #3 Owner

By _____ Date _____

DATE 3-10-66 OUR SEWER NO. 326

BUILDING PERMIT NO. 11351

OWNER'S NAME L.D. Church of Christ

JOB ADDRESS 9822 Russell St.

LOT NO. Addition

DATE SEWER APPROVED 3-10-66

GARDEN GROVE SANITARY DISTRICT

By R. C. Hiatt

Garden Grove Church of Christ
(CHRISTIAN CHURCH)
9822 RUSSELL STREET • GARDEN GROVE, CALIFORNIA 92642 • P. O. BOX 185 • TELEPHONE 537-4190

RICHARD L. MILLER, MINISTER
GARY K. DAVIS, YOUTH MINISTER
FRANCES S. SCOTT, SECRETARY

9822 Russell St

December 13, 1965

Mr. Harry Peirce, Building Department
City of Garden Grove,
11391 Acacia Street,
Garden Grove, California

Dear Mr. Peirce:

I am writing to clarify to your department the use we plan to make of the kitchen facility which is now under construction on our church property. In our initial planning we had considered the use of heavier equipment than we are now proposing. The reason for the change is simply that it is against our church policy to prepare dinners or banquets for the purpose of raising money, either for the church or any organization of the church. Furthermore, we do not loan or lease our facilities to any other group or organization. It was therefore concluded that a commercial type of kitchen installation would be an extreme waste of funds.

We plan to use this new facility for "fellowship" type dinners, for Sunday School class groups, Women's Council, or Men's Meetings. The usual arrangement for groups such as these is a "pot-luck dinner." In this case the main food dishes are prepared in the homes and brought to the church. Actually, our need is for counter top burners for heating vegetables, and ovens for the purpose of keeping casserole dishes warm. It is for this reason we are planning to go to a simpler installation.

Because of the small amount of use our kitchen will be getting, compared to what it was originally designed for, there will be no dishwasher installation and there will be no freezer unit. The stoves have been changed from counter top burners and wall ovens to simple domestic free-standing range and oven units. We feel therefore that a domestic hood and fan over the units will be sufficient. We sincerely appreciate your consideration of this matter.

Should you wish further clarification of this matter I will be most happy to write again or converse with you.

Very sincerely,

Richard L. Miller, Minister

May 28, 1965

Church of Christ
9822 Russell
Garden Grove, California

Gentlemen:

Before this department can complete a plan check of your proposed new addition, we will require one additional copy of the plot plan.

Very truly yours,

Stewart O. Miller
Zoning Technician

cr

CITY OF GARDEN GROVE
Public Works & Development

BUILDING PERMIT

Inspection Requests 638-6771

General Information 638-6661

For Applicant to Fill in

P.C. #

OCC. PANCY	TYPE	OCC. LOAD		FIRE SPRINK.	
		FRONT	LEFT	RIGHT	REAR
USE ZONE	Eav Proj.				
FIRE ZONE	Setbacks		N/C		

PLANNING ACTION — FILED PLANS — DATE

LAND USE APPROVED BY

REMARKS

G.G. SANT. DIS. FEE REQ'D.	O.C. SANT. DIS. FEE REQ'D.	DATE	INITIAL

	REQ'D	PROVIDED
PARCEL MAP		
R/W DEDICATION		

FEES AND BONDS

	REV. CODE	AMOUNT
ST. BOND		
WATER BOND		
WATER ASSMT. FEE (ACRG.)		
WATER ASSMT. FEE (FT.)		
PARKWAY TREE FEE		
PARK & REC. FEE (DIST.)		
DRAIN ASSMT. FEE (DIST.)		
PLAN RETENTION FEE		
BLDG. PLAN CHECK	3520	3.74
BLDG. PERMIT FEE	3226	11.50
BALANCE	3517	6.00
VALUATION $ 190.00	TOTAL FEES	21.24

AUTHORIZED BY — DATE 12-3-80

INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
ROOF SHTG		
ROUGH FRAME	1/14/81	
INSULATION, ENERGY		
LATH OR DRYWALL	1/21/81	
PLAS. BROWN CT.		
SOUND INSULATION		
SMOKE DETECTOR		
PARKING		
LANDSCAPING		
LAND USE FINAL		
FINAL	10/14/81	
UTILITY RELEASE		

IDENTIFICATION CODE

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. NONE Expiration Date

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

Michael W. Jacobs — 12-3-80
PERMIT APPLICANT SIGNATURE — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. _____ and Classification _____ is in full force and effect.

(PRINT) CONTRACTOR — (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT — DATE

BUSINESS TAX CERTIFICATE NO. — EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:
Owner: Section 7044 ☒ Minor work under $100: Section 7048 ☐
Employee working for wages only: Section 7053 ☐
Other _____

(PRINT) PROPERTY OWNER — Mike Jacobs (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT — 12-3-80 DATE

ADDRESS: 9822 RUSSELL ST.

LOT NO. 98 BLK NO. 081 TRACT NO. 19 PERMIT NO. [redacted]

OWNER: GG. CHRISTIAN CHURCH — TEL. NO.

MAILING ADDRESS: 9822 RUSSELL — CITY: GG. — ZIP: 92644

☐ ARCH
☐ ENGR.

MAILING ADDRESS — CITY — ZIP

TEL. NO. — STATE LIC. NO. & TYPE

VALIDATION: OWNER BUILDER

CONTRACTOR: 9822 RUSSELL GG. 92644

MAILING ADDRESS — CITY — ZIP

TEL. NO. — STATE LIC. NO.

PRESENT BLDG. USE: CHURCH — PROPOSED BLDG. USE

DESCRIBE WORK TO BE DONE: 19 L.F. PARTITION WALLS FOR PANTRY

NEW ☐ ADD'N ☐ ALTER. ☐ REPAIR ☐ DEMOLISH ☐

10 FT. HIGH

FLOOR AREA (SQ. FT.) _____ NO. OF STORIES _____ NO. OF DWELLING UNITS _____

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

CITY OF GARDEN GROVE

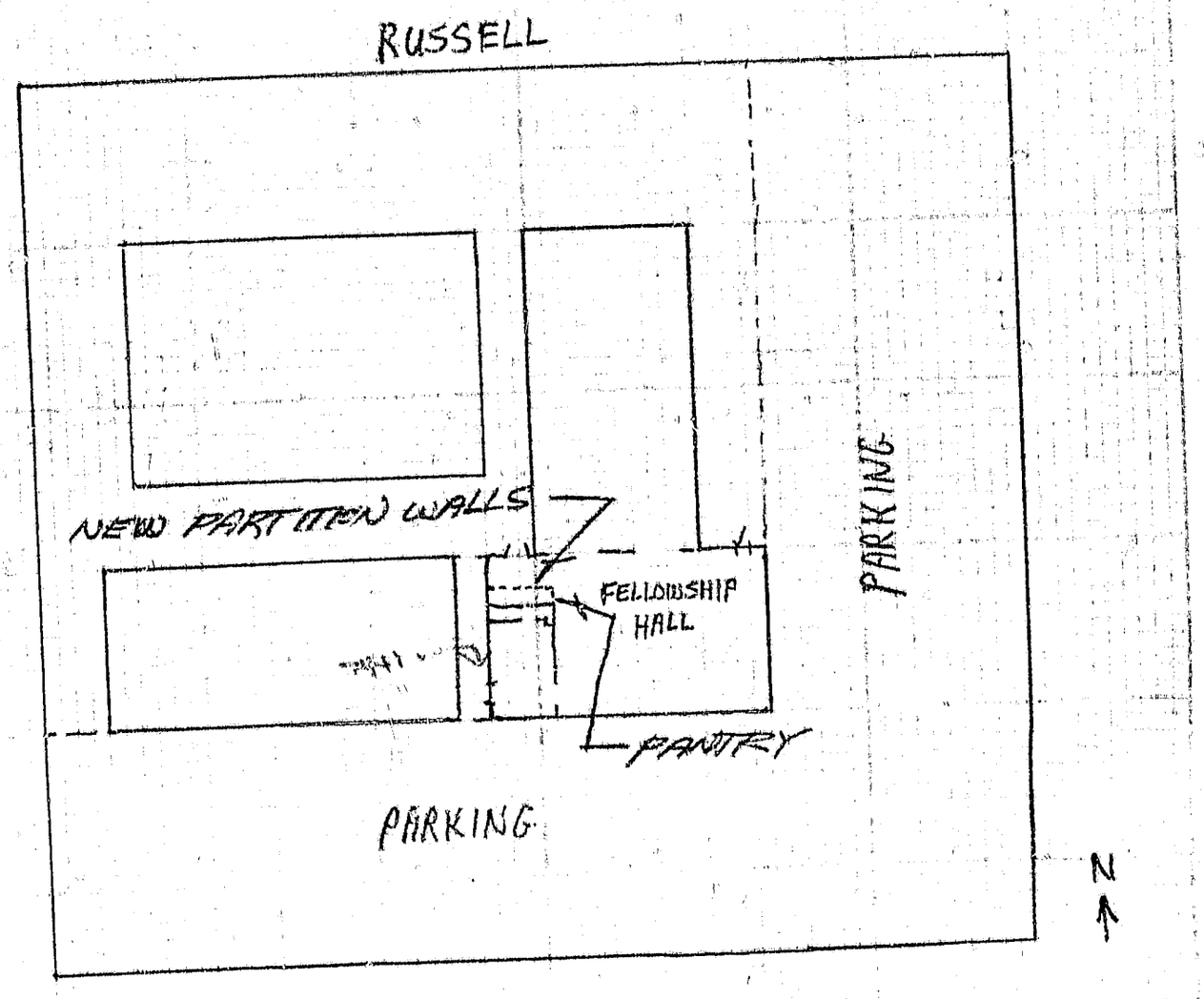
PLOT PLAN

PUBLIC WORKS & DEVELOPMENT

OWNER: GARDEN GROVE CHRISTIAN CHURCH	JOB ADDRESS: 9822 RUSSELL ST.			PERMIT NO.: 118102A
BANK OF CONSTRUCTION LENDER & BRANCH	ASSESSORS PARCEL NO.: 98-081-19	LOT	BLOCK	TRACT
	PLEASE CHECK ONE OR MORE: ☐ New ☒ Addition ☐ Alteration ☐ Repair ☐ Move ☐ Demolish			
ADDRESS / CITY	DATE: 12-3-80	JOB DESCRIPTION: PARTITION WALLS IN PANTRY		PERMIT VALUE: $190.00

SHOW NORTH ARROW, PROPERTY LINES AND ADJACENT STREETS.

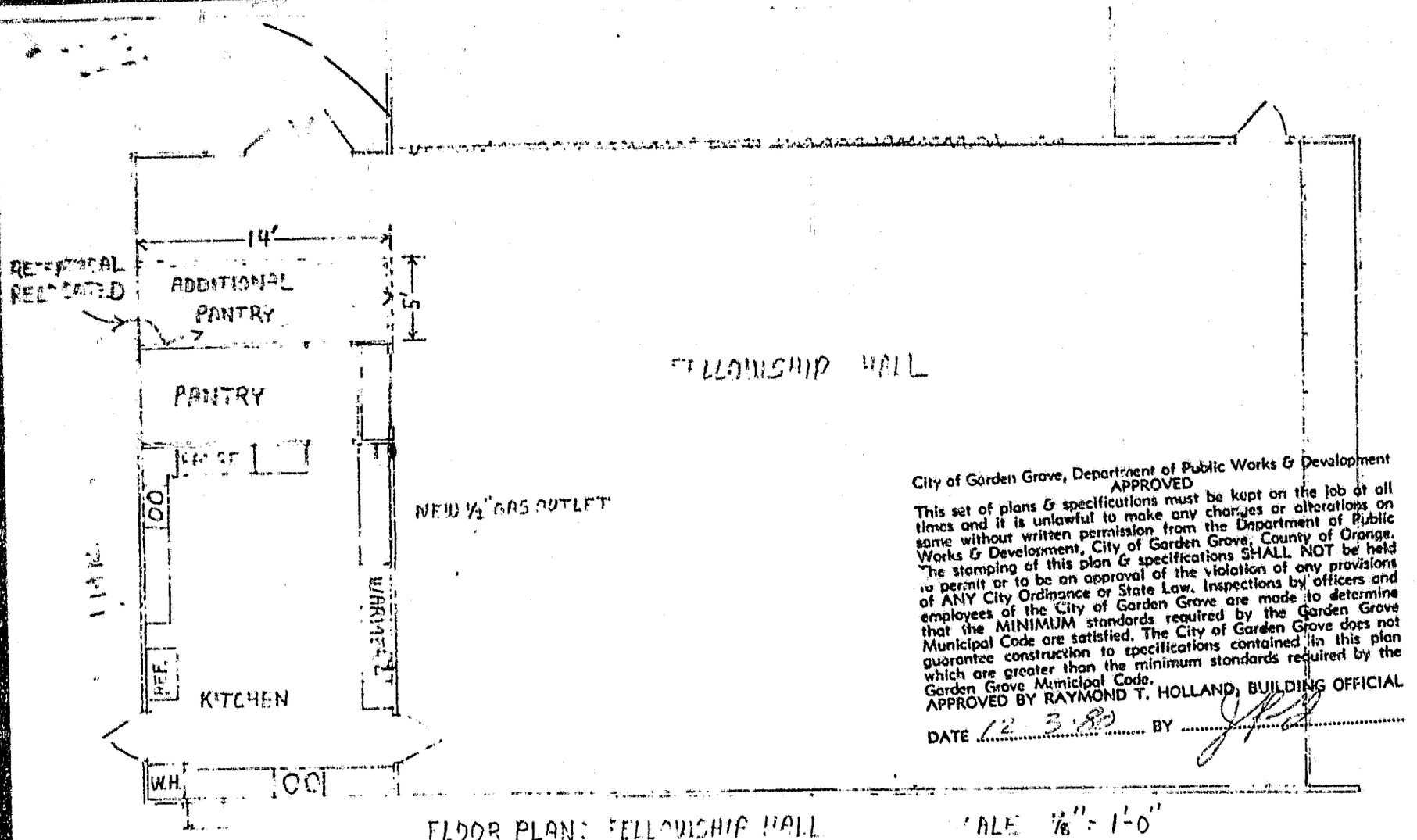
19 L.F.
10 FT. HIGH



#1 Building Insp./#2 Assessor/#3 Permittee/#4 File
I certify the information hereon is complete and correct. By _____

PLOT PLAN APPROVED BY _____

D 5-6812 - 3/78



City of Garden Grove, Department of Public Works & Development
APPROVED
This set of plans & specifications must be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the Department of Public Works & Development, City of Garden Grove, County of Orange. The stamping of this plan & specifications SHALL NOT be held to permit or to be an approval of the violation of any provisions of ANY City Ordinance or State Law. Inspections by officers and employees of the City of Garden Grove are made to determine that the MINIMUM standards required by the Garden Grove Municipal Code are satisfied. The City of Garden Grove does not guarantee construction to specifications contained in this plan which are greater than the minimum standards required by the Garden Grove Municipal Code.
APPROVED BY RAYMOND T. HOLLAND, BUILDING OFFICIAL
DATE 12 3 80 BY [signature]

FLOOR PLAN: FELLOWSHIP HALL SCALE ⅛" = 1'-0"

GARDEN GROVE CHRISTIAN CHURCH - 1822 RUSSELL ST GARDEN GROVE CA. 92644

INSTALL NEW GAS OUTLET FOR ADDITIONAL FOOD WARMER
EXTEND EXISTING PANTRY AND PROVIDE ACCESS DOOR
REMOVE TWO EXISTING RANGES AND INSTALL COMMERIAL RANGE
RELOCATE EXISTING RECEPTICAL

CITY OF GARDEN GROVE
Development Services Department

BUILDING PERMIT

Inspection Requests 741-5332 | General Information 741-5307

For Applicant to Fill in

PC #

OCCUPANCY	TYPE	OCC LOAD		FIRE SPRINK	
		FRONT	LEFT	RIGHT	REAR
USE ZONE	Esv. Proj.				
	Setbacks				

PLANNING ACTION | PLANS DATE

LAND USE APPROVED BY

REMARKS

G.G.SAN'T DIS. FEE REQ'D		O.C.SAN'T DIS. FEE REQ'D		DATE	INITIAL

	REQ'D	PROVIDED
PARCEL MAP		
R/W DEDICATION		

FEES AND BONDS

	DEV. CODE	AMOUNT	
ST. BOND			
WATER BOND			
WATER ASSMT FEE (ACRG)			
WATER ASSMT FEE (FT)			
PARKWAY TREE FEE			
PARK & REC. FEE (DIST.			
DRAIN ASSMT FEE (DIST.			
PLAN RETENTION FEE			
BLDG PLAN CHECK Re Roof		15	00
BLDG PERMIT FEE		63	50
ISSUANCE		10	00
VALUATION $ 3200.00	TOTAL FEES	88	50

AUTHORIZED BY: [signature] DATE: 10/31/89

1. INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
PRE INSPECTION	11/1/89	[signature]
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
MASONRY		
ROOF SHTG		
ROUGH FRAME		
INSULATION, ENERGY		
DRYWALL		
LATH		
PLAS. BROWN CT.		
LANDSCAPING		
PRE GUNITE		
PRE DECK		
PRE PLASTER		
PLANNING		
FINAL	11.6.89	[signature]

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. 195-2[illegible] Expiration Date 1/1/90

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

[signature] 10/31
PERMIT APPLICANT SIGNATURE DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. 356624 and classification C-39 is in full force and effect.

ROYAL ARMEY [signature] 10/31
(PRINT) CONTRACTOR SIGNATURE CONTRACTOR OR AUTHORIZED AGENT DATE

BUSINESS TAX CERTIFICATE NO. EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section: Owner: Section 7044 ☐ Minor work under $200 Section 7048 ☐ Employee working for wages only Section 7053 ☐

Other:

(PRINT) PROPERTY OWNER (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT DATE

ADDRESS: 9832 Russell

LOT NO. BLK NO. TRACT NO. | PERMIT NO: 167239A

OWNER: Christian Church | TEL NO.

MAILING ADDRESS: [illegible] CITY ZIP

☐ ARCH
☐ ENGR

MAILING ADDRESS CITY ZIP

TEL NO. | STATE LIC NO. & TYPE

VALIDATION

INSPCT 15.00
B-PER 63.50
ISS 10.00

CONTRACTOR: Royal Armey Roofing | 1#2397A10-31-89 CHECK # 1 <88.50>

MAILING ADDRESS: 10462 - E Trask Ave 90643
CITY ZIP

TEL NO. 636-1947 | STATE LIC NO. & TYPE 356624 C-39

PRESENT BLDG. USE: Church | PROPOSED BLDG. USE

DESCRIBE WORK TO BE DONE: Tear off Comp Shingles with Comp Shingles

NEW ☐ ADD'N ☐ ALTER ☐ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) 35 | NO. OF STORIES | NO. OF DWELLING UNITS

If work is not started within 180 days from date of issue or if abandoned for more than 180 days, this permit will be null and void.

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

RUSSELL		009822			5
STREET NAME		ADDRESS	APT. NO.		CARD NO.

BUILDING PERMIT

DEVELOPMENT SERVICES DEPT., GARDEN GROVE 638-0771

FIRE ZONE	OCCU-PANCY	TYPE	OCC. LOAD

		FRONT	LEFT	RIGHT	REAR
USE ZONE R-1					
PARK SPACES REQUIRED	SAVE PROJ.		No Change		
	SETBACKS				

PLANNING ACTION No Plans

Land Use Approved By [signature] Date 8-1-73

FEES AND BONDS

	AMOUNT	REQ'D	PROVIDED
PARCEL MAP			
R/W DEDICATION			
STREET BOND			
WATER BOND			
WATER ASSMT. FEE			
FIRE HYDRANT FEE		Ref.	
PARKWAY TREE FEE		Require	
PARK & REC. FEE(DIST.)			
DRAIN ASSMT. FEE(DIST.)			

Remarks:

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Foundation and Location		
Reinforcing		
Roof Shtg.		
Rough Frame		
Lath or Drywall		
Plas. Brown Ct.		
Parking		
Landscaping		
Land Use Cond.		
Final		
Utility Release		

VALUATION NOTE: INCLUDE LABOR, MAT. WIRING, PLUMB., HEAT., ETC. $ 2,060.00

FEES

Plan Check $

Building Permit $23.00

Permit Authorized By [signature] Date 8/1/73

1 ORIGINAL

INSTRUCTION: FILL IN AREA WITHIN HEAVY LINES USE TYPEWRITER OR BALL POINT PEN. PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE. NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED.

Job Address 9822 Russell St. | Permit No. 064001 A

Lot No. Tract No. Blk. No.

Owner Church of Christ | Tel. No.

Mailing Address 9822 Russell St. City Garden Grove, Zip No. Calif.

☐ Arch. ☐ Engr. | State Lic. No. Tel. No.

Mailing Address City Zip No.

Contractor Holmes Roofing Co. | Lic. No. 2066 Tel. No. 542-4719

Mailing Address 922 E. Fourth St., City Santa Ana, Zip No. 92701

PRESENT BLDG. USE | PROPOSED BLDG. USE

Validation AUG-1-73 11 106 M ****23.00

DESCRIBE WORK TO BE DONE Re-roof WO 20693

NEW [ ] ADD'N [ ] ALTER. [X] REPAIR [ ] DEMOLISH [ ]

FLOOR AREA (SQ. FT.) | NO. OF STORIES | NO. OF DWELLING UNITS

I certify that I have read this application and state that the above information is correct. I agree to comply to all City Ordinances and State laws relating to building construction. I certify that in the performance of the above work I shall not employ any person in violation of the Labor Code of California relating to Workman's Compensation Insurance. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

CONTRACTORS SIGN BELOW

I certify that I am a licensed contractor and that my license is in full force and effect.

Holmes Roofing Co. Contractor By [signature] Authorized Agent 7/30/73 Date

OWNER-BUILDER SIGN BELOW

I certify that I am exempt from the provisions of Ch. 9, Div. 3, B and P Code (Contractor's License Law) because (check one):

☐ I am the owner of the above property and will personally perform the above work.

☐ I am the owner of the above property and I will contract to have all of the above work performed by licensed contractors.

☐ I am the owner of the above property and will employ persons to perform the above work with wages as their sole compensation. I will furnish insurance for my employees as required by the Labor Code of California.

Owner's Signature By Authorized Agent Date

If work is not started within 60 days from date of issue or if abandoned for more than 120 days, this permit will be null and void

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR ADDRESS

ELECTRICAL PERMIT

Public Works & Development — Garden Grove, Ca.
Inspection 638-6771 Information 638-6661

INSTRUCTION: USE TYPEWRITER OR BALL POINT PEN, PRESS FIRMLY. BE SURE ALL COPIES ARE LEGIBLE, NO ERASURES PERMITTED. A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED. (PLEASE PRINT)

ELECTRIC PERMIT NO. 082978 A

ADDRESS 9822 RUSSELL PHONE

OWNER CHURCH OF CHRIST CITY

OWNER'S ADDRESS SAME

NEW BUILDING OR ADDITION — AREA SQ. FT.	EXISTING BUILDING REMODEL AREA SQ. FT.	OCCUPANCY GROUP	USE OF BUILDING AND OR NUMBER OF UNITS
		B-2	CHURCH

ELECTRICAL CONTRACTOR OWNER PHONE

ADDRESS CITY STATE LIC. NO.

VALIDATION

FEB 19-76 11 011 M ***14.00

I HAVE CAREFULLY READ THE ABOVE APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF STATE AND LOCAL LAWS COVERING THIS TYPE OF CONSTRUCTION WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. NO PERSON SHALL BE EMPLOYED IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA.

SIGNATURE OF PERMITTEE DATE

X [signature] 2-19-76

LOT NO.	TRACT NO.	NUMBER	EACH	FEE
IF NOT LISTED BELOW SEE CODE			.015	
Residential (1 & All sq. ft.			.01	
Garage, Resid. (1) sq. ft.			5.00	
Service Meter, Single Phase			5.00	
Service Meter, Three Phase			5.00	
Temporary Power Pole		3	3.00	9 00
Pole, Power, Light, etc.			2.00	
Sub-Panels 1 ϕ			2.00	
Sub-Panels 3 ϕ			.20	
Outlets			.20	
Fixtures			1.00	
Fixtures, Merc. Quartz, etc.			2.00	
Heater—Not Over 1650 W			2.00	
Washer			2.00	
Dryer			2.00	
Hot Water Heaters			2.00	
Dishwasher			2.00	
Domestic Range or Oven				
Power Apparatus—H.P., K.W. or K.V.A. Motors, Transformers, etc.				
Not Over 1 each			1.50	
Over 1, Not Over 10 each			3.00	
Over 10, Not Over 50 each			5.00	
Time Clock			1.00	
Sign			.50	
Sign Hookup			2.00	

BRANCH CIRCUIT PANEL: CIRCUITRY

CIR. NO.	BRKR. SIZE	WIRE SIZE	NOMENCLATURE	NO. OF OUTLET	WATTS L1	WATTS L2	WATTS L3
1							
2							
3							
4							
5							
6							

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Underground		
Conduit		
Wiring		
Heater		
Fixtures		
Ufer		
Service		
FINAL	5-3-76	
Utility Notified		

FEES	
PLAN CHECK $	
PERMIT $	9 00
ISSUANCE $	5 00
TOTAL $	14 00

RECD BY.
AUTHORIZED BY ERB
DATE 2-19-76

BUILDING PERMIT NO. SIGN PERMIT NO. VENT, HEAT, AIR COND. PERMIT NO.

INSPECTED

D5-0010 • 9

CITY OF GARDEN GROVE
Public Works & Development

ELECTRICAL PERMIT

Inspection Requests 638-6771

General Information 638-6661

INSPECTION RECORD

SINGLE PHASE SERVICE SIZE ___ AMPS ___ VOLTS ___ RIG CONDUIT

THREE PHASE SERVICE SIZE ___ AMPS ___ VOLTS ___ RIG CONDUIT

APPROVAL	DATE	INSPECTOR
Underground		
Conduit		
Wound Rough		
Hangs		
Fixtures & Trim		
Motor		
Other		
Service		

FINAL 12-4-80

Utility Notified

IDENTIFICATION CODE

BUILDING PERMIT NO. 1181034 | SIGN PERMIT NO. | CENT. HEAT AIR COND. PERMIT NO.

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

FEES

IF NOT LISTED BELOW SEE CODE	NO.	EA	FEE
Residential (R-1 & R-3) sq. ft.			
Garage Resid. (M) sq. ft.			
Service Meter, Single Phase			
Service Meter, Three Phase			
Addl. Meter, Three Phase			
Temporary Power Pole			
Pole, Power, Light, etc.			
Sub-Panels 1 ¢			
Sub-Panels 3 ¢			
Outlets RESIDENTIAL	1		.25
Fixtures			
Fixtures, Merc., Quartz, etc.			
Heater—Not Over 1650 W.			
Washer			
Dryer			
Hot Water Heaters			
Dishwasher			
Domestic Range or Oven			
Disposal			
Power Apparatus—H.P., K.W. or K.V.A. Motors, Transformers, etc.			
Not Over 1 each			
Over 1, Not Over 10 each			
Over 10, Not Over 30 each			
Indl. Circuits			
Time Clock			
Sign			
Sign Hookup			

ITEM	CODE	FEES
Plan Retention Fee		
Plan Check		
Permit	[illegible]	[illegible]
Issuance	[illegible]	[illegible]
TOTAL FEES		[illegible]

AUTHORIZED BY

LAND USE	BUILDING	DATE
	[illegible]	12-3-80

For Applicant to Fill in

ADDRESS: 9822 RUSSELL ST.

LOT NO. | BLK NO. | TRACT NO. | ELECTRIC PERMIT NO. 1181034

OWNER: G.G. CHRISTIAN | PHONE:

OWNER'S ADDRESS: 9822 RUSSELL | CITY: GARDEN GROVE

NEW BUILDING OR ADDITION AREA | EXISTING BUILDING REMODEL AREA | OCCUPANCY | USE OF BUILDING AND OR NUMBER OF UNITS

VALIDATION

ELECTRICAL CONTRACTOR: OWNER BUILDER | STATE LIC. NO. & TYPE:

ADDRESS: 9822 RUSSELL | CITY: GG | PHONE:

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. _____ Expiration Date _____

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

Michael M. Jacobs — PERMIT APPLICANT SIGNATURE | 12-3-80 — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. _____ and Classification _____ is in full force and effect.

(PRINT) CONTRACTOR | (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT | DATE

BUSINESS TAX CERTIFICATE NO. | EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:

Owner: Section 7044 ☐ Minor work under $100: Section 7048 ☐

Employee working for wages only: Section 7053 ☐

Other: _____

(PRINT) PROPERTY OWNER | (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT | Michael Jacobs | 12-3-80 — DATE

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

DS-0010-0

CITY OF GARDEN GROVE
Public Works & Development

ELECTRICAL PERMIT

Inspection Requests 638-6771 | General Information 638-0661

INSPECTION RECORD

SINGLE PHASE SERVICE SIZE ☐ UG ☐ OH
AMPS VOLTS RIG. CONDUIT
THREE PHASE SERVICE SIZE ☐ 3 Wire ☐ 4 Wire ☐ UG ☐ OH
AMPS VOLTS RIG. CONDUIT

APPROVAL	DATE	INSPECTOR
Underground		
Conduit		
Wiring - Rough		
Heater		
Fixtures & Trim		
Motors		
Ufer		
Service		
FINAL		
Utility Notified		

IDENTIFICATION CODE

BUILDING PERMIT NO. | SIGN PERMIT NO. | VENT, HEAT, AIR COND. PERMIT NO.

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

1. INSPECTOR

FEES

IF NOT LISTED BELOW SEE CODE	NO.	EA.	FEE
Residential (R-1 & R-3) sq. ft.			
Garage, Resid. (M) sq. ft.			
Service Meter, Single Phase			
Service Meter, Three Phase			
Add'l Meter, Three Phase			
Temporary Power Pole			
Pole, Power, Light, etc.			
Sub-Panels 1 ϕ			
Sub-Panels 3 ϕ			
Outlets	3		
Fixtures			
Fixtures, Merc, Quartz, etc.			
Heater - Not Over 1650 W			
Washer			
Dryer			
Hot Water Heaters			
Dishwasher			
Domestic Range or Oven			
Disposal			
Power Apparatus—H.P., K.W. or K.V.A. Motors, Transformers, etc.			
Not Over 1 each			
Over 1, Not Over 10 each			
Over 10, Not Over 30 each			
Indiv. Circuits			
Time Clock			
Sign			
Sign Hookup			
MANUAL PULL ALARM SYSTEM	1		
2 PULLS 1-BELL 1 CONTROL BOX			

ITEM	CODE	FEES
Plan Retention Fee		
Plan Check		
Permit		
Issuance		
TOTAL FEES		

AUTHORIZED BY
LAND USE | BUILDING | DATE
H E Keller 8-5-81

For Applicant to Fill In

ADDRESS: 9822 RUSSELL ST.
LOT NO. | BLK NO. | TRACT NO. | ELECTRIC PERMIT NO.: 121064
OWNER: GARDEN GROVE CHRISTIAN CHURCH | PHONE: 537-4190
OWNER'S ADDRESS: 9822 RUSSELL ST. | CITY

NEW BUILDING OR ADDITION - AREA	EXISTING BUILDING REMODEL AREA	OCCUPANCY GRP. DIV.	USE OF BUILDING AND OR NUMBER OF UNITS
SQ. FT.	2000 SQ. FT.	E-1	

VALIDATION 08/05/81
ELTPER 10.00
ISSNCE 6.00
CHECK 16.00 00004

ELECTRICAL CONTRACTOR: OWNER / BUILDER | STATE LIC. NO. & TYPE
ADDRESS | CITY | PHONE

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. _____ Expiration Date _____
☑ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.
NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.
☑ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

Stephen L. Patterson 8-4-81
PERMIT APPLICANT SIGNATURE DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. _____ and Classification _____ is in full force and effect.

(PRINT) CONTRACTOR | (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT | DATE 8-4-81

BUSINESS TAX CERTIFICATE NO. _____ EXPIRATION DATE _____

I certify that I am exempt from Section 7031.5 of the Business and Professions Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:
Owner: Section 7044 ☑ Minor work under $100. Section 7048 ☐
Employee working for wages only: Section 7053 ☐

Other: GARDEN GROVE CHRISTIAN CHURCH

(PRINT) PROPERTY OWNER | (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT | DATE
Stephen L. Patterson 8-4-81

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

DS-0010-0-79

CITY OF GARDEN GROVE
Public Works & Development

PLUMBING PERMIT

Inspection Requests
638-6771

General Information
638-6661

INSPECTION RECORD

APPROVALS	DATE	INSPECTOR
Soil Piping		
Gen and Plumbing		
Roof Plumbing		
Gas Piping		
Gas Vent		
Sewer		
Main Drain and Vacuum Lines		
Water Heater		
Backwash		
Water Lateral		
FINAL	Expire 10/82	
UTILITY CO. NOTIFIED		

IDENTIFICATION CODE

BUILDING PERMIT NO. | ELECTRICAL PERMIT NO.

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

J. INSPECTOR

FEES

M 14

TYPE OF FIXTURE OR ITEM	NO.	EACH	$ FEE
Water Closet (toilet)			
Bath Tub			
Shower			
Lavatory (Wash Basin)	3		9 —
Kitchen Sink			
Garbage Disposal			
Laundry Tub or Tray			
Water Heater			
Floor Sink			
Floor Drain			
Dish Washer			
Drinking Fountain			
Urinal			
Gas System - Outlets			
Building Sewer (First 100 ft.)			
Building Sewer (Add'l 100 ft.)			
Building Sewer (eg. add'l drain)			
Rainwater Drain			
Swimming Pool Piping			
Sand Traps/Receptors			
Automatic Washing Machine			
Water Softeners			
Backwash Trap			
Water Lateral			
Backflow Protective Devices			
Water Piping (ea. 100 ft.)			
Lawn Sprinklers (S.F.D. Only)			
Lawn Sprinklers (other)			

ITEM	CODE	FEES
Plan Retention Fee		
Plan Check		
Permit	3228	9 —
Issuance	3517	6 —
TOTAL FEES		15 —

AUTHORIZED BY

LAND USE	BUILDING	DATE
		7-13-81

For Applicant to Fill in

ADDRESS: 9822 RUSSELL ST.

LOT NO. | BLK. NO. | TRACT NO. | PERMIT NO.: 121232A

OWNER: G.G. CHRISTIAN CHURCH | PHONE: 537-4190

OWNER'S ADDRESS: 9822 RUSSELL ST. | CITY: G.G. 92644

NEW BUILDING OR ADDITION - AREA	EXISTING BUILDING / REMODEL AREA	OCCUPANCY GROUP	USE OF BUILDING AND OR NUMBER OF UNITS
SQ. FT.	2800 SQ. FT.	E-1	CLASSROOMS

VALIDATION

PLUMBING CONTRACTOR: OWNER | STATE LIC. NO. & TYPE: ~~333890~~

ADDRESS: ~~2543 W. CHAPMAN~~ | CITY: ~~ANA.~~ | PHONE: ~~997-8953~~

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. _____ Expiration Date _____

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

E. L. Tallerico — 7-13-81
PERMIT APPLICANT SIGNATURE — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. _____ and Classification _____ is in full force and effect.

(PRINT) CONTRACTOR | (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT | DATE

BUSINESS TAX CERTIFICATE NO. | EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:
Owner: Section 7044 ☐ Minor work under $100: Section 7048 ☐
Employee working for wages only: Section 7053 ☐
Other: _____

(PRINT) PROPERTY OWNER | (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT | DATE

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

DB-0008-1 4-79

CITY OF GARDEN GROVE
Public Works & Development

PLUMBING PERMIT

Inspection Requests
638-6771

General Information
638-6661

INSPECTION RECORD

APPROVALS	DATE	INSPECTOR
Soil Piping		
Ground Plumbing		
Rough Plumbing		
Gas Piping Test	12-4-80	[illegible]
Gas Vent		
Sewer		
Main Drain and Vacuum Lines		
Water Heater		
Backwash		
Water Lateral		
(gas Line to Water Heater)		
FINAL	Expire 12/80	
UTILITY CO. NOTIFIED		

IDENTIFICATION CODE

BUILDING PERMIT NO. 118102#

ELECTRICAL PERMIT NO. 118103#

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

INSPECTOR

FEES

TYPE OF FIXTURE OR ITEM	NO.	EACH	$ FEE
Water Closet (toilet)			
Bath Tub			
Shower			
Lavatory (Wash Basin)			
Kitchen Sink			
Garbage Disposal			
Laundry Tub or Tray			
Water Heater			
Floor Sink			
Floor Drain			
Dish Washer			
Drinking Fountain			
Urinal			
Gas System - Outlets	1		2 00
Building Sewer (First 100 ft.)			
Building Sewer (Add'l 100 ft.)			
Building Sewer (ea. add'l drain)			
Rainwater Drain			
Swimming Pool Piping			
Sand Traps/Receptors			
Automatic Washing Machine			
Water Softeners			
Backwash - Trap			
Water Lateral			
Backflow Protective Devices			
Water Piping (ea. 100 ft.)			
Lawn Sprinklers (S F D Only)			
Lawn Sprinklers (other)			

ITEM	CODE	FEES
Plan Retention Fee		
Plan Check		
Permit	3228	3 00
Issuance	3217	6 00
TOTAL FEES		9 00

AUTHORIZED BY

LAND USE	BUILDING	DATE
	JPV	12-3-80

For Applicant to Fill in

ADDRESS: 9822 RUSSELL ST.

LOT NO. | BLK NO. | TRACT NO. | PERMIT NO.: 118104#

OWNER: GARDEN GROVE CHRISTIAN | PHONE:

OWNER'S ADDRESS: 9822 RUSSELL | CITY: GARDEN GROVE

NEW BUILDING OR ADDITION - AREA	EXISTING BUILDING REMODEL AREA	OCCUPANCY GROUP	USE OF BUILDING AND OR NUMBER OF UNITS
SQ. FT.	SQ. FT.		

VALIDATION

PLUMBING CONTRACTOR: JACOBS PLUMBING | STATE LIC. NO. & TYPE: C-36 390039

ADDRESS: 11307 JANE WAY | CITY: STANTON | PHONE: 534-1271

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. _____ Expiration Date _____

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

Michael W Jacobs — 12-3-80
PERMIT APPLICANT SIGNATURE — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. 390039 and Classification C-36 is in full force and effect.

MICHAEL W. JACOBS — Michael W. Jacobs — 12-3-80
(PRINT) CONTRACTOR — (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT — DATE

215772 — _____
BUSINESS TAX CERTIFICATE NO. — EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:

Owner: Section 7044 ☐ Minor work under $100: Section 7048 ☐

Employee working for wages only: Section 7053 ☐

Other: LABOR + MATERIAL DONATED

_____ — Micha[illegible] W. Jacobs — 12-3-80
(PRINT) PROPERTY OWNER — (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT — DATE

A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

DS-0008-9-79

DATE

3-9-91

INSPECTOR'S NOTES

Plumbing & Hood (OK)
No Permits For
Sink
Dishwasher -
Water Softener -
Seal and Seal
[illegible]

1181[illegible]

CITY OF GARDEN GROVE
Public Works & Development

HEATING, VENTILATING, REFRIGERATION & AIR COND. PERMIT

Inspection Requests
638-6771

General Information
638-6661

INSPECTION RECORD

APPROVALS	DATE	INSPECTOR
FURNACE		
FURNACE VENTS		
GAS PIPING		
DUCTS		
SINGLE DUCT FAN VENT		
KITCHEN HOOD	2-3-81	[illegible]
AIR HANDLING UNIT		
EVAPORATIVE COOLER		
BOILER OR COMPRESSOR		
DECORATIVE APPLIANCE		

DATE	INSPECTOR'S NOTES
1-19-81	Shaft not complete Need Provisions for make up air interlocked with Hood Exhaust RJ
1-27-81	(M) to Bolt if welds cannot be done RJ

11828AY

9822

CITY OF GARDEN GROVE
Public Works & Development

BUILDING PERMIT

Inspection Requests 638-6771

General Information 638-6661

P.C. #

OCCUPANCY E1 TYPE VN OCC. LOAD FIRE SPRINK.

USE ZONE R-1

FIRE ZONE —

	FRONT	LEFT	RIGHT	REAR
Eav Proj.				
Setbacks	NO CHANGE			

PLANNING ACTION CUP 114-81 PROVIDED PLANS

LAND USE APPROVED BY [signature] DATE 6-26-81

REMARKS CUP 114-81

G.G. SANT. DIS. FEE REQ'D. | O.C. SANT. DIS. FEE REQ'D. | DATE | INITIAL

	REQ'D	PROVIDED
PARCEL MAP		
R/W DEDICATION		

FEES AND BONDS

	REV. CODE	AMOUNT	
ST. BOND			
WATER BOND			
WATER ASSMT. FEE (ACRG.)			
WATER ASSMT. FEE (FT.)			
PARKWAY TREE FEE			
PARK & REC. FEE (DIST.)			
DRAIN ASSMT. FEE (DIST.)			
PLAN RETENTION FEE			
BLDG. PLAN CHECK	3527	37	18
BLDG. PERMIT FEE	3226	57	87
ISSUANCE	3517	6	—
VALUATION 10,000	TOTAL FEES	101	05

NOT REQ'D

AUTHORIZED BY [signature] DATE 7-13-81

I. INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
ROOF SHTG		
ROUGH FRAME		
INSULATION, ENERGY		
LATH OR DRYWALL		
PLAS. BROWN CT.		
SOUND INSULATION		
SMOKE DETECTOR		
PARKING		
LANDSCAPING		
LAND USE FINAL		
~~FINAL~~ [illegible]		
UTILITY RELEASE		

IDENTIFICATION CODE

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No._____ Expiration Date_____

☒ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☐ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

[signature] 7-10-81
PERMIT APPLICANT SIGNATURE DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No._____ and Classification_____ is in full force and effect.

(PRINT) CONTRACTOR (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT DATE

BUSINESS TAX CERTIFICATE NO. EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:

Owner: Section 7044 ☒ Minor work under $100: Section 7048 ☐

Employee working for wages only: Section 7053 ☐

Other: [signature] Agent.

G.G. CHRISTIAN CHURCH 7-13-81
(PRINT) PROPERTY OWNER (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT DATE

For Applicant to Fill in

ADDRESS 9822 RUSSELL ST.

LOT NO. BLK NO. TRACT NO. PERMIT NO.

OWNER G.G. CHRISTIAN CHURCH TEL. NO. 537-4190

MAILING ADDRESS CITY ZIP 9822 RUSSELL ST., G.G. 92644

☐ ARCH ☐ ENGR. NONE

MAILING ADDRESS CITY ZIP

TEL. NO. STATE LIC. NO. & TYPE

VALIDATION

CONTRACTOR ~~A.V.C. CONSTRUCTION~~ OWNER

MAILING ADDRESS CITY ZIP ~~2543 W. CHANTICLEER, ANAHEIM 92804~~

TEL. NO. ~~714-995-8953~~ STATE LIC. NO. ~~333890~~

PRESENT BLDG. USE CLASSROOMS PROPOSED BLDG. USE CLASSROOMS

DESCRIBE WORK TO BE DONE INTERIOR REMODEL

NEW ☐ ADD'N ☐ ALTER. ☒ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) 2800 NO. OF STORIES 1 NO. OF DWELLING UNITS 0

If work is not started within 120 days from date of issue or if abandoned for more than 120 days, this permit will be null and void.

A FEE MAY BE CHARGED FOR RE INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

DS-0007-9-79

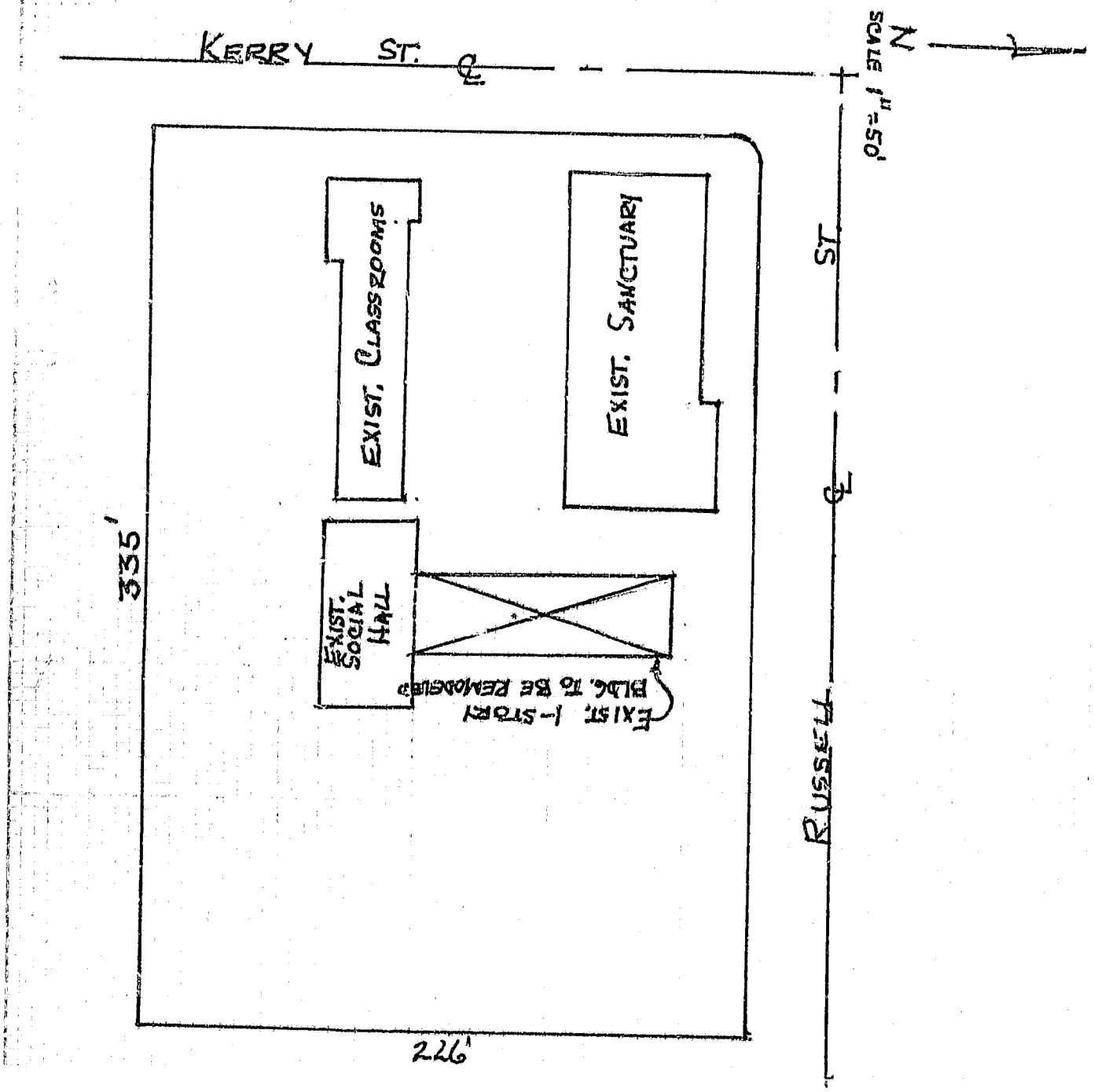
CITY OF GARDEN GROVE

PLOT PLAN

PUBLIC WORKS & DEVELOPMENT 1

OWNER: GARDEN GROVE CHRISTIAN CHURCH	JOB ADDRESS: 9822 RUSSELL ST., G.G.			PERMIT NO.: 12123-A
NAME OF CONSTRUCTION LENDER & BRANCH: NONE	ASSESSORS PARCEL NO.: 98-081-19	LOT	BLOCK	TRACT
	PLEASE CHECK ONE OR MORE: ☐ New ☐ Addition ☑ Alteration ☐ Repair ☐ Move ☐ Demolish			
ADDRESS / CITY	DATE: 7-10-81	JOB DESCRIPTION: INTERIOR REMODEL		PERMIT VALUE: $10,000

SHOW NORTH ARROW, PROPERTY LINES AND ADJACENT STREETS.



#1 Building Insp./#2 Assessor/#3 Permittee/#4 File
I certify the information hereon is complete and correct.

By Owen Witthaus

PLOT PLAN APPROVED BY

D 8-0042 • 3/79

RUSSELL	9822		6
STREET NAME	ADDRESS	APT. NO.	CARD NO.

9822

CITY OF GARDEN GROVE
Public Works & Development

BUILDING PERMIT

Inspection Requests 638-6771

General Information 638-6661

For Applicant to Fill In

P.C. #

OCCUPANCY	TYPE	OCC. LOAD	FIRE SPRINK.
USE ZONE R-1		FRONT / LEFT / RIGHT / REAR	
FIRE ZONE	Bay Proj. / Setbacks	N/A	

PLANNING ACTION — ATTACHED PLANS — DATE

LAND USE APPROVED BY

REMARKS:

G.G. SANT. DIS. FEE REQ'D.	O.C. SANT. DIS. FEE REQ'D.	DATE	INITIAL

	REQ'D	PROVIDED
PARCEL MAP		
R/W DEDICATION		

FEES AND BONDS

	REV. CODE	AMOUNT
ST. BOND		
WATER BOND		
WATER ASSMT. FEE (ACRG.)		
WATER ASSMT. FEE (FT.)		
PARKWAY TREE FEE		
PARK & REC. FEE (DIST.)		
DRAIN ASSMT. FEE (DIST.)		
PLAN RETENTION FEE		
BLDG. PLAN CHECK	3527	6 80
BLDG. PERMIT FEE	3226	10 50
ISSUANCE	3517	10 00
VALUATION $200.00	TOTAL FEES	27 30

AUTHORIZED BY — DATE

JR 5-4-83

1. INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
ROOF SHTG		
ROUGH FRAME		
INSULATION, ENERGY		
LATH OR DRYWALL		
PLAS. BROWN CT		
SOUND INSULATION		
SMOKE DETECTOR		
PARKING		
LANDSCAPING		
LAND USE FINAL		
FINAL	4/17 [illegible]	
UTILITY RELEASE		

IDENTIFICATION CODE

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. _____ Expiration Date _____

☑ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☑ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

Owen T. Witthaver 5-4-83
PERMIT APPLICANT SIGNATURE — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. _____ and Classification _____ is in full force and effect.

(PRINT) CONTRACTOR — (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT — DATE

BUSINESS TAX CERTIFICATE NO. — EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section:
Owner: Section 7044 ☑ Minor work under $100: Section 7048 ☐
Employee working for wages only: Section 7053 ☐
Other Owen T. Witthaver

(PRINT) PROPERTY OWNER — (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT — DATE

ADDRESS: 9822 Russell St.

LOT NO. / BLK NO. / TRACT NO.: 98-081-19 — PERMIT NO.: 128662A

OWNER: G.G. Christian Church — TEL. NO.

MAILING ADDRESS: 9822 Russell St. — CITY: G.G. — ZIP: 92644

☐ ARCH
☐ ENGR. None

MAILING ADDRESS — CITY — ZIP

TEL. NO. — STATE LIC. NO. & TYPE

VALIDATION

CONTRACTOR: Owner

MAILING ADDRESS — CITY — ZIP: Same as above

TEL. NO. — STATE LIC. NO.

PRESENT BLDG. USE: Church — PROPOSED BLDG. USE

DESCRIBE WORK TO BE DONE: New Door & Remove Wall in Classroom

NEW ☐ ADD'N ☐ ALTER. ☑ REPAIR ☐ DEMOLISH ☐

FLOOR AREA (SQ. FT.) _____ NO. OF STORIES _____ NO. OF DWELLING UNITS _____

If work is not started within 180 days from date of issue or if abandoned for more than 180 days, this permit will be null and void.

A FEE MAY BE CHARGED FOR RE INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS

RELOCATION

PRESENT BLDG. ADDRESS

MOVING CONTRACTOR

ADDRESS

C-9-0007-9-79

CITY OF GARDEN GROVE

PLOT PLAN

PUBLIC WORKS & DEVELOPMENT 1

OWNER	JOB ADDRESS	PERMIT NO.
GARDEN GROVE CHRISTIAN CHURCH	9822 RUSSELL ST.	1296624

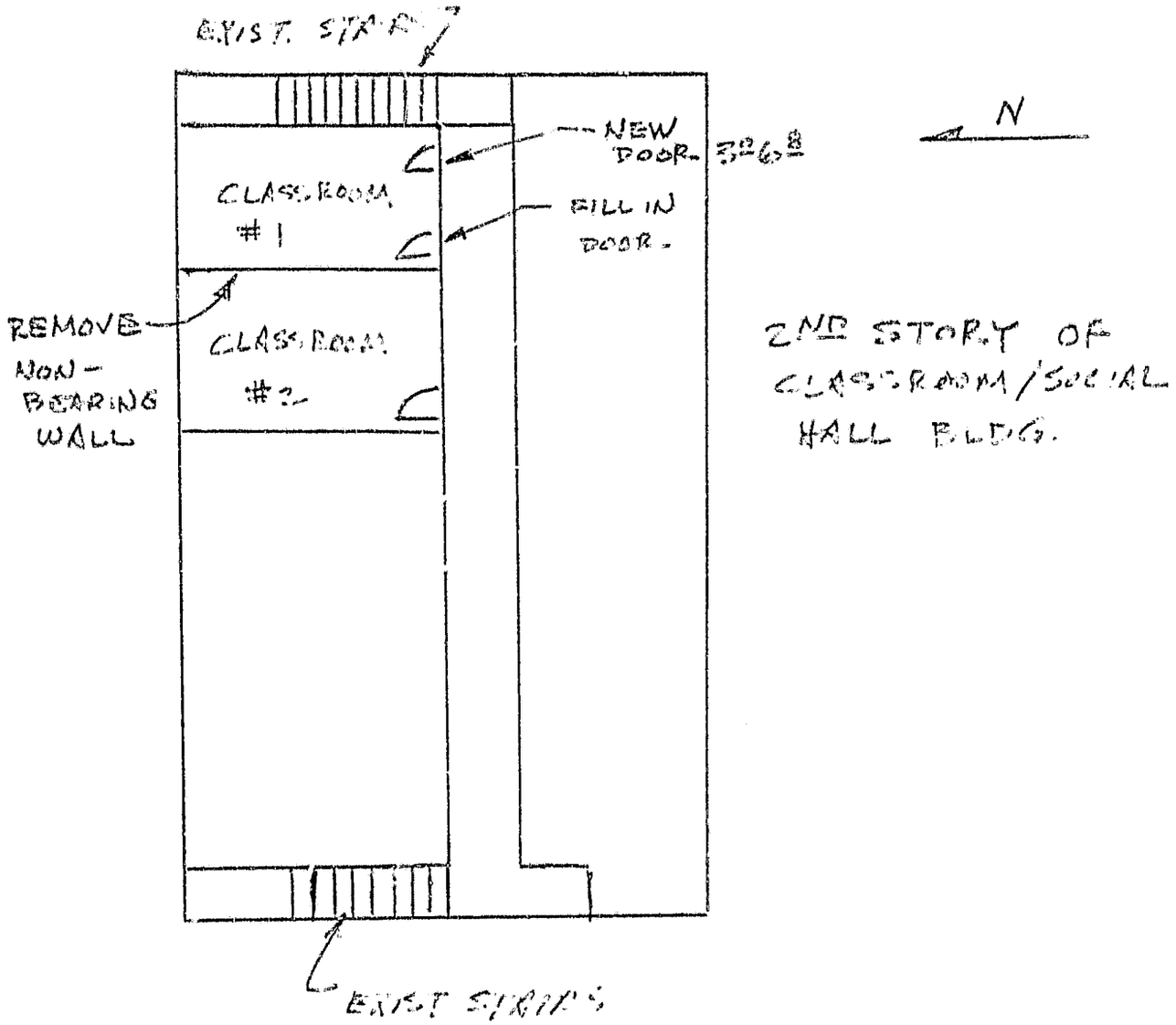
NAME OF CONSTRUCTION LENDER & BRANCH	ASSESSORS PARCEL NO.	LOT	BLOCK	TRACT
NONE	98-381-19			

PLEASE CHECK ONE OR MORE

☐ New ☐ Addition ☒ Alteration ☐ Repair ☐ Move ☐ Demolish

ADDRESS	CITY	DATE	JOB DESCRIPTION	PERMIT VALUE
		5-4-83	NEW DOOR & REMOVE WALL	$200.00

SHOW NORTH ARROW, PROPERTY LINES AND ADJACENT STREETS.



#1 Building Insp./#2 Assessor/#3 Permittee/#4 File
I certify the information hereon is complete and correct. By _____

PLOT PLAN APPROVED BY _____

D R-0042 • 3/79

CITY OF GARDEN GROVE
Development Services Department

BUILDING PERMIT

Inspection Requests 638-6771
General Information 638-6661

P.C. #

OCCUPANCY	TYPE	OCC LOAD	FIRE ZONE		
		FRONT	LEFT	RIGHT	REAR
USE ZONE	Env. Pro.				
	Setbacks				

PLANNING ACTION — DATE
LAND USE APPROVED BY
REMARKS:

SCAQMD FEE REQ'D	SCAQMD FEE REQ'D	SOILS REQ'D	SOILS PROVIDED
PARCEL MAP			
R/W DEDICATION			

FEES AND BONDS

	REV CODE	AMOUNT
ST BOND		
WATER BOND		
WATER ASSMT FEE (ACRE)		
WATER ASSMT FEE (FT)		
PARKWAY TREE FEE		
PARK & REC FEE		
DRAIN ASSMT FEE		
PLAN RETENTION FEE		
BLDG PLAN CHECK		
BLDG PERMIT FEE		
ISSUANCE		
VALUATION $ 2250.00	TOTAL FEES	

AUTHORIZED BY

1. INSPECTOR

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
PRE INSPECTION	1/23/87	
FOUNDATION & LOCATION		
CONCRETE FLOOR		
REINFORCING		
MASONRY		
ROOF SHTG		
ROUGH FRAME		
INSULATION ENERGY		
DRYWALL		
LATH		
PLAS BROWN CT		
PRE SUNITE		
FIRE DEPT		
PRE PLASTER		
FINAL	1-27-87 R. Cox	

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Fund — Expiration Date

I certify that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance or a certificate of exemption, or I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California.

NOTE: If subject to Workers' Compensation provisions, no permit will be issued unless certificate has been furnished.

I hereby affirm that I am exempt from Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter or improve any building or structure, or do any work in connection therewith, shall require the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500):

Owner Section 7044 (b) Maint. work under $500 Section 7048 (c) Homeowner building for own use Section 7044 (d)

Other

PRINT PROPERTY OWNER — SIGNATURE PROPERTY OWNER OR AUTHORIZED AGENT — DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that I have a valid Business Tax Certificate for the classification(s) listed below. 625-232

ROY L CHANEY — Roy L Chaney — 1/22
PRINT CONTRACTOR — SIGNATURE OF CONTRACTOR — DATE

118904
BUSINESS TAX CERTIFICATE NUMBER — 1/27/87

I certify that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter or improve any building or structure, or do any work in connection therewith, shall require the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500):

Owner Section 7044 (b) Maint. work under $500 Section 7048 (c) Homeowner building for own use Section 7044 (d)

Other

PRINT PROPERTY OWNER — SIGNATURE PROPERTY OWNER OR AUTHORIZED AGENT — DATE

For Applicant to Fill in

ADDRESS 9822 Russell
LOT NO. BLK NO. TRACT NO. — PERMIT NO. 149661A
OWNER CHURCH — TEL NO.
MAILING ADDRESS — CITY
☐ ARCH ☐ ENGR
MAILING ADDRESS — CITY
TEL NO. — STATE LIC NO. & TYPE

ST INS 15.00
B-PER 39.00
ISS 10.00
CASH 64.00
VALUATION 1W4100A 1-22'87

Roy L Chaney Roofing
MAILING ADDRESS
10462 Tusk (C) S.A.
TEL 534-1912 — TEL 405-232
PRESENT BLDG USE — PROPOSED BLDG USE

DESCRIBE WORK TO BE DONE: Tear over old comp with fiberglass shingles

NEW — ADD — ALT — REPAIR — DEMO — CONV — NO. DWELL. UNITS
FLOOR AREA 3500 — STORIES 1

A FEE MAY BE CHARGED FOR RE-INSPECTION, DUE TO NEGLIGIBLE INCOMPLETE WORK OR FAILURE TO MAKE CORRECTIONS

RELOCATION

PRESENT LOCATION
MOVER
CONTRACTOR
ADDRESS

RUSSELL AVE

9822

CITY OF GARDEN GROVE, CALIFORNIA

Development Services Department

11391 ACACIA PARKWAY, P.O. BOX 3070, GARDEN GROVE, CALIFORNIA 92642

Address : 9822 RUSSELL AVE
Parcel No: 09808119 Type: B33

Suite:
Date : 04/06/93

PERMIT NO.: 17624
Insp Dist : ZB

Owner : CHURCH, GARDEN GROVE (NO)
Address:

Phone:

Applicant: DON COULSON AND ASSOCIATES
Address : 3251 LAGUNA CANYON RD SUIT
LAGUNA BEACH CA 92651
Phone:

Architect:
Address :

LIC: EXP: PH:

Engineer:
Address :

LIC: EXP: PH:

WORKER'S COMPENSATION REQUIREMENTS

State Compensation Insurance Policy No. 1282653 Expiration Date 1-1-94

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws of California.

NOTE: If, after making such certificate, the applicant for the permit should become subject to the Worker's Compensation provisions of this code, he shall forthwith comply with the provisions of Section 3700 or his permit shall be deemed revoked.

☑ I certify that I have read this application and state that the above information is correct. I agree to comply with all City ordinances and State laws relating to pending construction. I further agree to hold the City of Garden Grove free and harmless from any liability arising out of injury or bodily damage resulting from work performed relevant to this permit.

X [signature] 4-6-93
PERMIT APPLICANT SIGNATURE DATE

BUSINESS TAX CERTIFICATE INFORMATION

I certify that the following Contractor's License No. L32918 and Classification C39 is in full force and effect.

X STATE MANAGING [signature] 4-6-93
(PRINT) CONTRACTOR (SIGNATURE) CONTRACTOR OR AUTHORIZED AGENT DATE

BUSINESS TAX CERTIFICATE NO. EXPIRATION DATE

I certify that I am exempt from Section 7031.5 of the Business and Professional Code, Division 3, Chapter 9, Contractors' License Law, under the following Section; Owner. Section 7044 ☐ Minor work under $200; Section 7048 ☐ Employee working for wages only. Section 7052 ☐ Other:

(PRINT) PROPERTY OWNER (SIGNATURE) PROPERTY OWNER OR AUTHORIZED AGENT DATE

Proposed Work: 1 #15 FELT & COMP. OVER 1 OR 2 EXISTING/ PITCH/ 3 PLY CAP OVER 1 EXISTING CAP/FLA

Value : 16000
Floor Area: 15000

Permit	1	172.98
Issuance	1	15.00
Pre-Roof Inspection	1	15.00
General Plan	1	20.-
Cultural Arts	1	9.90

3223 PERMITS/GENE	20.10
3224 PERMITS/CULT	9.90
3226 BLDG PERM &	187.98
3517 ISSUANCE FEE	15.00

Authorized by: X

TOTAL FEES 232.98

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Pre Inspect	4/7/93	[illegible]
Foundation		
Concrete Floor		
Reinforcing		
Masonry		
Roof Shtg		
Rough Frame		
Insul / Energy		
Drywall		
Lath		
Plas.Brown Ct.		
Landscaping		
Pre Gunite		
Pre Deck		
Pre Plaster		
Planning Final		
Bldg Final	4/14/93	[illegible]
Utility Notified		

Inspection Requests

General Information

741-5307

If work is not started within 180 days from date of issue or if abandoned for more than 180 days, this permit will be null and void.
A FEE MAY BE CHARGED FOR RE-INSPECTION DUE TO NEGLIGENCE, INCOMPLETE WORK, OR FAILURE TO MAKE CORRECTIONS.

1. INSPECTOR

17624.

GARDEN GROVE

CITY OF GARDEN GROVE
DEVELOPMENT SERVICES DEPARTMENT

RE-ROOFING INFORMATION
Permits/Inspection

INFORMATION REQUIRED

1. Number of buildings to be re-roofed: (1) ONE
2. Number of existing roof coverings and type.
   a. 1 HOT BUR - CAP SHEET b. 1 3 TAB SHINGLE c. 2 - 3 TAB SHINGLE
3. Pitch of roof(s). CAP - FLAT / SHINGLE 5:12
4. Number of squares to be re-roofed. 150
5. Complete description of work to be done, including materials to be used; number and type of under layment:
   SHINGLE: NAIL 15# UNDERLAYMENT; NAIL 3-TAB COMP SHINGLES; 3 WAY EDGE METAL
   HOT: PREP ROOF; NAIL 28# GLASS BASE SHEET; HOT 2-11# PLIES; HOT 72# CAP SHEET.
6. I.C.B.O. Research Number _____ Class _____ (if applicable)
7. Contract Price. $ 16,000.00

METHOD OF PAYMENT

Pre-inspection and permit fees may be included on one check.

Permits will be required for each building.

INSPECTION PROCEDURE

1. Provide a safe ladder for each phase of inspection.
2. All materials to be on site at time of inspection.
3. If roof covering is to be removed or made smooth, work should be completed before pre-inspection.
4. Inspection and written approval by the building inspector shall be obtained prior to application of any re-roofing materials; then contact building inspection department at 741-5332 when starting re-roofing application.
5. "See Your Inspection Record Card." Inspection Record Card shall be conspicuous; posted on premises.
6. A final inspection and approval shall be obtained when re-roofing is completed.

Signature: _____
Owner/Contractor/Agent

Job Address: 9822 RUSSELL AVE

1. Building Inspector
2. Permitee

4678T/1600A

General Information: 714-741-5307 CITY OF GARDEN GROVE - DEVELOPMENT SERVICES DEPARTMENT Inspection Requests: 714-741-5332

PERMIT (PAGE 2 of 2)

PROJECT/SITE/BUILDING DESCRIPTION

JOB Address : [redacted]
Suite :
PERMIT NO. : 29720
Permit Type : SIGN
Type : B11
SIGNS
Owner : CHURCH GARDEN GROVE CHRISTIAN
Applicant : OWNER
Appl Address : 9822 RUSSELL AVE

Phone :

Insp Dist : SB
Date : 08/11/95
Parcel No : 09808119

PROPOSED WORK:

SIGN FACE CHANGE

FEES

Permit	1	30.00
Issuance	1	25.00
Cultural Arts	1	1.25
General Plan	1	2.50

OK 12

INSPECTION RECORD

	APPROVAL	DATE	INSPECTOR
Pre Inspect			
Foundation			
Concrete Floor			
Reinforcing			
Masonry			
Roof Shtg			
Rough Frame			
Insul / Energy			
Drywall			
Lath			
Plas.Brown Ct.			
Landscaping			
Pre Gunite			
Pre Deck			
Pre Plaster			
Planning Final			
Bldg Final	8-22-95		
Utility Notified			

11	3226	BLDG PERM &	30.00
11	3517	ISSUANCE FEE	25.00
80	3224	PERMITS/CULT	1.25
92	2163	GENERAL PLAN	2.50

TOTAL 58.75

AUTHORIZATION

Issued By: MK Date 8-12-95

DECLARATION

I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

Applicant's Signature C. Allen Hodge

Print Name C. ALLEN HODGE Date 8/12/95

General Information: 714-741-5307 **CITY OF GARDEN GROVE - DEVELOPMENT SERVICES DEPARTMENT** Inspection Requests: 714-741-5332

PERMIT (PAGE 1 OF 2)

Permit No.: 29720
Job Address: 9822 Russell Ave

Type of Permit: [ ]Bldg. [ ]Elec.
[ ]Mech. [ ]Plumb. [ ]Grading [ ]Street
[ ]Sign [ ]Pool/Spa [ ]Fire Supp. Syst.

Owner STEVE BAEDER (MINISTER)
Address 6802 CHARLWOOD LAKEWOOD
CA 90713 Phone (310) 866-4871

Contractor OWNER
Address
Phone
Lic. Class Lic. No.

Architect/Engineer None
Address
Phone
Type of Lic. Lic. No.

Applicant C. ALLEN HODGE
Address 15702 RYON AVE
BELLFLOWER CA Phone (310) 804-4558

DECLARATIONS

CONTRACTOR DECLARATION

[ ] I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

OWNER-BUILDER DECLARATION

Sec. 7031.5, Business and Professions Code (B&PC) states: "Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9; commencing with Section 7000; of Division 3 of the B&PC) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500." I hereby affirm under penalty of perjury that I am exempt from the Contractors License Law for the following reason.

[X] I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale. Sec. 7044, B&PC states: "The Contractor License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale."

[ ] I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. Sec. 7044, B&PC states: "The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such project with a contractor(s) licensed pursuant to the Contractor License Law."

[ ] I am exempt under Sec. _____, B&PC for the following reason:

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

[ ] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier N/A
Policy Number

[CA] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Sec. 3700 of the Labor Code, I shall forthwith comply with those provisions

[CA] I have and will maintain a certificate of consent to self insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

CONSTRUCTION LENDING AGENCY

[ ] I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097 Civil Code).

Lender N/A
Address

HAZMAT/AQMD DECLARATION

Will the applicant or future building occupant handle a hazardous material or a mixture containing a hazardous material equal or greater than the amounts specified in the hazardous materials information guide?

[CA] NO [ ] YES

Refer to the AQMD permitting checklist and/or guidelines. Will the intended use of the building by the applicant or future building occupant require a permit for construction or modification from the South Coast Air Quality Management District (SCAQMD)?

[CA] NO [ ] YES

I have read the hazardous material information guide and the SCAQMD permitting checklist. I understand my requirements under State of California Health and Safety Code, Section 2505, 2533, and 2534 concerning hazardous material reporting.

[CA] YES [ ] NO

DEMOLITION/ASBESTOS DECLARATION

[CA] I declare that written asbestos notification is not applicable to the scheduled project.

[ ] On the attached sheet(s) are copies of all written asbestos notifications regarding the above referenced building that are required to be submitted to the United States Environmental Protection Agency or to a designated State agency, or both, pursuant to Part 61 of Title 40 of the Code of Federal Regulation or successor to that part.

DECLARATION

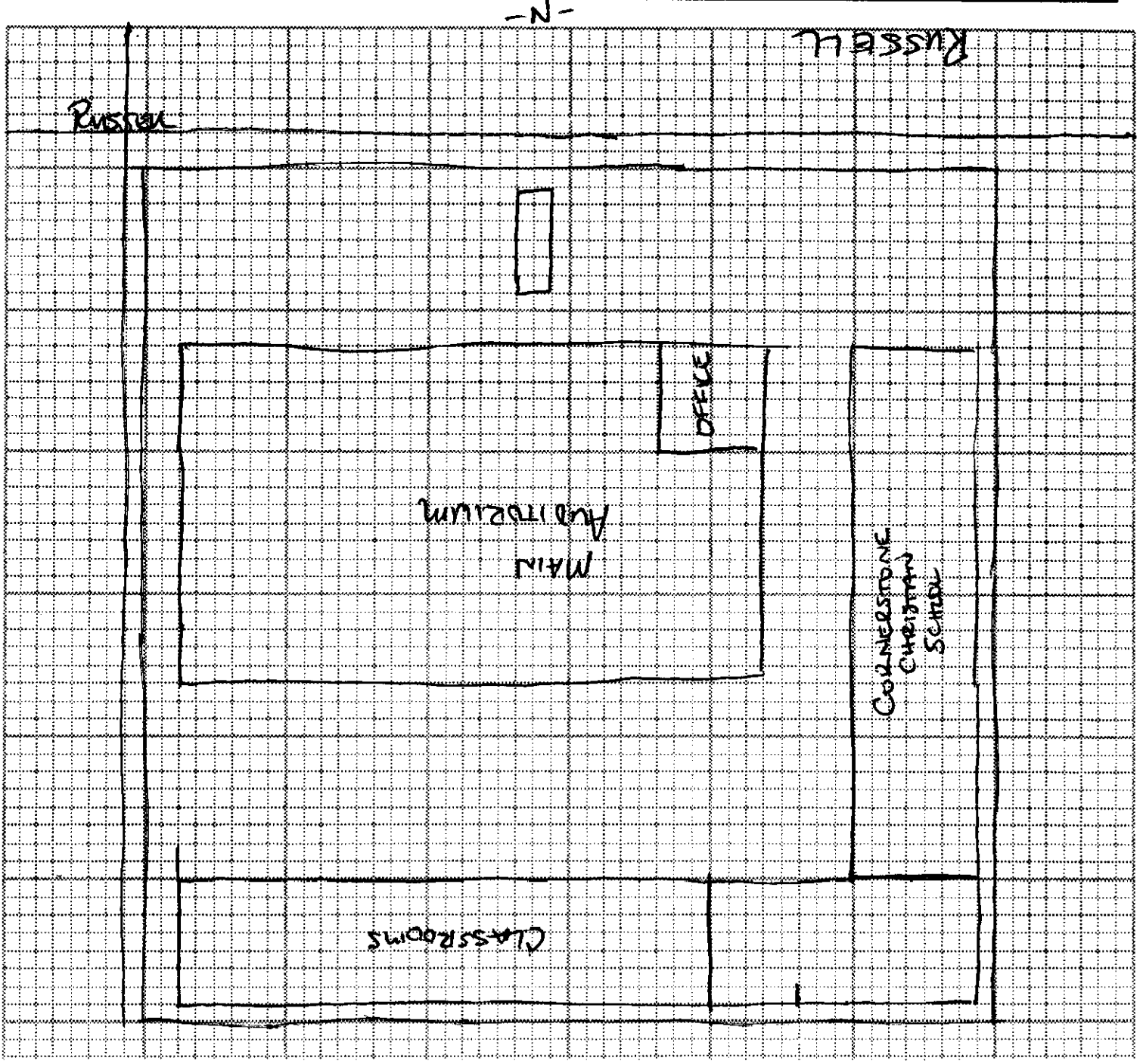
I certify that I have read this application/permit and state that the information on all pages of this document is correct. Under penalty of perjury, I hereby affirm all of the checked/marked declarations on this document. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes. I acknowledge that if work is not started within 180 days from the date of issue or if abandoned for more than 180 days, this permit will be null and void. I acknowledge that a fee may be charged for reinspection due to negligence, incomplete work, or failure to make corrections.

Signature C. Allen Hodge
Print Name C. ALLEN HODGE Date 8/12/95

CITY OF GARDEN GROVE - DEVELOPMENT SERVICES DEPARTMENT - PLOT PLAN FORM

Planning action:	Use zone:	Job address: 9822 Russell Ave	Permit No. 29720
Land use approved by: [signature] Date: 8/11/95	Lot size:	Assessor Parcel No. 09808119	Legal desc.:
Remarks: FACE CHANGE ONLY	Lot coverage:	Occupancy: / Const. type: / Sprinklers:	Value:
	% increase	____ New ____ Alter ____ Add ____ Repair ____ Demo	

Job Description:
SIGN FACE CHANGE 9822 RUSSELL



White: Inspection
Yellow: Assessor
Pink: Permittee

I certify the information hereon is complete & correct.

STEVE BAEDER	[signature]	8/12/95
Owner's name (print)	Signature (owner/agent)	Date



Permit 29720

GARDEN GROVE
CALIFORNIA

PERMIT (PAGE 2 of 2)

PROJECT/SITE/BUILDING DESCRIPTION

JOB Address : 9822 RUSSELL AVE
Suite :
PERMIT NO. : 70871 - 70870
Permit Type : BUILDING
Type : B33
REPAIRS
Owner : CROSS COUNTY CHRISTIAN CHURCH
Applicant : ELLIOTT ROOF MAINTENANCE AND I
Appl Address : 324 SOUTH EARLHAM
ORANGE, CA 92869
Phone : 997-4938

Insp Dist : N-14
Date : 11/07/03
Parcel No : 09808119

Value :29130
Floor area :0

PROPOSED WORK:

T/O EXIST, APPLY (1) LAYER 30# ASTM FELT & 30YR GAF TIMERLINE ASPHALT SHINGLES.

FEES

111 32410 Permit		1	465.12
111 32401 issuance		1	35.00
942 22130 General Plan		1	35.50
080 32550 Cultural Arts		1	17.48
TOTAL			553.10

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Pre Inspect	12-14-03	
Foundation		
Concrete Floor		
Reinforcing		
Masonry		
Roof Shtg		
Rough Frame		
Insul / Energy		
Drywall		
Lath		
Plas.Brown Ct.		
Landscaping		
Pre Gunite		
Pre Deck		
Pre Plaster		
Planning Final		
Bldg Final	2/2/04	
Utility Notified		

********** VALIDATION **********
PAID ON 07 Nov 2003 AT 11:24
RECEIVED BY LARAINEM 198.245.206.215/2 TRANS# 54
AMOUNT PAID $824.83 BY CHECK#21613
TOTAL PAID = $824.83

****

AUTHORIZATION

Issued By: jimc Date

DECLARATION

I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

Applicant's Signature James H Elliott

Print Name JAMES H ELLIOTT Date 11/7/03

PROJECT/SITE/BUILDING DESCRIPTION

JOB Address : 9822 RUSSELL AVE
Suite :
PERMIT NO. : 70870
Permit Type : BUILDING
Type : B33
REPAIRS
Owner : CROSS COUNTY CHRISTIAN CHURCH
Applicant : ELLIOTT ROOF MAINTENANCE AND I
Appl Address : 324 SOUTH EARLHAM
ORANGE, CA 92869
Phone : 997-4938

Insp Dist : ZB
Date : 11/07/03
Parcel No : 09808119

Value :11000
Floor area :0

PROPOSED WORK:

T/O EXISTING/REROOF W/BUILT UP ASPHALT ROOFING SYSTEM/4 PLY/GRANULAR SURFING

FEES

111 32410	Permit	1	215.48
111 32401	issuance	1	35.00
942 22130	General Plan	1	14.24
080 32550	Cultural Arts	1	7.01
TOTAL			271.73

INSPECTION RECORD

APPROVAL	DATE	INSPECTOR
Pre Inspect	12/16/03	GLY CARD IN FIELD
Foundation		
Concrete Floor		
Reinforcing		
Masonry		
Roof Shtg	12/16/03	GLY/8 CARD IN FIELD.
Rough Frame		
Insul / Energy		
Drywall		
Lath		
Plas.Brown Ct.		
Landscaping		
Pre Gunite		
Pre Deck		
Pre Plaster		
Planning Final		
Bldg Final	[signature]	2/2/04
Utility Notified		

********** VALIDATION **********
PAID ON 07 Nov 2003 AT 11:24
RECEIVED BY LARAINEM 198.245.206.215/2 TRANS# 54
AMOUNT PAID $824.83 BY CHECK#21613
TOTAL PAID = $824.83

****

AUTHORIZATION

Issued By: janetw Date

DECLARATION

I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

Applicant's Signature [signature]

Print Name JAMES H ELLIOTT Date 11/7/03

GARDEN GROVE CALIFORNIA

General Information: 714-741-5307 CITY OF GARDEN GROVE - DEVELOPMENT SERVICES DEPARTMENT Inspection Requests: 714-741-5332

PERMIT (PAGE 2 of 2)

PROJECT/SITE/BUILDING DESCRIPTION

JOB Address : 9822 RUSSELL AVE
Suite :
PERMIT NO. : 90636
Permit Type : SIGN
Type : B11
SIGNS
Owner : DE CRISTO DE RESTAURAC IGLESIA
Applicant : KATELYN LE
Phone : 714-534-3916

Contractor : OWNER
Address : 9822 RUSSELL AVE
CityStZip :
Phone :

Insp Dist : SB
Date : 06/07/07
Parcel No : 09808119

Value : 3100
Floor area : 0

PROPOSED WORK:

028 - SIGNS

(1) CAN WALL SIGN.

FEES

111 32509	PLAN CHECK 65%($42.0	1	20.15
111 32410	Permit	1	31.00
111 32401	issuance	1	35.00
942 22130	General Plan	1	4.98
080 32550	Cultural Arts	1	2.45
TOTAL			93.58

APPROVAL	DATE	INSPECTOR
Pre Inspect		
Foundation		
Concrete Floor		
Reinforcing		
Masonry		
Roof Shtg		
Rough Frame		
Insul / Energy		
Drywall		
Lath		
Plas.Brown Ct.		
Landscaping		
Pre Gunite		
Pre Deck		
Pre Plaster		
Planning Final		
Bldg Final	6-27-07	T.H
Utility Notified		

********** VALIDATION **********
PAID ON 07 Jun 2007 AT 10:34
RECEIVED BY EVAR 198.245.206.215/2 TRANS# 50
CASH PAID = $100.00 CASH RETURNED = $6.42
TOTAL PAID = $93.58

****

AUTHORIZATION

Issued By: jimc Date

DECLARATION

I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

Applicant's Signature

Print Name XUAN MINH HO Date 6/07/2007

CITY OF GARDEN GROVE
BUILDING SERVICES

General Info : 714-741-5307
Inspection Requests : 714-741-5332

9822 RUSSELL ST
PERMIT#:11-2640
ISSUED:12/1/11

Owner	Telephone	Zip
IGLESIA DE CRISTO DE RESTAURACTION		92844
Address	**City**	**State**
9822 RUSSELL ST	Garden Grove	CA

Applicant	Telephone	Zip
IGLESIA DE CRISTO DE RESTAURACTION		92844
Address	**City**	**State**
9822 RUSSELL ST	Garden Grove	CA

Floor Area(sq. ft.)	Residential/Commercial
	Commercial

Job Description
WROUGHT IRON FENCE BETWEEN (E)WOOD COLUMNS 110' X 5' IN FRONT OF PARKING AREA AT PRESCHOOL

DECLARATION
I certify that I have read this application/permit and state that the information on all pages of this document is correct. I agree to comply with all City and County ordinances and State laws relating to building construction, and hereby authorize representatives of this City and County to enter upon the above mentioned property for inspection purposes.

X Applicant's Signature _____

Print Name Tim Spencer Date 12-1-11

Building Address
9822 RUSSELL ST

Suite/Unit/Building

TYPE	ISSUED BY
Miscellaneous	Joanne Chung

Inspector Dist.	Parcel Number	LOT	TRACT
M14	09808119		

Valuation
$800.00

Final
Inspector's Signature _____
Date _____

FEES

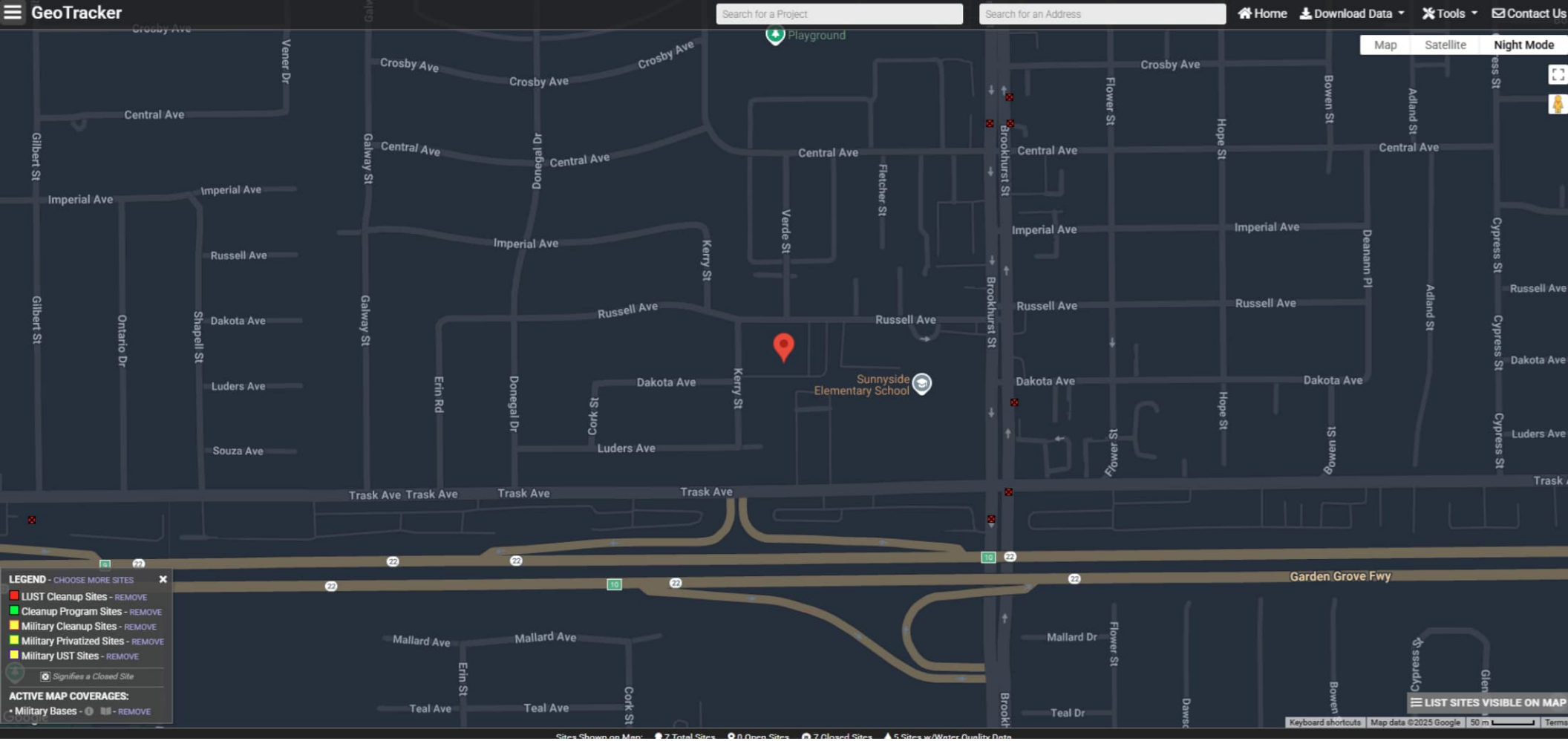
Description	Quantity	Amount
BSASRF State Fee		$1.00
Issuance Fee	1	$35.00
One-Stop Permit Center Surcharge		$0.98
Building Permit Fee		$49.00
Plan Check Fee		$60.00
Cultural Arts Fee, Valuation		$1.25
General Plan Update Fee, Valuation		$2.50
TOTAL		$149.73

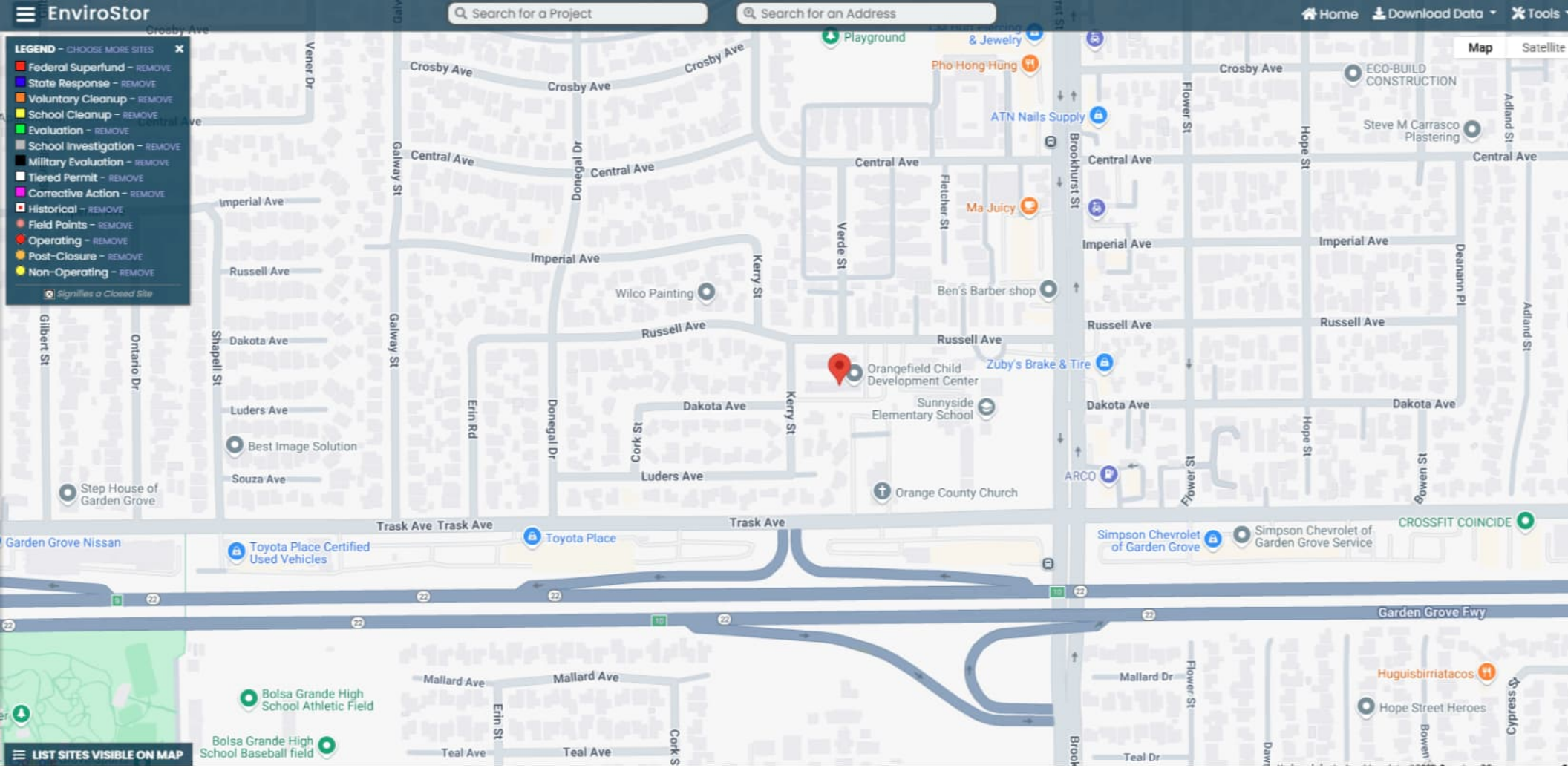
This is a building permit when properly filled out, signed and validated, and is subject to expiration if work thereunder is suspended for 180 days.

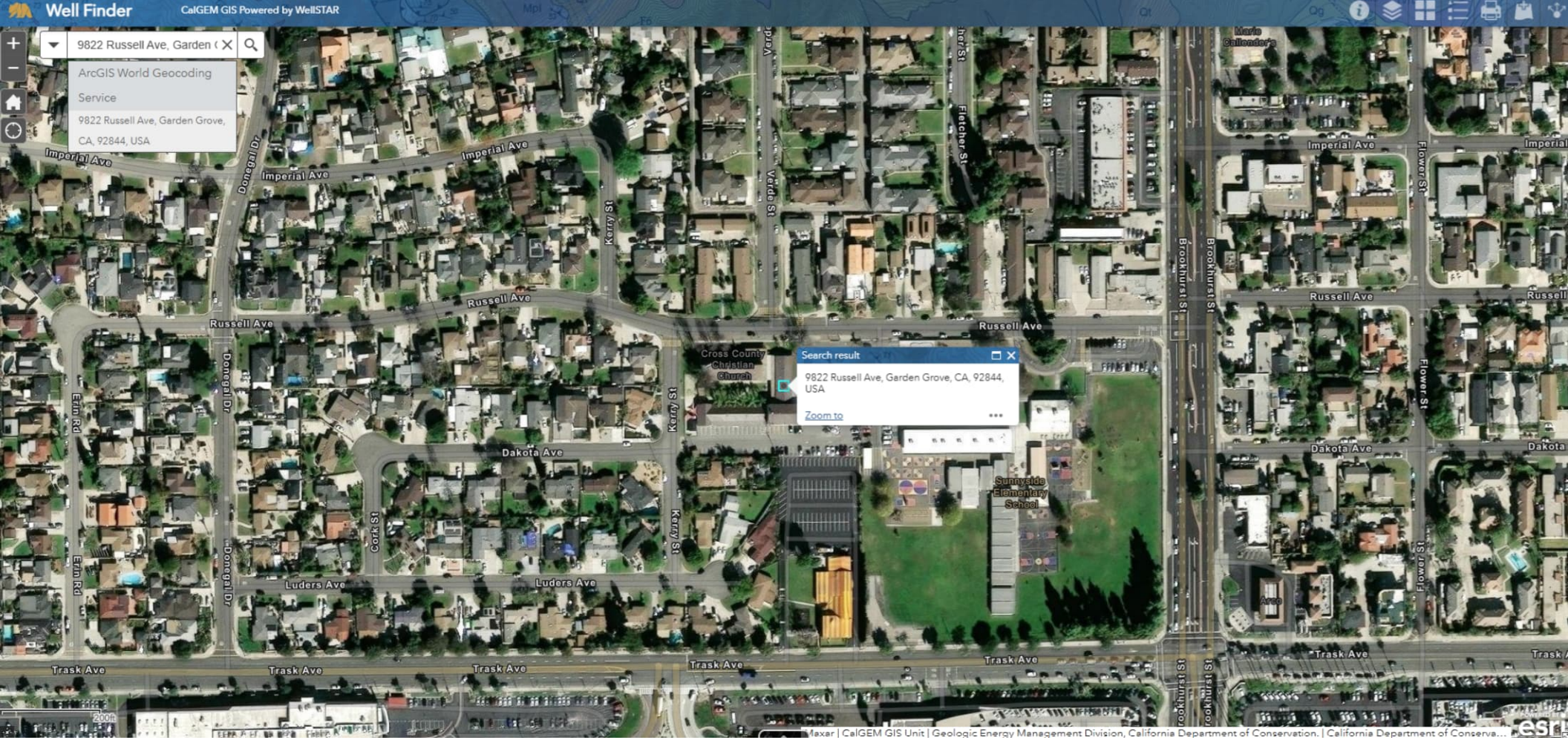
EXPIRED

Permit Type: BLDG

ORIGINAL


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Contact Us
Map
Satellite
Night Mode
Playground
Crosby Ave
Central Ave
Imperial Ave
Russell Ave
Dakota Ave
Luders Ave
Souza Ave
Trask Ave
Mallard Ave
Teal Ave
Mallard Dr
Teal Dr
Garden Grove Fwy
Sunnyside Elementary School
Vener Dr
Gilbert St
Ontario Dr
Shapell St
Galway St
Erin Rd
Donegal Dr
Cork St
Kerry St
Verde St
Fletcher St
Brookhurst St
Flower St
Hope St
Bowen St
Adland St
Deanann Pl
Cypress St
Erin St
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Signifies a Closed Site
ACTIVE MAP COVERAGES:
Military Bases - REMOVE
LIST SITES VISIBLE ON MAP
Keyboard shortcuts
Map data ©2025 Google
50 m


EnviroStor
Search for a Project
Search for an Address
Home
Download Data
Tools
Map
Satellite
LEGEND – CHOOSE MORE SITES
Federal Superfund – REMOVE
State Response – REMOVE
Voluntary Cleanup – REMOVE
School Cleanup – REMOVE
Evaluation – REMOVE
School Investigation – REMOVE
Military Evaluation – REMOVE
Tiered Permit – REMOVE
Corrective Action – REMOVE
Historical – REMOVE
Field Points – REMOVE
Operating – REMOVE
Post-Closure – REMOVE
Non-Operating – REMOVE
Signifies a Closed Site
LIST SITES VISIBLE ON MAP
Crosby Ave
Central Ave
Imperial Ave
Russell Ave
Dakota Ave
Luders Ave
Souza Ave
Trask Ave
Mallard Ave
Teal Ave
Teal Dr
Vener Dr
Galway St
Donegal Dr
Gilbert St
Ontario Dr
Shapell St
Erin Rd
Cork St
Kerry St
Verde St
Fletcher St
Brookhurst St
Flower St
Hope St
Adland St
Deanann Pl
Bowen St
Cypress St
Playground
& Jewelry
Pho Hong Hung
ATN Nails Supply
ECO-BUILD CONSTRUCTION
Steve M Carrasco Plastering
Ma Juicy
Wilco Painting
Ben's Barber shop
Orangefield Child Development Center
Zuby's Brake & Tire
Sunnyside Elementary School
Best Image Solution
Step House of Garden Grove
ARCO
Orange County Church
Garden Grove Nissan
Toyota Place Certified Used Vehicles
Toyota Place
Simpson Chevrolet of Garden Grove
Simpson Chevrolet of Garden Grove Service
CROSSFIT COINCIDE
Garden Grove Fwy
Bolsa Grande High School Athletic Field
Bolsa Grande High School Baseball field
Huguisbirriatacos
Hope Street Heroes


Well Finder
CalGEM GIS Powered by WellSTAR
9822 Russell Ave, Garden (
ArcGIS World Geocoding Service
9822 Russell Ave, Garden Grove, CA, 92844, USA
Search result
9822 Russell Ave, Garden Grove, CA, 92844, USA
Zoom to
Imperial Ave
Russell Ave
Dakota Ave
Luders Ave
Trask Ave
Donegal Dr
Erin Rd
Cork St
Kerry St
Verde St
Fletcher St
Brookhurst St
Flower St
Cross County Christian Church
Sunnyside Elementary School
esri

CalEPA CalEPA Regulated Site Portal

9822 russell

10 sites found

Did you mean: **9822 Russell Ave, Garden Grove, CA 92844**

MOBIL #18-GOE
13521 BROOKHURST
GARDEN GROVE CA 92643

Garden Grove Hyundai
9898 TRASK AVE
GARDEN GROVE CA 92844

TOYOTA PLACE
9670 TRASK AVE
GARDEN GROVE CA 92844

EXXON #7-0833
13502 BROOKHURST
GARDEN GROVE CA 92643

GAMMO CORP
13482 BROOKHURST ST
GARDEN GROVE CA 92843

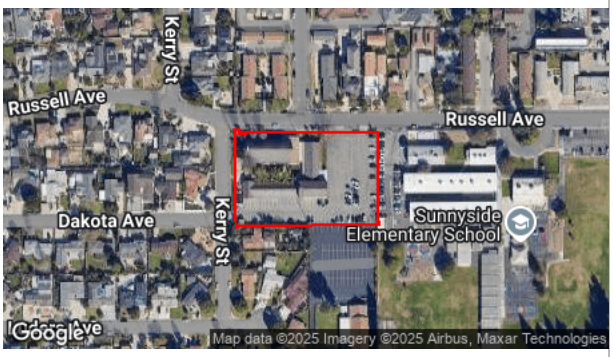


Claude Parrish, Orange County Assessor

Property Address: **9822 RUSSELL AVE GARDEN GROVE CA 92844-2429**

General Information

Parcel # (APN):	**098-081-19** Download Assessor Map
Owner:	Available
Mailing Address:	**9822 RUSSELL AVE GARDEN GROVE CA 92844**
Legal Description:	**S TWP 5 RGE 10 SEC 6 SEC 6 T 5 R 10 S 226 FT N 256 FT E 5 AC SW1/4**
Use Type:	**COMMERCIAL**
Tax Rate Area:	**018-032**



Detail Report $14.95 Learn More

Assessment

Total Value:	**$3,215,491**	Year Assd:	**2024**
Land:	**$2,639,390**	Zoning:	
Structures:	**$576,101**	Use Code:	Available
Other:		Census Tract:	Available
% Improved:	Available	Price/SqFt:	
Exempt Amt:	**$3,215,491**		
Exempt Type:	**N**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	**02/28/2006**	Available		Available
Document Number:	**00136242**	Available		Available
Document Type:	Available	Available		
Transfer Amount:	**$2,400,000**			
Seller (Grantor):	Available			

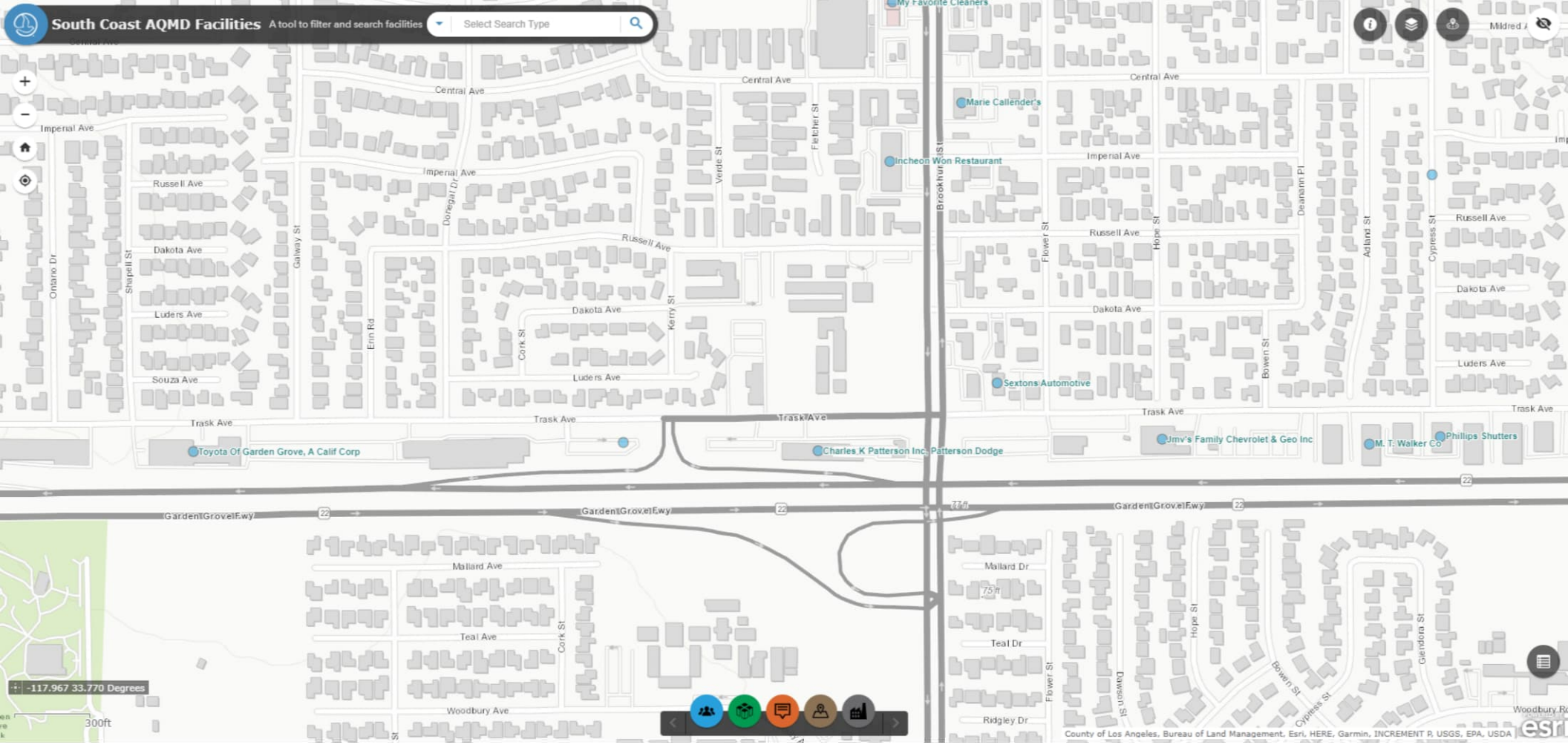
Property Characteristics

Bedrooms:		Fireplace:		Units:	
Baths (Full):		A/C:		Stories:	
Baths (Half):		Heating:		Quality:	
Total Rooms:		Pool:		Building Class:	
Bldg/Liv Area:		Park Type:		Condition:	
Lot Acres:	**1.806**	Spaces:		Site Influence:	
Lot SqFt:	**78,710**	Garage SqFt:		Timber Preserve:	
Year Built:				Ag Preserve:	
Effective Year:					

**The information provided here is deemed reliable, but is not guaranteed.

Additional reports on this property

© 2025 **ParcelQuest** | www.parcelquest.com | Privacy Policy | Refund Policy | User Agreement | Usage Limits


South Coast AQMD Facilities
A tool to filter and search facilities
Select Search Type
My Favorite Cleaners
Central Ave
Imperial Ave
Marie Callender's
Incheon Won Restaurant
Russell Ave
Dakota Ave
Luders Ave
Souza Ave
Trask Ave
Sextons Automotive
Toyota Of Garden Grove, A Calif Corp
Charles K Patterson Inc, Patterson Dodge
Jmv's Family Chevrolet & Geo Inc
M. T. Walker Co
Phillips Shutters
Garden Grove Fwy
Mallard Ave
Mallard Dr
Teal Ave
Teal Dr
Woodbury Ave
Ridgley Dr
Brookhurst St
Flower St
Hope St
Bowen St
Cypress St
Adland St
Deanann Pl
Dawson St
Giendora St
Verde St
Fletcher St
Kerry St
Cork St
Erin Rd
Galway St
Shapell St
Ontario Dr
Doregat Dr
-117.967 33.770 Degrees
300ft
County of Los Angeles, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

Hazardous Waste Tracking System

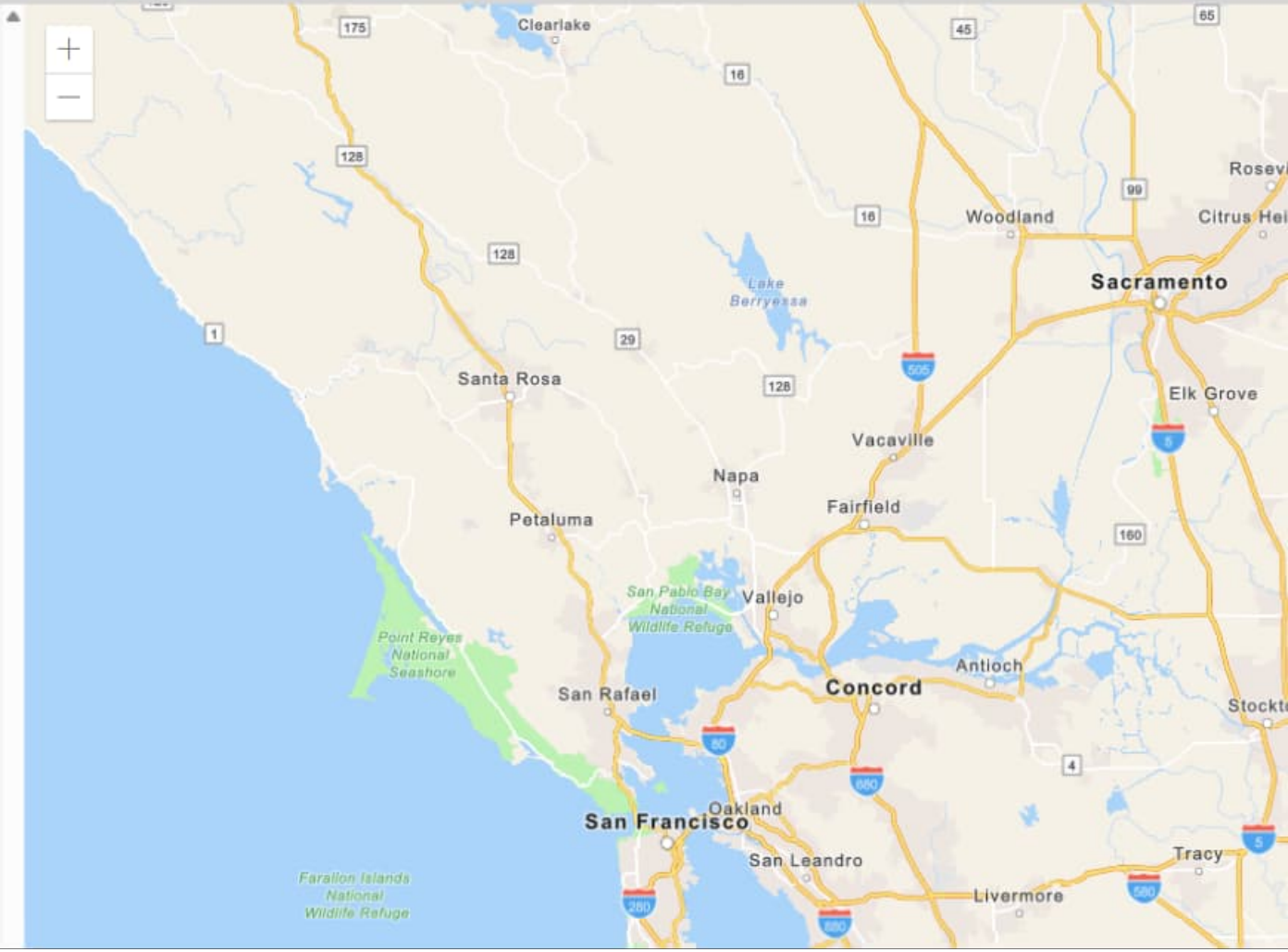
Handler Search | Reports | ID Number | Log In

Search by... | Enter a Handler Name or ID Number

Filters | Advanced Search

Physical Address | 9822 russell | garden grove | Zip Code... | County... | Handler... | Status... | Category... | ID Type... | Update | Clear

No Results Found.



NOTES TO USERS

p is for use in administering the National Flood Insurance Program. It t necessarily identify all areas subject to flooding, particularly from local sources of small size. The **community map repository** should be d for possible updated or additional flood hazard information.

in more detailed information in areas where **Base Flood Elevations** and/or **floodways** have been determined, users are encouraged to consult d Profiles and Floodway Data and/or Summary of Stillwater Elevations ontained within the Flood Insurance Study (FIS) report that accompanies M. Users should be aware that BFEs shown on the FIRM represent l whole-foot elevations. These BFEs are intended for flood insurance urposes only and should not be used as the sole source of flood n information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of tion and/or floodplain management.

Base Flood Elevations shown on this map apply only landward of n American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should e that coastal flood elevations are also provided in the Summary of Elevations tables in the Flood Insurance Study report for this jurisdiction. s shown in the Summary of Stillwater Elevations tables should be used for ion and/or floodplain management purposes when they are higher than tions shown on this FIRM.

es of the **floodways** were computed at cross sections and interpolated cross sections. The floodways were based on hydraulic considerations rd to requirements of the National Flood Insurance Program. Floodway nd other pertinent floodway data are provided in the Flood Insurance port for this jurisdiction.

areas not in Special Flood Hazard Areas may be protected by **flood structures**. Refer to Section 2.4 "Flood Protection Measures" of the surance Study report for information on flood control structures for this n.

jection used in the preparation of this map was Universal Transverse (UTM) Zone 11. The **horizontal datum** was NAD 83, GRS80 spheroid. es in datum, spheroid, projection or UTM zones used in the production of r adjacent jurisdictions may result in slight positional differences in map across jurisdiction boundaries. These differences do not affect the of this FIRM.

vations on this map are referenced to the North American Vertical Datum These flood elevations must be compared to structure and ground s referenced to the same **vertical datum**. For information regarding on between the National Geodetic Vertical Datum of 1929 and the merican Vertical Datum of 1988, visit the National Geodetic Survey at http://www.ngs.noaa.gov or contact the National Geodetic Survey at ing address:

rmation Services
/NGS12
Geodetic Survey
#9202
t-West Highway
ring, Maryland 20910-3282
3-3242

n current elevation, description, and/or location information for **bench** shown on this map, please contact the Information Services Branch National Geodetic Survey at **(301) 713-3242**, or visit its website at w.ngs.noaa.gov.

ap information shown on this FIRM was derived from the National e Imagery Program, dated 2005.

o reflects more detailed and up-to-date **stream channel configurations** se shown on the previous FIRM for this jurisdiction. The floodplains and s that were transferred from the previous FIRM may have been adjusted rm to these new stream channel configurations. As a result, the Flood and Floodway Data tables in the Flood Insurance Study Report (which authoritative hydraulic data) may reflect stream channel distances that n what is shown on this map.

te limits shown on this map are based on the best data available at the ublication. Because changes due to annexations or de-annexations may urred after this map was published, map users should contact appropriate ty officials to verify current corporate limit locations.

efer to the separately printed **Map Index** for an overview map of the howing the layout of map panels; community map repository addresses; sting of Communities table containing National Flood Insurance Program r each community as well as a listing of the panels on which each ty is located.

the **FEMA Map Service Center** at 1-800-358-9616 for information on products associated with this FIRM. Available products may include y issued Letters of Map Change, a Flood Insurance Study report, and/or rsions of this map. The FEMA Map Service Center may also be reached 1-800-358-9620 and its website at http://msc.fema.gov.

ve **questions about this map** or questions concerning the National Flood e Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDA BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that ha chance of being equaled or exceeded in any given year. The Special Flood Hazard Are area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water- elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); depths determined. For areas of alluvial fan flooding, velociti determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual flood by a flood control system that was subsequently decertified. indicates that the former flood control system is being restored to protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Feder protection system under construction; no Base Flood El determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Bas Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be k of encroachment so that the 1% annual chance flood can be carried without substantial in in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flo average depths of less than 1 foot or with drainage areas les 1 square mile; and areas protected by levees from 1% annual chanc

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Area

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zone boundary dividing Special Flood Hazard Areas of differe Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; e in feet*

* Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North Ame Datum of 1983 (NAD 83), Western Hemisphere
3776000mN	1000-meter Universal Transverse Mercator grid values, zo NAD 1983 UTM Zone 11N
600000 FT	5000-foot grid ticks: California State Plane coordinate system, zone VI (FIPSZONE 0406), Lambert Conformal C projection
DX5510 ×	Bench mark (see explanation in Notes to Users section o FIRM panel)
●M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 15, 1989

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
February 5, 1992 - November 3, 1993 - January 3, 1997 - February 18, 2004 - December 3, 2
for description of revisions, see Notice to Users page in the Flood Insurance Study report.

For community map revision history prior to countywide mapping, refer to the Comm Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your In agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0139J

FIRM

FLOOD INSURANCE RATE

ORANGE COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 139 OF 539

(SEE MAP INDEX FOR FIRM PANEL LA

CONTAINS:

COMMUNITY	NUMBER	PANEL
GARDEN GROVE, CITY OF	060220	0139
SANTA ANA, CITY OF	060232	0139
WESTMINSTER, CITY OF	060237	0139

Notice to User: The **Map Number** shown below used when placing map orders; the **Communit** shown above should be used on insurance applicat subject community

MAP NU
06059C

MAP RE
DECEMBER

Federal Emergency Management

Case Closure Summary
Leaking Underground Fuel Tank Program

Date: **February 28, 2005**

I. Agency Information

Agency Name: **Orange County Health Care Agency**	Address: **2009 E. Edinger Avenue**
City/State/Zip: **Santa Ana , CA 92705**	Phone: **(714) 433-6255**
Responsible staff person: **Steven A. Speer**	Title: **Hazardous Waste Specialist**

II. Case Information

Site Facility Name: **ARCO Facility #0629**				
Site Facility address: **13482 Brookhurst Street, Garden Grove, CA 92843**				
RB LUSTIS Case No. 083002773T		Local Case No.		LOP Case No: 95UT62
URF filing date: **9/28/95**		SWEEPS No.		
Responsible Parties		Addresses		Phone Numbers
Darrell Fah		**ARCO Products Company**		**(714) 378-5105**
		P.O. Box 5077		
		Buena Park, CA 90622-5077		
Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	6000	gasoline	removed	10/5/95
2	6000	gasoline	removed	10/5/95
3	6000	gasoline	removed	10/5/95
4	6000	gasoline	removed	10/5/95

III. Release and Site Characterization Information

Cause and type of release: **Unknown**			
Site characterization complete **Yes**		Date approved by oversight agency: **October 25, 2000**	
Monitoring Wells Installed? **Yes**	Number: **9**	Proper screened interval? **Yes**	
Highest GW depth BGS: **12.48 feet**		Lowest depth: **22.84 feet**	Flow direction: **South**
Most Sensitive Current Use: **Municipal and domestic supply**			
Are drinking water wells affected? **No**		Aquifer name: **NA**	
Is surface water affected? **No**		Nearest/affected SW name: **NA**	
Off-site beneficial use impacts (addresses/locations): **NA**			
Report(s) on file? **Yes**		Where is report(s) filed? **OCHCA**	
Treatment and Disposal of Affected Material			
Material	Amount (include Units)	Action (Treatment or Disposal/Destination)	Date

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Case #: 95UT62
Date: February 28, 2005

Tank	(4) 6000 gallon	L.A. Industrial Services, Inc. Los Angeles, CA	10/5/95
Piping	Unknown	Removed	10/5/95
Soil	108 tons	Bradley Landfill Tujunga, CA	10/5/95
Rinsate	800 gallons	Demeno-Kerdoon Compton, CA	10/95
Groundwater	NA		
Product	NA		

IV. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gasoline)	12,000	290	81	25.0	MTBE	0.056	0.056	10.0	0.027
Benzene	8.8	1.4	5.7	0.15	TBA	<5.0	<5.0	0.84	<0.25
Toluene	250	7.4	22	0.14	ETBE	<0.25	<0.25	ND<50	<0.005
Ethylbenzene	310	5.1	5.9	3.5	TAME	<0.25	<0.25	ND<50	<0.005
Xylene	2000	24	21	4.5	DIPE	<0.25	<0.25	ND<50	<0.005

(Comments)

The case was opened in October 1995 with the removal of four 6000 gallon gasoline Underground Storage Tanks (UST). The soil samples that were obtained from beneath the eastern and southern dispenser islands and the two southernmost USTs were found to be contaminated with petroleum hydrocarbons. The most contaminated soil sample contained: Total Petroleum Hydrocarbons - gasoline range (TPHg) at a concentration of 12,000 ppm, benzene at a concentration of 8.8 ppm, toluene at a concentration of 250 ppm, ethylbenzene at a concentration of 310 ppm, and xylene at a concentration of 2000 ppm. These concentrations are listed in the above Maximum Documented Contaminant Concentrations Table as the "before" values for soil.

Prior to the UST removal, ARCO performed a Preliminary Site Assessment that involved the installation of two soil borings and one monitoring well. Soil boring B-1 was placed in the tank pit for the new USTs. This boring was found to be contaminated with benzene at a concentration of 2.4 ppm. Non-aqueous Phase Liquid (NAPL) was found in the 20 foot sample. This was the most contaminated sample from the boring. Unfortunately, a deeper soil sample was not obtained at that time.

In March, 1996 four additional monitoring wells were placed on the site. These monitoring wells completed a network of on-site monitoring wells that defined the groundwater contaminant plume to the west, east, and south of the site. Soil samples from these four additional wells were found to be "non-detect" for TPH-g, benzene, toluene, ethylbenzene, and xylene.

Offsite assessment was performed in December, 1996. Monitoring well MW-6 was installed across Brookhurst Street, in the westbound right hand lane of Trask Avenue. Soil samples from the boring for MW-6 were found to contain only non-detectable concentrations of petroleum hydrocarbons.

(continued)

(Additional comments, etc.)

Initially monitoring well MW-4, which is located at the midpoint of the line between the existing UST pit and the western dispenser island, was the most contaminated well on the site. The concentrations of petroleum hydrocarbons, that were found in the first groundwater sample from MW-4, were as follows: TPHg at a concentration of 81,000 ppb, benzene at a concentration of 5700 ppb, toluene at a concentration of 22,000 ppb, ethylbenzene at a concentration of 4800 ppb, and xylene at a concentration of 21,000 ppb.

With the exception of the concentration of ethylbenzene, these concentrations are listed in the Maximum Documented Contaminant Concentrations table as the "before" values for groundwater. The maximum documented contaminant concentration for ethylbenzene, as listed in the above table, was found in a sample from MW-4 that was obtained in March, 1997.

The maximum documented contaminant concentration of methyl *tertiary*-butyl ether (MTBE) was found in a groundwater sample from monitoring well MW-1. Using EPA Method 8020 as the laboratory analysis method, a groundwater sample that was obtained in March, 1997, was found to have an MTBE concentration of 10,000 ppb. This value is recorded as the "before" value for groundwater in the above Maximum Documented Contaminant Concentrations table. It should be noted, however, that the sample that was obtained from this same well, during the following quarter, was analyzed using EPA Method 8260B. This sample was found to contain MTBE at a concentration of 2500 ppb. EPA Method 8260B is considered to be the more accurate analytical method.

Because MW-1 continued to produce groundwater samples with the highest concentration of MTBE on the site, ARCO submitted a workplan for additional off site (downgradient) groundwater assessment. Monitoring wells MW-7 and MW-8 were installed in May, 2000. The soil samples that were obtained from the borings for these wells were found to contain only nondetectable concentrations of petroleum hydrocarbons, except for the 20 - foot soil sample from the boring for MW-7. This sample contained MTBE at a concentration of only 56 ppb. The groundwater samples from these offsite wells never contained benzene, toluene, ethylbenzene, and xylene above detectable concentrations. MTBE was detected in one groundwater sample from MW-8, at a concentration of 120 ppb. MTBE was detected in three groundwater samples from MW-7. The highest detected concentration of MTBE in these groundwater samples was 64 ppb.

Tertiary-butyl alcohol (TBA) was only detected twice in groundwater samples from the site. The first sample was obtained from MW-1 in June, 2001. This sample was found to contain TBA at a concentration of 840 ppb. This concentration is listed in the Maximum Documented Contaminant Concentrations table as the "before" value for groundwater. The previous quarter a groundwater sample from MW-1 was found to contain nondetectable concentrations of TBA. Likewise, the sample that was obtained during the quarter following the sample, that contained TBA at a concentration of 840 ppb, was also found to contain nondetectable concentrations of TBA. The other groundwater sample that contained a detectable concentration of TBA was obtained from monitoring well MW-3, in March, 2002. All other groundwater samples from MW-3 did not contain detectable concentrations of TBA.

A final set of monitoring wells was installed in October 2003. Monitoring well MW-9 was located approximately in the location of boring C-5, which was the boring that contained the "maximum documented contaminant concentrations" in soil. The soil from the boring for MW-9 was found to contain benzene at a concentration of only 1.4 ppm, at 25 feet bgs. Likewise, the concentration of toluene was 7.4 ppm, the concentration of ethylbenzene was 5.1 ppm, and the concentration of xylene was 24 ppm. The concentration of fuel oxygenates was nondetectable in the same soil sample. The above concentrations are listed as the "after" concentrations for soil in the above "Maximum Documented Contaminant Concentrations table.

The final groundwater samples that were obtained from monitoring well MW-9 were found to contain TPHg at a concentration of 25,000 ppb, benzene at a concentration of 150 ppb, toluene at a

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Case: #95UT62
Date: February 28, 2005

(Additional comments, etc.)

concentration of 140 ppb, ethylbenzene at a concentration of 3500 ppb, xylenes at a concentration of 4500 ppb, and MTBE at a concentration of 27 ppb. The groundwater samples did not contain detectable concentrations of the other fuel oxygenates. The above concentrations represent the "after" concentrations for groundwater in the above Maximum Documented Contaminant Concentrations table.

A deep cluster well was placed in a casing that was within five feet of MW-9. This well was called MW-9d. The soil samples from MW-9d were found to be lightly contaminated with benzene, toluene, ethylbenzene, and xylene, at a depth of 30 feet bgs. No detectable concentrations of fuel oxygenates were found in any soil samples from MW-9d. Detectable concentrations of ethylbenzene and xylene, however, were found down to 40 feet bgs, and possibly deeper.

The groundwater sample from MW-9d was found to contain benzene at a concentration of 130 ppb, toluene at a concentration of 320 ppb, ethylbenzene at a concentration of 120 ppb, and xylene at a concentration of 660 ppb. No fuel oxygenates were found in the groundwater.

The presence of TBA in the groundwater at the site is questionable. Furthermore, no other gasoline oxygenates (with the exception of MTBE), have been found in the groundwater samples from the site. There has been no active remediation of the soil and/or groundwater at this site. The extent of the petroleum hydrocarbon contamination, however, is known and the concentrations of benzene, toluene, MTBE, and TBA in the groundwater has been below "low-risk" guideline concentrations for at least one year.

This site is a low risk site and therefore not a risk to public health and the environment for the following reasons: 1) the source of the contamination which was the former UST system was removed in 1995; 2) the maximum benzene concentration in groundwater has diminished, through natural attenuation, to levels below "low risk" guidelines; 3) the groundwater has been monitored for 31 quarters and the concentrations of dissolved-phase contaminants are now stable; 4) sampling for MTBE and has shown that the concentrations of MTBE in the groundwater has been reduced to low-risk levels by natural attenuation; 5) the site has been adequately assessed with the remaining groundwater contamination confined to an area of limited lateral extent around the western dispenser island; 6) it is doubtful that the site has been contaminated with TBA, because past groundwater samples with detectable concentrations were both preceded and followed by groundwater samples without detectable concentrations; 7) the closest downgradient production drinking water well is located over 4000 feet from the site and is not likely to be impacted by the contaminant plume.

V. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site Management requirements: Soil contamination remains. Should future site activity disturb this soil, it should be handled per current regulations.		
Should corrective action be reviewed if land use changes? Yes, a health risk assessment should be conducted.		
Monitoring Wells Decommissioned: NA	Number Decommissioned: NA	Number Retained: NA
List enforcement actions taken: None		
List enforcement actions rescinded: None		

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Case: #95UT62
Date: September 21, 2005

VI. Local Agency Representative Data

Name: Steven A. Speer, Ph.D.	Title: Hazardous Waste Specialist	
Steven A. Speer, Ph.D.	Signature: Kenneth K. Williams	Date: 9/21/05

VII. RWQCB Notification

Date Submitted to RB:	RB Response: Concur W/Closure	
RWQCB Staff Name: Valeric Jahn	Title: Environmental Scientist	
Signature:		Date:
RWQCB Supervisor Name: Ken Williams	Title: Chief Pollutant Investigation Section	
Signature: Kenneth K. Williams		Date: 10/18/05

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



GARDEN GROVE

Presented by
City of Garden Grove

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información importante sobre su agua potable. Traducirlo, o hablar con alguien que lo entienda.

이 보고서에는 식수에 관한 중요한 정보가 포함되어 있습니다. 번역해 보세요, 아니면 이해해주는 사람이랑 얘기해봐

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Dịch nó, hoặc nói chuyện với người hiểu nó

Your 2025 Water Quality Report

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. This year's report covers 2024 drinking water quality testing and reporting. The City of Garden Grove Water Services Division vigilantly safeguards its water supply, and as in years past, the water delivered to your home meets the quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards.

In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have drinking water standards. For example, the Orange County Water District (OCWD), which manages the groundwater basin, and the Metropolitan Water District of Southern California (MWDSC), which supplies imported, treated surface water to the City, test for unregulated chemicals in our water supply. Unregulated chemical monitoring helps U.S. EPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals to protect public health.

Through drinking water quality testing programs carried out by OCWD for groundwater, MWDSC for treated surface water, and the City for the water distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated constituents. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than a year old.

Source Water Assessment

Imported (MWDSC) Water Assessment

Every five years, MWDSC is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. The most recent surveys for MWDSC's source waters are the Colorado River Watershed Sanitary Survey—2020 Update and the State Water Project Watershed Sanitary Survey—2021 Update. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. U.S. EPA also requires MWDSC to complete a source water assessment (SWA) that uses information collected in the watershed sanitary surveys. MWDSC completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. A copy of the most recent summary of the Watershed Sanitary Surveys or the SWA can be obtained by calling MWDSC at (800) CALL-MWD (800-225-5693).

Groundwater Assessment

An assessment of the drinking water sources for the City was completed in December 2002. The groundwater sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: known contaminant plumes, historic agricultural activities and application of fertilizers, and parks. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: confirmed leaking underground storage tanks, dry cleaners, gas stations, and photo processing/printing. A copy of the complete assessment is available at State Water Resources Control Board, Division of Drinking Water, 2 MacArthur Place, Suite 150, Santa Ana, CA 92707. You may request a summary of the assessment by contacting the City at (714) 741-5395.

Sources of Supply



Your drinking water is a blend of mostly groundwater from 11 wells in the Orange County groundwater basin and surface water imported by MWDSC. Imported water sources are the State Water Project from Northern California and the Colorado River Aqueduct. Your groundwater comes from a natural underground reservoir managed by the OCWD that stretches from the Prado Dam across the northwestern portion of Orange County, excluding the communities of Brea and La Habra, and stretching as far south as the El Toro Y.

Last year, as in years past, your tap water met all U.S. EPA and state drinking water health standards. The City vigilantly safeguards its water supplies, and once again, we are proud to report that our system has never violated a maximum contaminant level (MCL) or any other water quality standard. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to federal and state standards.

We Invite You to Learn More About Your Water's Quality

For information about this report, or your water quality in general, please contact the water quality staff at (714) 741-5395. Public Garden Grove City Council meetings are held on the second and fourth Tuesday of each month at 6:30 p.m. in Council Chambers at the Community Meeting Center, 11300 Stanford Avenue. Contact our city clerk's office, Garden Grove City Hall, 11222 Acacia Parkway, or call (714) 741-5040 for information about city council meetings. Please feel free to participate in these meetings

Quality Water is Our Priority

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different. Delivering high-quality drinking water to our customers is a scientific and engineering feat that requires considerable effort and talent to ensure the water is always there, always safe to drink. Because tap water is highly regulated by state and federal laws, water treatment and distribution operators must be licensed.

Our licensed water professionals have an understanding of a wide range of subjects, including mathematics, biology, chemistry, physics, and engineering. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind every drop.

About Lead in Tap Water

Lead can cause serious health effects in people of all ages, especially pregnant women, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Garden Grove is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute–accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact the Garden Grove water quality staff at (714) 741-5395. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead Service Line Inventory

Garden Grove has completed the lead service line initial inventory (LSLI) required by U.S. EPA's Lead and Copper Rule Revisions. The deadline for the LSLI was October 16, 2024. Through completing a historical records review and field investigations, Garden Grove has determined it has no lead or galvanized service lines requiring replacement in its distribution system. This includes any privately or customer-owned service lines. For more information, please visit https://ggcity.org/pw/water-quality.



2024 City of Garden Grove Drinking Water Quality

For more information about the health effects of the listed contaminants in the following tables, call the U.S. EPA hotline at (800) 426-4791.

2024 CITY OF GARDEN GROVE DISTRIBUTION SYSTEM WATER QUALITY

	MCL (MRDL/ MRDLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	7	ND - 28	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	12	ND - 26	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	0.77	0.08 - 2.8	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (color units)	15*	0.92	ND - 1	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	0.92	ND - 1	No	Erosion of Natural Deposits
Turbidity (ntu)	5*	0.15	ND - 0.32	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; thirty-three locations are tested each month for color, odor and turbidity. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

	ACTION LEVEL (AL)	PUBLIC HEALTH GOAL	90TH PERCENTILE VALUE	SITES EXCEEDING AL / NUMBER OF SITES	AL VIOLATION?	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	15	0.2	ND<5	0 / 50	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.11	0 / 50	No	Corrosion of Household Plumbing

Every three years, at least 50 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2022. Lead was detected above the reporting level in 1 sample, but did not exceed the lead Action Level. Copper was detected above the reporting level in 32 samples, but none of the samples exceeded the copper Action Level. A regulatory Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Drinking Water Definitions

What are water quality standards?

Drinking water standards established by U.S. EPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water.

The tables in this report show the following types of water quality standards:

- **Maximum contaminant level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- **Maximum residual disinfectant level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **Primary drinking water standard:** MCLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.
- **Regulatory action level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

What is a water quality goal?

In addition to mandatory water quality standards, U.S. EPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices.

The tables in this report include three types of water quality goals:

- **Maximum contaminant level goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by U.S. EPA.
- **Maximum residual disinfectant level goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Public health goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

How are contaminants measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L)
- Parts per billion (ppb) or micrograms per liter (µg/L)
- Parts per trillion (ppt) or nanograms per liter (ng/L)

2024 CITY OF GARDEN GROVE GROUNDWATER QUALITY

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	MOST RECENT SAMPLING DATE	TYPICAL SOURCE OF CONTAMINATION
Radiologicals							
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND - 4.8	No	2024	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	8.2	5.9 - 10	No	2024	Erosion of Natural Deposits
Inorganic Chemicals							
Arsenic (ppb)	10	0.004	ND	ND - 4.7	No	2024	Erosion of Natural Deposits
Barium (ppm)	1	2	ND	ND - 0.13	No	2024	Erosion of Natural Deposits
Chromium, Hexavalent (ppb)	10	0.02	1.3	0.19 - 2	No	2024	Erosion of Natural Deposits; Industrial Discharge
Fluoride (ppm)	2	1	0.45	0.4 - 0.51	No	2024	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	3.2	0.52 - 4.2	No	2024	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	3.2	0.52 - 4.2	No	2024	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	1	1.7	ND - 3.4	No	2024	Industrial Discharge
Secondary Standards*							
Chloride (ppm)	500*	n/a	72	26 - 116	No	2024	Erosion of Natural Deposits
Odor (threshold odor number)	3*	n/a	ND	ND - 1	No	2024	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	821	513 - 1,040	No	2024	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	113	59 - 144	No	2024	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	516	300 - 662	No	2024	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	ND	ND - 0.3	No	2024	Erosion of Natural Deposits
Unregulated Chemicals							
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	190	171 - 218	n/a	2024	Erosion of Natural Deposits
Boron (ppm)	NL = 1	n/a	0.1	ND - 0.25	n/a	2024	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	98	59 - 117	n/a	2024	Erosion of Natural Deposits
Hardness, total (grains per gallon)	Not Regulated	n/a	18	11 - 22	n/a	2024	Erosion of Natural Deposits
Hardness, total (ppm as CaCO3)	Not Regulated	n/a	316	189 - 374	n/a	2024	Erosion of Natural Deposits
Lithum (ppb)[1]	Not Regulated	n/a	ND	ND - 11	n/a	2024	Various Natural & Man-made Sources
Magnesium (ppm)	Not Regulated	n/a	18	10 - 21	n/a	2024	Erosion of Natural Deposits
Perfluorobutanoic acid (ppt)	Not Regulated	n/a	ND	ND - 15	n/a	2024	Industrial Discharge
Perfluorobutanoic acid (ppt)[1]	Not Regulated	n/a	ND	ND - 15	n/a	2024	Industrial Discharge
Perfluoro butane sulfonic acid (ppt)	NL = 500	n/a	ND	ND - 3.3	n/a	2024	Industrial Discharge
Perfluoro butane sulfonic acid (ppt)[1]	NL = 500	n/a	ND	ND - 2.7	n/a	2024	Industrial Discharge
Perfluoro hexane sulfonic acid (ppt)	NL = 3	n/a	3	ND - 11	n/a	2024	Industrial Discharge
Perfluoro hexane sulfonic acid (ppt)[1]	NL = 3	n/a	ND	ND - 9.6	n/a	2024	Industrial Discharge
Perfluorohexanoic acid (ppt)	Not Regulated	n/a	ND	ND - 8.1	n/a	2024	Industrial Discharge
Perfluorohexanoic acid (ppt)[1]	Not Regulated	n/a	ND	ND - 5.4	n/a	2024	Industrial Discharge
Perfluoro octane sulfonic acid (ppt)	NL = 6.5	1	4.7	ND - 18	n/a	2024	Industrial Discharge
Perfluoro octane sulfonic acid (ppt)[1]	NL = 6.5	1	4	ND - 19	n/a	2024	Industrial Discharge
Perfluoro octanoic acid (ppt)	NL = 5.1	0.007	ND	ND - 8.9	n/a	2024	Industrial Discharge
Perfluoro octanoic acid (ppt)[1]	NL = 5.1	0.007	ND	ND - 8.1	n/a	2024	Industrial Discharge
Perfluoropentanoic acid (ppt)	Not Regulated	n/a	3.7	ND - 9.8	n/a	2024	Industrial Discharge
Perfluoropentanoic acid (ppt)[1]	Not Regulated	n/a	2.9	ND - 8.6	n/a	2024	Industrial Discharge
pH (pH unit)	Not Regulated	n/a	7.9	7.7 - 8.1	n/a	2024	Acidity, hydrogen ions
Potassium (ppm)	Not Regulated	n/a	3.9	2.6 - 5.2	n/a	2024	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	53	35 - 89	n/a	2024	Erosion of Natural Deposits
Vanadium, Total (ppb)	NL = 50	n/a	1.9	ND - 3.8	n/a	2024	Erosion of Natural Deposits; Industrial Discharge

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts per trillion; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; NL = Notification Level; n/a = not applicable; MCL = Maximum Contaminant Level; PHG = California Public Health Goal; µmho/cm = micromho per centimeter; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

[1] Constituent is part of the Fifth Unregulated Contaminant Rule (UCMR 5)

2024 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TREATED SURFACE WATER

CONSTITUENT	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Radiologicals - Tested in 2023 and 2024						
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND - 5	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	4	ND - 5	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	1	ND - 3	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2024						
Aluminum (ppm)	1	0.6	ND	ND - 0.11	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.124	0.124	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	ND	ND - 1.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) treatment-related	2	1	0.7	0.6 - 0.8	No	Water Additive for Dental Health
Secondary Standards* - Tested in 2024						
Aluminum (ppb)	200*	600	ND	ND - 110	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	104	93 - 116	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	2	1 - 2	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	1	1	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	979	888 - 1,070	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	224	196 - 253	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	621	556 - 686	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals - Tested in 2024						
Alkalinity, total (ppm as CaCO3)	Not Regulated	n/a	114	105 - 123	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.14	0.14	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	58 - 78	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm as CaCO3)	Not Regulated	n/a	270	235 - 305	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	16	14 - 18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	26	22 - 29	n/a	Runoff or Leaching from Natural Deposits
pH (units)	Not Regulated	n/a	8.2	8.2	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.9	4.4 - 5.4	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	103	90 - 116	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.4	2 - 2.5	n/a	Various Natural and Man-made Sources

ppb = parts per billion; ppm = parts per million; pCi/L = picoCuries per liter; µmho/cm = micromhos per centimeter; ND = not detected; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal NL = Notification Level; n/a = not applicable; TT = treatment technique; * Chemical is regulated by a secondary standard.



METROPOLITAN WATER DISTRICT DIEMER FILTRATION PLANT	TREATMENT TECHNIQUE	TURBIDITY MEASUREMENTS	TT VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Turbidity - combined filter effluent				
1) Highest single turbidity measurement (NTU)	0.3	0.06	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT). A treatment technique is a required process intended to reduce the level of chemicals in drinking water that are difficult and sometimes impossible to measure directly. NTU = nephelometric turbidity units

UNREGULATED CONSTITUENTS REQUIRING MONITORING

CONSTITUENT	NL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	21	ND - 35	2023

NL = Notification Level

Drinking Water Contaminants



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

PFAS Advisory

Per- and polyfluoroalkyl substances (PFAS) are a group of human-made chemicals that have been used in various consumer products since the 1940s due to their resistance to heat, water, oils, and stains. These chemicals are prevalent in the environment and have been detected in water supplies nationwide. Studies suggest that exposure to certain PFAS may pose health risks. The U.S. EPA and DDW have established health-based advisories for PFAS. If PFAS levels exceed these guidelines, water agencies must notify their governing bodies and take necessary actions, such as removing affected sources from service or implementing treatment solutions.

To address PFAS contamination, water providers have conducted testing and taken proactive steps to ensure safe drinking water.

Regulatory actions: The U.S. EPA announced final National Primary Drinking Water Regulations for six PFAS in April 2024. Public water systems are required to monitor these substances, with full reporting and compliance expected by 2027.

For more details on PFAS regulations and water safety, visit:

- California State Water Resources Control Board, Division of Drinking Water: waterboards.ca.gov/pfas
- Orange County Water District: ocwd.com/what-we-do/water-quality/pfas
- U.S. EPA: epa.gov/pfas

Cross Connections

The SWRCB updated the Cross-Connection Control Policy Handbook (CCCPH) on July 1, 2024. More information about the City of Garden Grove's Cross-Connection Control (CCC) Plan is available at https://ggcity.org/pw/cross-connections-faqs.

GARDEN GROVE

City of Garden Grove, Water Services Division
(714) 741-5395 • https://ggcity.org/pw/water

Drinking Water Fluoridation

Fluoride has been added to U.S. drinking water supplies since 1945 to help prevent tooth decay. As of today, the majority of public water suppliers in the country, including the MWDSC, fluoridate their water. MWDSC began adding fluoride in December 2007, complying with all provisions of California's fluoridation system requirements. Fluoride levels in drinking water are regulated in California and limited to a maximum of 2 parts per million (ppm). Some local groundwater supplies naturally contain fluoride, but they are not supplemented with additional fluoride.

Additional Information

For more details on water fluoridation, please visit:

- **U.S. Centers for Disease Control and Prevention (CDC):** cdc.gov/fluoridation or (800) 232-4636
- **State Water Resources Control Board, Division of Drinking Water:** waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html
- **American Dental Association:** ada.org
- **American Water Works Association:** awwa.org

For specific inquiries about MWDSC's fluoridation program, please contact MWDSC directly at (800) 225-5693.

Cryptosporidium

Cryptosporidium is a microscopic organism that originates from animal and human waste and may be present in surface water. When ingested, it can cause diarrhea, fever, and other gastrointestinal symptoms. In 2024 the MWDSC tested for Cryptosporidium and did not detect its presence in any water after it had been treated. If Cryptosporidium is ever detected in drinking water, it is effectively removed through a combination of sedimentation, filtration, and disinfection.

The U.S. EPA and the Centers for Disease Control and Prevention (CDC) provide guidelines on how to reduce the risk of infection from Cryptosporidium and other microbial contaminants. For more information, contact the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or visit epa.gov/safewater.



APPENDIX C: REGULATORY DATABASE REPORT

DATABASE REPORT

Project Property:	*9822 Russell Avenue* *9822 Russell Avenue* *GARDEN GROVE CA 92844*
Project No:	*25-500978.1*
Report Type:	*Database Report*
Order No:	*25061300823*
Requested by:	*Partner Engineering and Science, Inc.*
Date Completed:	*June 16, 2025*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:		*9822 Russell Avenue* *9822 Russell Avenue GARDEN GROVE CA 92844*
Project No:		*25-500978.1*
Coordinates:		
	Latitude:	*33.7681234*
	Longitude:	*-117.9578273*
	UTM Northing:	*3,736,867.00*
	UTM Easting:	*411,313.04*
	UTM Zone:	*11S*
Elevation:		*74 FT*

Order Information:

Order No:	*25061300823*
Date Requested:	*June 13, 2025*
Requested by:	*Partner Engineering and Science, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*Smart CD Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	**2**	-	**2**
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	**2**	**3**	-	-	**5**
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	**11**	**18**	-	-	**29**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	0	0	0
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
WMUD	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
C&D DEBRIS RECY	Y	0.5	0	**2**	0	**1**	-	**3**
RECYCLING	Y	0.5	0	0	0	0	-	0
PROCESSORS	Y	0.5	0	0	0	0	-	0
CONTAINER RECY	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	**6**	**5**	-	**11**
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	**2**	-	-	**2**
UST CLOSURE	Y	0.5	0	0	**1**	0	-	**1**
HHSS	Y	0.25	0	0	**4**	-	-	**4**
UST SWEEPS	Y	0.25	0	**2**	**7**	-	-	**9**
AST	Y	0.25	0	**2**	0	-	-	**2**
AST SWRCB	Y	0.25	0	**1**	0	-	-	**1**
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	**3**	**6**	**1**	-	**10**
CERS TANK	Y	0.25	0	**2**	**2**	-	-	**4**
DELISTED CTNK	Y	0.25	0	0	0	-	-	0
HIST TANK	Y	0.25	0	0	**4**	-	-	**4**
LUR	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
CALSITES	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED CLEANUP	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County								
ICP ORANGE	Y	0.25	0	0	0	-	-	0
LOP ORANGE	Y	0.5	0	0	**7**	**5**	-	**12**
NPUT ORANGE	Y	0.5	0	0	0	0	-	0
UST ORANGE	Y	0.25	0	0	**4**	-	-	**4**
AST ORANGE	Y	0.25	0	**2**	0	-	-	**2**
UST CLP ANAHEIM	Y	0.5	0	0	0	0	-	0
UST ANAHEIM	Y	0.25	0	0	0	-	-	0
AST ANAHEIM	Y	0.25	0	0	0	-	-	0
Additional Environmental Records								
Federal								
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
PFAS GHG	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	**1**	-	-	**1**
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	0	-	-	-	0
HIST RISK	Y	0.125	0	0	-	-	-	0
State								
PFAS SAMPLING	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	**1**	-	-	**1**

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS GT CLEANUPS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0
PFAS INVEST	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
TOXIC PITS	Y	1	0	0	0	0	0	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	**1**	**1**
SCH	Y	1	0	0	0	0	0	0
CHMIRS	Y	PO	0	-	-	-	-	0
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	-	-	-	-	0
HAZ GEN	Y	PO	0	-	-	-	-	0
HAZ TSD	Y	0.5	0	0	0	0	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HW TRANSPORT	Y	0.125	0	0	-	-	-	0
WASTE TIRE	Y	PO	0	-	-	-	-	0
MEDICAL WASTE	Y	0.25	0	0	0	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	**2**	-	-	-	**2**
DELISTED HAZ	Y	0.5	0	0	0	0	-	0
GEOTRACKER	Y	0.125	0	0	-	-	-	0
MINE	Y	1	0	0	0	0	0	0
LIEN	Y	PO	0	-	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	0	**5**	-	-	**5**
CDL	Y	0.125	0	0	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County								
HW ORANGE	Y	0.125	0	**4**	-	-	-	**4**
Total:			***0***	***33***	***71***	***14***	***1***	***119***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	RCRA NON GEN	SUNNYSIDE ELEMENTARY SCHOOL	9972 RUSSELL AVE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAC003292523 | NO	ESE	0.06 / 309.08	-1	39
2	RCRA NON GEN	LARRY LOCKWOOD	13292 VERDE ST GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAC003099098 | NO	NNE	0.07 / 366.46	0	41
2	RCRA NON GEN	LARRY LOCKWOOD	13292 VERDE ST GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAC003114378 | NO	NNE	0.07 / 366.46	0	43
3	RCRA NON GEN	13282 VERDE ST, #3	13282 VERDE ST, #3 GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAC003232900 | NO	NNE	0.08 / 431.94	0	45
4	DELISTED TNK	GARDEN GROVE DODGE/SUBARU/HYUNDAI	9666 TRASK AVE GARDEN GROVE CA 92844	SW	0.09 / 476.68	-3	48
4	UST SWEEPS	QUALITY NISSAN	9666 TRASK AVE GARDEN GROVE CA ***C C | Status:*** A30-000-12923 | ACTIVE ***Tank ID:*** 000007, 000005	SW	0.09 / 476.68	-3	48
5	CERS HAZ	VUNG TAU AUTO REPAIR	13331 BROOKHURST ST C GARDEN GROVE CA 92843	ENE	0.09 / 494.13	2	48
6	CERS HAZ	QUOC AUTO REPAIR	13331 BROOKHURST ST #A GARDEN GROVE CA 92843	ENE	0.09 / 500.98	2	54
7	RCRA NON GEN	KHOI VU	9791 IMPERIAL AVE GARDEN GROVE CA 92844-2413 ***Handler ID | Recycler Activity?:*** CAC003060207 | NO	NNW	0.10 / 531.25	0	59
8	RCRA SQG	UNION DODGE	9898 TRASK AVE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAD982313199 | NO	SE	0.10 / 547.63	-2	61
8	DELISTED TNK	GARDEN GROVE MITSUBISHI	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	-2	63
8	AST ORANGE	Russell Westbrook Hyundai Of Garden Grove	9898 Trask Ave Garden Grove, Ca 92844-2800 CA ***Establishment ID:*** FA0054812	SE	0.10 / 547.63	-2	64

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	AST		9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	-2	64
8	HW ORANGE	Russell Westbrook Hyundai Of Garden Grove	9898 Trask Ave Garden Grove, Ca 92844-2800 Garden Grove CA 92844-2800	SE	0.10 / 547.63	-2	64
8	CERS TANK	Garden Grove Hyundai	9898 TRASK AVE GARDEN GROVE CA 92844 ***Site ID:*** 118782	SE	0.10 / 547.63	-2	64
8	RCRA NON GEN	DYNAMIC AUTO IMAGES	9898 TRASK AVENUE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAL000429991 | NO	SE	0.10 / 547.63	-2	73
8	RCRA NON GEN	YNOT6 II LLC DBA GARDEN GROVE HYUNDAI	9898 TRASK AVE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAL000428944 | NO	SE	0.10 / 547.63	-2	75
8	UST SWEEPS	GARDEN GROVE MITSUBISHI	9898 TRASK AVE GARDEN GROVE CA ***C C | Status:*** A30-000-6947 | ACTIVE ***Tank ID:*** 000001, 000002	SE	0.10 / 547.63	-2	78
8	C&D DEBRIS RECY	UNION CHRYSLER JEEP DODGE	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	-2	78
9	RCRA SQG	QUALITY NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAD982357949 | NO	SW	0.11 / 557.72	-3	78
9	DELISTED TNK	QUALITY NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	-3	80
9	AST ORANGE	Toyota Place	9670 Trask Ave Garden Grove, Ca 92844-2801 CA ***Establishment ID:*** FA0051444	SW	0.11 / 557.72	-3	81
9	AST		9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	-3	81
9	HW ORANGE	Toyota Place	9670 Trask Ave Garden Grove, Ca 92844-2801 Garden Grove CA 92844-2801	SW	0.11 / 557.72	-3	81
9	CERS TANK	TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844 ***Site ID:*** 178742	SW	0.11 / 557.72	-3	81

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
9	RCRA NON GEN	NOARUS TGG INC DBA TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844-2801 ***Handler ID*	*Recycler Activity?:*** CAL000330099 | NO	SW	0.11 / 557.72	-3	95
9	AST SWRCB	NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844-2801	SW	0.11 / 557.72	-3	97
9	C&D DEBRIS RECY	TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	-3	97
10	RCRA NON GEN	ROBERT KELLEY	13262 VERDE ST, UNIT 1 GARDEN GROVE CA 92884 ***Handler ID*	*Recycler Activity?:*** CAC003203540 | NO	N	0.11 / 559.27	0	97
11	RCRA NON GEN	LORI DUNHAM	9771 IMPERIAL AVE GARDEN GROVE CA 92844 ***Handler ID*	*Recycler Activity?:*** CAC003174431 | NO	NW	0.11 / 569.37	0	100
11	RCRA NON GEN	9771 IMPERIAL AVE	9771 IMPERIAL AVE GARDEN GROVE CA 92840-3434 ***Handler ID*	*Recycler Activity?:*** CAC003214811 | NO	NW	0.11 / 569.37	0	102
12	HW ORANGE	Vung Tau Auto Repair	13331 Brookhurst St Ste C Garden Grove, Ca 92843-7000 Garden Grove CA 92843-7000	ENE	0.12 / 649.42	1	104
12	HW ORANGE	Quoc Auto Repair	13331 Brookhurst St Ste A Garden Grove, Ca 92843-7000 Garden Grove CA 92843-7000	ENE	0.12 / 649.42	1	104
13	RCRA NON GEN	JANNIEN NGUYEN	9942 CENTRAL AVE, APT F GARDEN GROVE CA 92844 ***Handler ID*	*Recycler Activity?:*** CAC003271573 | NO	NE	0.14 / 722.41	2	104
14	RCRA SQG	BIG O TIRES	13388 BROOKHURST ST GARDEN GROVE CA 92841 ***Handler ID*	*Recycler Activity?:*** CAD981668973 | NO	E	0.15 / 775.47	1	107
14	RCRA NON GEN	HAS INC DBA ZUBYS BRAKES TIRES AND WHEELS	13388 BROOKHURST ST GARDEN GROVE CA 92843-3153 ***Handler ID*	*Recycler Activity?:*** CAL000313023 | NO	E	0.15 / 775.47	1	109
15	DELISTED TNK	MOBIL #18-G03E	13521 BROOKHURST ST # 18-G03E GARDEN GROVE CA 92843	ESE	0.15 / 782.79	-2	111
15	LUST	MOBIL #18-GOE	13521 BROOKHURST GARDEN GROVE CA 92643 ***Global ID*	*Status:*** T0605901769 |	ESE	0.15 / 782.79	-2	111

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
15	LOP ORANGE	Mobil #18-Goe	13521 Brookhurst St Garden Grove Ca 92643 CA ***Case ID:*** 94UT037 ***Closed Date:*** 3/7/1995	ESE	0.15 / 782.79	-2	113
15	UST SWEEPS	MOBIL #18-G03E	13521 BROOKHURST ST GARDEN GROVE CA ***C C	Status:*** A30-000-2129 | ACTIVE ***Tank ID:*** 000004, 000001, 000003, 000005	ESE	0.15 / 782.79	-2	114
16	RCRA SQG	BP WEST COAST PRODUCTS LLC NO 0629	13482 BROOKHURST ST GARDEN GROVE CA 92643 ***Handler ID | Recycler Activity?:*** CAR000174276 | NO	ESE	0.15 / 811.75	-1	115
16	UST ORANGE	Gammo Corporation	13482 Brookhurst St Garden Grove, Ca 92843-3119 Garden Grove CA ***FA No:*** FA0052965	ESE	0.15 / 811.75	-1	117
16	LUST	ARCO #629	13482 BROOKHURST GARDEN GROVE CA 92844 ***Global ID | Status:*** T0605901913 |	ESE	0.15 / 811.75	-1	117
16	HHSS	LIAQUAT ALI JUMANI	13482 BROOKHURST ST GARDEN GROVE CA 92643	ESE	0.15 / 811.75	-1	122
16	UST	GAMMO CORP	13482 BROOKHURST ST GARDEN GROVE CA 92843 ***Facility ID:*** FA0052965 ***Tank ID No. | Tank Status | Tank Closure Date:*** 3 | Confirmed/Updated Information | , 2 | Renewal Permit | , 1 | Renewal Permit | , 4 | Renewal Permit |	ESE	0.15 / 811.75	-1	122
16	EMISSIONS	GAMMO C30P30ATION	13482 BROOKHURST ST GARDEN GROVE CA 92843	ESE	0.15 / 811.75	-1	124
16	LOP ORANGE	Arco #629	13482 Brookhurst St Garden Grove Ca 92843-3119 CA ***Case ID:*** 95UT062 ***Closed Date:*** 11/17/2005	ESE	0.15 / 811.75	-1	124
16	CERS TANK	GAMMO CORP	13482 BROOKHURST ST GARDEN GROVE CA 92843 ***Site ID:*** 393660	ESE	0.15 / 811.75	-1	124
16	HIST TANK	LIAQUAT ALI JUMANI	13482 BROOKHURST ST. GARDEN GROVE CA	ESE	0.15 / 811.75	-1	145
16	EMISSIONS	GAMMO CORPORATION	13482 BROOKHURST ST GARDEN GROVE CA 92843	ESE	0.15 / 811.75	-1	146
16	RCRA NON GEN	GAMMO CORPORATION	13482 BROOKHURST ST GARDEN GROVE CA 92843-3119 ***Handler ID | Recycler Activity?:*** CAL000338171 | NO	ESE	0.15 / 811.75	-1	147

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
16	UST SWEEPS	ARCO #629	13482 BROOKHURST ST GARDEN GROVE CA ***C C	Status:*** A30-000-4348 | ACTIVE ***Tank ID:*** 000002, 000003, 000001, 000004	ESE	0.15 / 811.75	-1	149
17	DELISTED TNK	EXXON #7-0833	13502 BROOKHURST ST # 7-0833 GARDEN GROVE CA 92843	ESE	0.16 / 829.33	-2	150
17	LUST	EXXON #7-0833	13502 BROOKHURST GARDEN GROVE CA 92643 ***Global ID	Status:*** T0605970421 |	ESE	0.16 / 829.33	-2	150
17	HHSS	EXXON SERVICE STATION	13502 BROOKHURST GARDEN GROVE CA 92640	ESE	0.16 / 829.33	-2	156
17	LOP ORANGE	Exxon #7-0833	13502 Brookhurst St Garden Grove Ca 92643 CA ***Case ID:*** 92UT061 ***Closed Date:*** 2/7/1996	ESE	0.16 / 829.33	-2	156
17	HIST TANK	EXXON SERVICE STATION	13502 BROOKHURST GARDEN GROVE CA	ESE	0.16 / 829.33	-2	156
17	UST SWEEPS	EXXON #7-0833	13502 BROOKHURST ST GARDEN GROVE CA ***C C	Status:*** A30-000-2122 | ACTIVE ***Tank ID:*** 000004, 000003, 000001, 000005	ESE	0.16 / 829.33	-2	156
17	LOP ORANGE	Exxon #7-0833	13502 Brookhurst St Garden Grove Ca 92643 CA ***Case ID:*** 92UT125 ***Closed Date:*** 1/1/1992	ESE	0.16 / 829.33	-2	157
18	RCRA NON GEN	9705 IMPERIAL AVE	9705 IMPERIAL AVE GARDEN GROVE CA 92844 ***Handler ID | Recycler Activity?:*** CAC003239797 | NO	WNW	0.16 / 842.99	-2	157
19	RCRA NON GEN	GABRIEL RASCOL	10021 RUSSELL AVE GARDEN GROVE CA 92843 ***Handler ID | Recycler Activity?:*** CAC003121243 | NO	ENE	0.17 / 880.94	1	160
20	RCRA SQG	SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA 92843 ***Handler ID | Recycler Activity?:*** CAD982052995 | NO	ESE	0.18 / 939.28	0	162
20	DELISTED TNK	SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA 92843	ESE	0.18 / 939.28	0	164
20	UST SWEEPS	SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA ***C C	Status:*** A30-000-3140 | ACTIVE ***Tank ID:*** 000002	ESE	0.18 / 939.28	0	164

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
21	DELISTED TNK	KARAMAT STATION	13231 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.18 / 944.26	2	165
21	LUST	ANDYS UNOCAL	13231 BROOKHURST GARDEN GROVE CA 92844 ***Global ID*	*Status:*** T0605900976 |	NE	0.18 / 944.26	2	165
21	HHSS	A SAADAI UNION 76	13231 BROOKHURST ST. GARDEN GROVE CA 92643	NE	0.18 / 944.26	2	182
21	LOP ORANGE	Andys Unocal	13231 Brookhurst St Garden Grove Ca 92843-1009 CA ***Case ID:*** 89UT095 ***Closed Date:*** 5/26/2014	NE	0.18 / 944.26	2	182
21	HIST TANK	A. SAADI UNION 76	13231 BROOKHURST ST. GARDEN GROVE CA	NE	0.18 / 944.26	2	182
21	UST CLOSURE	FKA Andy's Unocal	13231 Brookhurst Ave., Garden Grove, CA 92643 CA ***Claim Case No:*** Claim No. 2776	NE	0.18 / 944.26	2	182
21	RCRA NON GEN	VN AUTO	13231 BROOKHURST ST GARDEN GROVE CA 92843 ***Handler ID*	*Recycler Activity?:*** CAP000186775 | NO	NE	0.18 / 944.26	2	183
22	UST SWEEPS	DON THIO	13231 S BROOKHURST ST GARDEN GROVE CA ***C C*	*Status:*** A30-000-13410 | ACTIVE ***Tank ID:*** 000004, 000002, 000001, 000003	NE	0.18 / 960.03	2	186
22	UST SWEEPS	KARAMAT STATION	13231 S BROOKHURST ST GARDEN GROVE CA ***C C*	*Status:*** A30-000-4349 | ACTIVE ***Tank ID:*** 000001, 000004, 000003, 000005	NE	0.18 / 960.03	2	187
23	RCRA NON GEN	DANG DANG	9672 IMPERIAL AVENUE GARDEN GROVE CA 92844 ***Handler ID*	*Recycler Activity?:*** CAC003205204 | NO	WNW	0.19 / 984.44	-1	188
24	RCRA NON GEN	MARIE CALLENDARS	13252 BROOKHURST STREET GARDEN GROVE CA 92843 ***Handler ID*	*Recycler Activity?:*** CAC003164178 | NO	ENE	0.19 / 986.51	3	190
24	RCRA NON GEN	13252 BROOKHURST ST	13252 BROOKHURST ST GARDEN GROVE CA 92843 ***Handler ID*	*Recycler Activity?:*** CAC003246861 | NO	ENE	0.19 / 986.51	3	192
25	RCRA NON GEN	9671 IMPERIAL AVE	9671 IMPERIAL AVE GARDEN GROVE CA 92844 ***Handler ID*	*Recycler Activity?:*** CAC003108729 | NO	WNW	0.19 / 1,015.19	-1	194
26	RCRA NON GEN	MEAALII LOLOGO	9642 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.21 / 1,106.38	-1	196

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Handler ID **|** ***Recycler Activity?:*** CAC003257686	NO			
26	RCRA NON GEN	MEAALII LOLOGO	9642 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.21 / 1,106.38	-1	199
			Handler ID **|** ***Recycler Activity?:*** CAC003257533	NO			
27	RCRA NON GEN	BOWERS COMPANIES	13222 BROOKHURST ST GARDEN GROVE CA 92840	NE	0.21 / 1,110.53	0	201
			Handler ID **|** ***Recycler Activity?:*** CAD028230811	NO			
27	DELISTED TNK	BOWERS CO	13222 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.21 / 1,110.53	0	203
27	LUST	BOWERS CO	13222 BROOKHURST GARDEN GROVE CA 92844	NE	0.21 / 1,110.53	0	204
			Global ID **|** ***Status:*** T0605900855				
27	LOP ORANGE	Bowers Co	13222 Brookhurst St Garden Grove Ca 92843-1010 CA ***Case ID:*** 88UT176 ***Closed Date:*** 4/19/2012	NE	0.21 / 1,110.53	0	218
28	RCRA NON GEN	ANA FIGUEROA	9651 IMPERIAL AVE. GARDEN GROVE CA 92844	WNW	0.21 / 1,133.87	-1	218
			Handler ID **|** ***Recycler Activity?:*** CAC003077198	NO			
29	DRYCLEANERS	MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA	NE	0.22 / 1,140.42	1	220
29	EMISSIONS	MY FAVORITE CLEANERS, SEONG HE	13197 BROOKHURST ST. GARDEN GROVE CA 92640	NE	0.22 / 1,140.42	1	220
29	RCRA NON GEN	MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA 92843-1009	NE	0.22 / 1,140.42	1	221
			Handler ID **|** ***Recycler Activity?:*** CAL000015627	NO			
29	FED DRYCLEANERS	MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.22 / 1,140.42	1	224
			FRS Facility ID: 110070442968				
30	DELISTED TNK	PRONTO MARKETING 312	13202 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	1	224
30	UST ORANGE	Garden Grove Shell	13202 Brookhurst St Garden Grove, Ca 92843-1010 Garden Grove CA ***FA No:*** FA0057500	NE	0.23 / 1,217.53	1	224
30	LUST	JET GAS STATION	13202 BROOKHURST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	1	224

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			***Global ID	Status:*** T0605900794 |			
30	HHSS	JET	13202 BROOKHURST GARDEN GROVE CA 92643	NE	0.23 / 1,217.53	1	239
30	UST	GARDEN GROVE SHELL	13202 Brookhurst St Garden Grove CA 92843 ***Facility ID:*** FA0057500 ***Tank ID No. | Tank Status | Tank Closure Date:*** 3 | Confirmed/Updated Information | , 1 | Confirmed/Updated Information | , 2 | Confirmed/Updated Information |	NE	0.23 / 1,217.53	1	239
30	LOP ORANGE	Jet Gas Station	13202 Brookhurst St Garden Grove Ca 92843-1010 CA ***Case ID:*** 88UT135 ***Closed Date:*** 4/18/2014	NE	0.23 / 1,217.53	1	241
30	CERS TANK	GARDEN GROVE SHELL	13202 BROOKHURST ST GARDEN GROVE CA 92843 ***Site ID:*** 366507	NE	0.23 / 1,217.53	1	241
30	HIST TANK	JET	13202 BROOKHURST GARDEN GROVE CA	NE	0.23 / 1,217.53	1	265
30	EMISSIONS	BR PETROLEUM INC	13202 BROOKHURST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	1	265
30	UST ORANGE	M & R STATION	13202 BROOKHURST GARDEN GROVE CA 92843 ***FA No:*** FA24722	NE	0.23 / 1,217.53	1	266
30	UST ORANGE	ULTRAMAR STATION	13202 BROOKHURST GARDEN GROVE CA 92843 ***FA No:*** FA24722	NE	0.23 / 1,217.53	1	266
30	RCRA NON GEN	GARDEN GROVE SHELL	13202 BROOKHURST GARDEN GROVE CA 92843 ***Handler ID | Recycler Activity?:*** CAL000453941 | NO	NE	0.23 / 1,217.53	1	266
30	UST SWEEPS	PRONTO MARKETING	13202 BROOKHURST ST GARDEN GROVE CA ***C C | Status:*** A30-000-4347 | ACTIVE ***Tank ID:*** 000002, 000003, 000001	NE	0.23 / 1,217.53	1	268
30	EMISSIONS	KORMEX MANAGEMENT & MARKETING, INC.	13202 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	1	269
31	RCRA NON GEN	PACIFIC COAST OIL CO	13169 J BROOKHURST ST GARDEN GROVE CA 92843 ***Handler ID | Recycler Activity?:*** CAD981428766 | NO	NE	0.24 / 1,263.24	1	269
32	RCRA NON GEN	DENTAL OFFICE LIEN HUONG	13161 BROOKHURST ST GARDEN GROVE CA 92843-0000	NE	0.24 / 1,281.70	1	272

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			**Handler ID	Recycler Activity?:** CAL000223611 | NO			
33	DELISTED TNK	ARCO #629	13482 BROOKHURST ST GARDEN GROVE CA 92843	E	0.25 / 1,321.03	2	274
34	LOP ORANGE	Ejax Water Systems	9911 Larson Ave Garden Grove Ca 92844-1657 CA **Case ID:** 89UT181 **Closed Date:** 12/14/1989	N	0.28 / 1,453.83	2	274
35	LUST	EJAX WATER SYSTEMS	9911 LARSON GARDEN GROVE CA 92644 **Global ID	Status:** T0605901020 |	N	0.28 / 1,454.05	2	274
36	LUST	COUNTY WIDE CHRYSLER/JEEP	10080 GARDEN GROVE GARDEN GROVE CA 92842 **Global ID	Status:** T0605918872 |	N	0.33 / 1,768.44	6	277
37	RCRA TSD	MARCOS LOPEZ	13632 DAWSON ST GARDEN GROVE CA 92843 **Handler ID	Recycler Activity?:** CAC003017595 | NO	ESE	0.35 / 1,870.77	-2	280
38	LOP ORANGE	County Wide Chrysler/Jeep	10080 Garden Grove Blvd Garden Grove Ca 92844-1694 CA **Case ID:** 99UT016 **Closed Date:** 2/12/2003	N	0.37 / 1,959.35	6	282
39	LUST	TOYOTA OF GARDEN GROVE	10081 GARDEN GROVE GARDEN GROVE CA 92641 **Global ID	Status:** T0605901533 |	N	0.43 / 2,266.02	7	283
39	LOP ORANGE	Toyota Of Garden Grove	10081 Garden Grove Blvd Garden Grove Ca 92844-1620 CA **Case ID:** 92UT026 **Closed Date:** 4/14/1992	N	0.43 / 2,266.02	7	285
39	C&D DEBRIS RECY	GARDEN GROVE KIA	10081 GARDEN GROVE BLVD GARDEN GROVE CA 92844	N	0.43 / 2,266.02	7	285
40	RCRA TSD	HOUSE OF HYBRIDS	9825 GARDEN GROVE BLVD GARDEN GROVE CA 92844 **Handler ID	Recycler Activity?:** CAL000444865 | YES	NNW	0.46 / 2,417.25	3	285
41	LUST	ORIENTAL LEASING	9672 GARDEN GROVE GARDEN GROVE CA 92641 **Global ID	Status:** T0605900714 |	NW	0.46 / 2,453.34	2	288
42	LUST	4 DAY TIRE STORE	13961 BROOKHURST GARDEN GROVE CA 92643 **Global ID	Status:** T0605901280 |	SSE	0.47 / 2,478.76	-4	290
43	LOP ORANGE	Oriental Leasing	9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA	NW	0.48 / 2,548.01	0	293

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Case ID: 88UT083 ***Closed Date:*** 8/7/2000				
43	LOP ORANGE	Orental Leasing	9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA ***Case ID:*** 88UT077 ***Closed Date:*** 1/1/1988	NW	0.48 / 2,548.01	0	293
44	INSP COMP ENF	VETERANS ED'S INC	10372 STANFORD AVENUE #S GARDEN GROVE CA 92840	NE	0.68 / 3,589.02	11	293

Executive Summary: Summary by Data Source

Standard

Federal

RCRA TSD - RCRA non-CORRACTS TSD Facilities

A search of the RCRA TSD database, dated Jan 6, 2025 has found that there are 2 RCRA TSD site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
HOUSE OF HYBRIDS	9825 GARDEN GROVE BLVD GARDEN GROVE CA 92844	NNW	0.46 / 2,417.25	40
	Handler ID **|** ***Recycler Activity?****: CAL000444865*	*YES*		

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
MARCOS LOPEZ	13632 DAWSON ST GARDEN GROVE CA 92843	ESE	0.35 / 1,870.77	37
	Handler ID **|** ***Recycler Activity?****: CAC003017595*	*NO*		

RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Jan 6, 2025 has found that there are 5 RCRA SQG site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
BIG O TIRES	13388 BROOKHURST ST GARDEN GROVE CA 92841	E	0.15 / 775.47	14
	Handler ID **|** ***Recycler Activity?****: CAD981668973*	*NO*		
SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA 92843	ESE	0.18 / 939.28	20
	Handler ID **|** ***Recycler Activity?****: CAD982052995*	*NO*		

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
UNION DODGE	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
	Handler ID **|** ***Recycler Activity?****: CAD982313199*	*NO*		
QUALITY NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	9
	Handler ID **|** ***Recycler Activity?****: CAD982357949*	*NO*		
BP WEST COAST PRODUCTS LLC NO 0629	13482 BROOKHURST ST GARDEN GROVE CA 92643	ESE	0.15 / 811.75	16
	Handler ID **|** ***Recycler Activity?****: CAR000174276*	*NO*		

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Jan 6, 2025 has found that there are 29 RCRA NON GEN site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LARRY LOCKWOOD	13292 VERDE ST GARDEN GROVE CA 92844	NNE	0.07 / 366.46	2
	***Handler ID	Recycler Activity?**: CAC003099098	NO*		
LARRY LOCKWOOD	13292 VERDE ST GARDEN GROVE CA 92844	NNE	0.07 / 366.46	2
	***Handler ID	Recycler Activity?**: CAC003114378	NO*		
13282 VERDE ST, #3	13282 VERDE ST, #3 GARDEN GROVE CA 92844	NNE	0.08 / 431.94	3
	***Handler ID	Recycler Activity?**: CAC003232900	NO*		
KHOI VU	9791 IMPERIAL AVE GARDEN GROVE CA 92844-2413	NNW	0.10 / 531.25	7
	***Handler ID	Recycler Activity?**: CAC003060207	NO*		
ROBERT KELLEY	13262 VERDE ST, UNIT 1 GARDEN GROVE CA 92884	N	0.11 / 559.27	10
	***Handler ID	Recycler Activity?**: CAC003203540	NO*		
LORI DUNHAM	9771 IMPERIAL AVE GARDEN GROVE CA 92844	NW	0.11 / 569.37	11
	***Handler ID	Recycler Activity?**: CAC003174431	NO*		
9771 IMPERIAL AVE	9771 IMPERIAL AVE GARDEN GROVE CA 92840-3434	NW	0.11 / 569.37	11
	***Handler ID	Recycler Activity?**: CAC003214811	NO*		
JANNIEN NGUYEN	9942 CENTRAL AVE, APT F GARDEN GROVE CA 92844	NE	0.14 / 722.41	13
	***Handler ID	Recycler Activity?**: CAC003271573	NO*		
HAS INC DBA ZUBYS BRAKES TIRES AND WHEELS	13388 BROOKHURST ST GARDEN GROVE CA 92843-3153	E	0.15 / 775.47	14
	***Handler ID	Recycler Activity?**: CAL000313023	NO*		
GABRIEL RASCOL	10021 RUSSELL AVE GARDEN GROVE CA 92843	ENE	0.17 / 880.94	19
	***Handler ID	Recycler Activity?**: CAC003121243	NO*		
VN AUTO	13231 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.18 / 944.26	21
	***Handler ID	Recycler Activity?**: CAP000186775	NO*		
MARIE CALLENDARS	13252 BROOKHURST STREET GARDEN GROVE CA 92843	ENE	0.19 / 986.51	24
	***Handler ID	Recycler Activity?**: CAC003164178	NO*		

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
13252 BROOKHURST ST	13252 BROOKHURST ST GARDEN GROVE CA 92843	ENE	0.19 / 986.51	24
	Handler ID* | *Recycler Activity?: *CAC003246861* | *NO*			
BOWERS COMPANIES	13222 BROOKHURST ST GARDEN GROVE CA 92840	NE	0.21 / 1,110.53	27
	Handler ID* | *Recycler Activity?: *CAD028230811* | *NO*			
MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA 92843-1009	NE	0.22 / 1,140.42	29
	Handler ID* | *Recycler Activity?: *CAL000015627* | *NO*			
GARDEN GROVE SHELL	13202 BROOKHURST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	30
	Handler ID* | *Recycler Activity?: *CAL000453941* | *NO*			
PACIFIC COAST OIL CO	13169 J BROOKHURST ST GARDEN GROVE CA 92843	NE	0.24 / 1,263.24	31
	Handler ID* | *Recycler Activity?: *CAD981428766* | *NO*			
DENTAL OFFICE LIEN HUONG	13161 BROOKHURST ST GARDEN GROVE CA 92843-0000	NE	0.24 / 1,281.70	32
	Handler ID* | *Recycler Activity?: *CAL000223611* | *NO*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
SUNNYSIDE ELEMENTARY SCHOOL	9972 RUSSELL AVE GARDEN GROVE CA 92844	ESE	0.06 / 309.08	1
	Handler ID* | *Recycler Activity?: *CAC003292523* | *NO*			
DYNAMIC AUTO IMAGES	9898 TRASK AVENUE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
	Handler ID* | *Recycler Activity?: *CAL000429991* | *NO*			
YNOT6 II LLC DBA GARDEN GROVE HYUNDAI	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
	Handler ID* | *Recycler Activity?: *CAL000428944* | *NO*			
NOARUS TGG INC DBA TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844-2801	SW	0.11 / 557.72	9
	Handler ID* | *Recycler Activity?: *CAL000330099* | *NO*			
GAMMO CORPORATION	13482 BROOKHURST ST GARDEN GROVE CA 92843-3119	ESE	0.15 / 811.75	16
	Handler ID* | *Recycler Activity?: *CAL000338171* | *NO*			
9705 IMPERIAL AVE	9705 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.16 / 842.99	18
	Handler ID* | *Recycler Activity?: *CAC003239797* | *NO*			
DANG DANG	9672 IMPERIAL AVENUE GARDEN GROVE CA 92844	WNW	0.19 / 984.44	23

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	Handler ID* | *Recycler Activity?: *CAC003205204* | *NO*			
9671 IMPERIAL AVE	9671 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.19 / 1,015.19	25
	Handler ID* | *Recycler Activity?: *CAC003108729* | *NO*			
MEAALII LOLOGO	9642 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.21 / 1,106.38	26
	Handler ID* | *Recycler Activity?: *CAC003257686* | *NO*			
MEAALII LOLOGO	9642 IMPERIAL AVE GARDEN GROVE CA 92844	WNW	0.21 / 1,106.38	26
	Handler ID* | *Recycler Activity?: *CAC003257533* | *NO*			
ANA FIGUEROA	9651 IMPERIAL AVE. GARDEN GROVE CA 92844	WNW	0.21 / 1,133.87	28
	Handler ID* | *Recycler Activity?: *CAC003077198* | *NO*			

State

C&D DEBRIS RECY - Construction and Demolition Debris Recyclers

A search of the C&D DEBRIS RECY database, dated Jun 20, 2018 has found that there are 3 C&D DEBRIS RECY site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GARDEN GROVE KIA	10081 GARDEN GROVE BLVD GARDEN GROVE CA 92844	N	0.43 / 2,266.02	39

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
UNION CHRYSLER JEEP DODGE	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	9

LUST - Leaking Underground Fuel Tank Reports

A search of the LUST database, dated Apr 4, 2025 has found that there are 11 LUST site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANDYS UNOCAL	13231 BROOKHURST GARDEN GROVE CA 92844	NE	0.18 / 944.26	21
	Global ID* | *Status: *T0605900976* |			

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
BOWERS CO	13222 BROOKHURST GARDEN GROVE CA 92844 ***Global ID* | *Status***: *T0605900855* |	NE	0.21 / 1,110.53	27
JET GAS STATION	13202 BROOKHURST GARDEN GROVE CA 92843 ***Global ID* | *Status***: *T0605900794* |	NE	0.23 / 1,217.53	30
EJAX WATER SYSTEMS	9911 LARSON GARDEN GROVE CA 92644 ***Global ID* | *Status***: *T0605901020* |	N	0.28 / 1,454.05	35
COUNTY WIDE CHRYSLER/JEEP	10080 GARDEN GROVE GARDEN GROVE CA 92842 ***Global ID* | *Status***: *T0605918872* |	N	0.33 / 1,768.44	36
TOYOTA OF GARDEN GROVE	10081 GARDEN GROVE GARDEN GROVE CA 92641 ***Global ID* | *Status***: *T0605901533* |	N	0.43 / 2,266.02	39
ORIENTAL LEASING	9672 GARDEN GROVE GARDEN GROVE CA 92641 ***Global ID* | *Status***: *T0605900714* |	NW	0.46 / 2,453.34	41

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
MOBIL #18-GOE	13521 BROOKHURST GARDEN GROVE CA 92643 ***Global ID* | *Status***: *T0605901769* |	ESE	0.15 / 782.79	15
ARCO #629	13482 BROOKHURST GARDEN GROVE CA 92844 ***Global ID* | *Status***: *T0605901913* |	ESE	0.15 / 811.75	16
EXXON #7-0833	13502 BROOKHURST GARDEN GROVE CA 92643 ***Global ID* | *Status***: *T0605970421* |	ESE	0.16 / 829.33	17
4 DAY TIRE STORE	13961 BROOKHURST GARDEN GROVE CA 92643 ***Global ID* | *Status***: *T0605901280* |	SSE	0.47 / 2,478.76	42

UST - Permitted Underground Storage Tank (UST) in GeoTracker

A search of the UST database, dated May 25, 2025 has found that there are 2 UST site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GARDEN GROVE SHELL	13202 Brookhurst St Garden Grove CA 92843 ***Facility ID***: *FA0057500* ***Tank ID No.* | *Tank Status* | *Tank Closure Date***: *3 | Confirmed/Updated Information | , 1 | Confirmed/Updated*	NE	0.23 / 1,217.53	30

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	Information | , 2 | Confirmed/Updated Information |			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
GAMMO CORP	13482 BROOKHURST ST GARDEN GROVE CA 92843	ESE	0.15 / 811.75	16
	***Facility ID**: FA0052965* ***Tank ID No. | Tank Status | Tank Closure Date**: 3 | Confirmed/Updated Information | , 2 | Renewal Permit | , 1 | Renewal Permit | , 4 | Renewal Permit |*			

UST CLOSURE - Proposed Closure of Underground Storage Tank Cases

A search of the UST CLOSURE database, dated Apr 7, 2025 has found that there are 1 UST CLOSURE site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FKA Andy's Unocal	13231 Brookhurst Ave., Garden Grove, CA 92643 CA ***Claim Case No**: Claim No. 2776*	NE	0.18 / 944.26	21

HHSS - Historical Hazardous Substance Storage Information Database

A search of the HHSS database, dated Aug 27, 2015 has found that there are 4 HHSS site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
A SAADAI UNION 76	13231 BROOKHURST ST. GARDEN GROVE CA 92643	NE	0.18 / 944.26	21
JET	13202 BROOKHURST GARDEN GROVE CA 92643	NE	0.23 / 1,217.53	30

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
LIAQUAT ALI JUMANI	13482 BROOKHURST ST GARDEN GROVE CA 92643	ESE	0.15 / 811.75	16
EXXON SERVICE STATION	13502 BROOKHURST GARDEN GROVE CA 92640	ESE	0.16 / 829.33	17

UST SWEEPS - Statewide Environmental Evaluation and Planning System

A search of the UST SWEEPS database, dated Oct 1, 1994 has found that there are 9 UST SWEEPS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA	ESE	0.18 / 939.28	20

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***C C	Status**: A30-000-3140	ACTIVE* ***Tank ID**: 000002*			
DON THIO	13231 S BROOKHURST ST GARDEN GROVE CA	NE	0.18 / 960.03	22
	***C C	Status**: A30-000-13410	ACTIVE* ***Tank ID**: 000004, 000002, 000001, 000003*			
KARAMAT STATION	13231 S BROOKHURST ST GARDEN GROVE CA	NE	0.18 / 960.03	22
	***C C	Status**: A30-000-4349	ACTIVE* ***Tank ID**: 000001, 000004, 000003, 000005*			
PRONTO MARKETING	13202 BROOKHURST ST GARDEN GROVE CA	NE	0.23 / 1,217.53	30
	***C C	Status**: A30-000-4347	ACTIVE* ***Tank ID**: 000002, 000003, 000001*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
QUALITY NISSAN	9666 TRASK AVE GARDEN GROVE CA	SW	0.09 / 476.68	4
	***C C	Status**: A30-000-12923	ACTIVE* ***Tank ID**: 000007, 000005*			
GARDEN GROVE MITSUBISHI	9898 TRASK AVE GARDEN GROVE CA	SE	0.10 / 547.63	8
	***C C	Status**: A30-000-6947	ACTIVE* ***Tank ID**: 000001, 000002*			
MOBIL #18-G03E	13521 BROOKHURST ST GARDEN GROVE CA	ESE	0.15 / 782.79	15
	***C C	Status**: A30-000-2129	ACTIVE* ***Tank ID**: 000004, 000001, 000003, 000005*			
ARCO #629	13482 BROOKHURST ST GARDEN GROVE CA	ESE	0.15 / 811.75	16
	***C C	Status**: A30-000-4348	ACTIVE* ***Tank ID**: 000002, 000003, 000001, 000004*			
EXXON #7-0833	13502 BROOKHURST ST GARDEN GROVE CA	ESE	0.16 / 829.33	17
	***C C	Status**: A30-000-2122	ACTIVE* ***Tank ID**: 000004, 000003, 000001, 000005*			

AST - Aboveground Storage Tanks

A search of the AST database, dated Aug 31, 2009 has found that there are 2 AST site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	9

AST SWRCB - SWRCB Historical Aboveground Storage Tanks

A search of the AST SWRCB database, dated Dec 1, 2007 has found that there are 1 AST SWRCB site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844-2801	SW	0.11 / 557.72	9

DELISTED TNK - Delisted Storage Tanks

A search of the DELISTED TNK database, dated Jun 1, 2025 has found that there are 10 DELISTED TNK site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SEXTONS AUTOMOTIVE	10041 TRASK AVE GARDEN GROVE CA 92843	ESE	0.18 / 939.28	20
KARAMAT STATION	13231 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.18 / 944.26	21
BOWERS CO	13222 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.21 / 1,110.53	27
PRONTO MARKETING 312	13202 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	30
ARCO #629	13482 BROOKHURST ST GARDEN GROVE CA 92843	E	0.25 / 1,321.03	33

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
GARDEN GROVE DODGE/SUBARU/HYUNDAI	9666 TRASK AVE GARDEN GROVE CA 92844	SW	0.09 / 476.68	4
GARDEN GROVE MITSUBISHI	9898 TRASK AVE GARDEN GROVE CA 92844	SE	0.10 / 547.63	8
QUALITY NISSAN	9670 TRASK AVE GARDEN GROVE CA 92844	SW	0.11 / 557.72	9
MOBIL #18-G03E	13521 BROOKHURST ST # 18-G03E GARDEN GROVE CA 92843	ESE	0.15 / 782.79	15

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
EXXON #7-0833	13502 BROOKHURST ST # 7-0833 GARDEN GROVE CA 92843	ESE	0.16 / 829.33	17

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated May 28, 2025 has found that there are 4 CERS TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GARDEN GROVE SHELL	13202 BROOKHURST ST GARDEN GROVE CA 92843 ***Site ID**: 366507*	NE	0.23 / 1,217.53	30

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Garden Grove Hyundai	9898 TRASK AVE GARDEN GROVE CA 92844 ***Site ID**: 118782*	SE	0.10 / 547.63	8
TOYOTA PLACE	9670 TRASK AVE GARDEN GROVE CA 92844 ***Site ID**: 178742*	SW	0.11 / 557.72	9
GAMMO CORP	13482 BROOKHURST ST GARDEN GROVE CA 92843 ***Site ID**: 393660*	ESE	0.15 / 811.75	16

HIST TANK - Historical Hazardous Substance Storage Container Information - Facility Summary

A search of the HIST TANK database, dated May 27, 1988 has found that there are 4 HIST TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
A. SAADI UNION 76	13231 BROOKHURST ST. GARDEN GROVE CA	NE	0.18 / 944.26	21
JET	13202 BROOKHURST GARDEN GROVE CA	NE	0.23 / 1,217.53	30

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
LIAQUAT ALI JUMANI	13482 BROOKHURST ST. GARDEN GROVE CA	ESE	0.15 / 811.75	16

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
EXXON SERVICE STATION	13502 BROOKHURST GARDEN GROVE CA	ESE	0.16 / 829.33	17

County

LOP ORANGE - Orange County - LOP Lead Cases List

A search of the LOP ORANGE database, dated May 15, 2023 has found that there are 12 LOP ORANGE site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Andys Unocal	13231 Brookhurst St Garden Grove Ca 92843-1009 CA ***Case ID**: 89UT095* ***Closed Date**: 5/26/2014*	NE	0.18 / 944.26	21
Bowers Co	13222 Brookhurst St Garden Grove Ca 92843-1010 CA ***Case ID**: 88UT176* ***Closed Date**: 4/19/2012*	NE	0.21 / 1,110.53	27
Jet Gas Station	13202 Brookhurst St Garden Grove Ca 92843-1010 CA ***Case ID**: 88UT135* ***Closed Date**: 4/18/2014*	NE	0.23 / 1,217.53	30
Ejax Water Systems	9911 Larson Ave Garden Grove Ca 92844-1657 CA ***Case ID**: 89UT181* ***Closed Date**: 12/14/1989*	N	0.28 / 1,453.83	34
County Wide Chrysler/Jeep	10080 Garden Grove Blvd Garden Grove Ca 92844-1694 CA ***Case ID**: 99UT016* ***Closed Date**: 2/12/2003*	N	0.37 / 1,959.35	38
Toyota Of Garden Grove	10081 Garden Grove Blvd Garden Grove Ca 92844-1620 CA ***Case ID**: 92UT026* ***Closed Date**: 4/14/1992*	N	0.43 / 2,266.02	39
Oriental Leasing	9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA ***Case ID**: 88UT083* ***Closed Date**: 8/7/2000*	NW	0.48 / 2,548.01	43
Orental Leasing	9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA ***Case ID**: 88UT077* ***Closed Date**: 1/1/1988*	NW	0.48 / 2,548.01	43

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Mobil #18-Goe	13521 Brookhurst St Garden Grove Ca 92643 CA	ESE	0.15 / 782.79	15

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Case ID**: 94UT037* ***Closed Date**: 3/7/1995*			
Arco #629	13482 Brookhurst St Garden Grove Ca 92843-3119 CA ***Case ID**: 95UT062* ***Closed Date**: 11/17/2005*	ESE	0.15 / 811.75	16
Exxon #7-0833	13502 Brookhurst St Garden Grove Ca 92643 CA ***Case ID**: 92UT061* ***Closed Date**: 2/7/1996*	ESE	0.16 / 829.33	17
Exxon #7-0833	13502 Brookhurst St Garden Grove Ca 92643 CA ***Case ID**: 92UT125* ***Closed Date**: 1/1/1992*	ESE	0.16 / 829.33	17

UST ORANGE - Orange County - Underground Storage Tanks Listing

A search of the UST ORANGE database, dated May 15, 2023 has found that there are 4 UST ORANGE site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
M & R STATION	13202 BROOKHURST GARDEN GROVE CA 92843 ***FA No**: FA24722*	NE	0.23 / 1,217.53	30
ULTRAMAR STATION	13202 BROOKHURST GARDEN GROVE CA 92843 ***FA No**: FA24722*	NE	0.23 / 1,217.53	30
Garden Grove Shell	13202 Brookhurst St Garden Grove, Ca 92843-1010 Garden Grove CA ***FA No**: FA0057500*	NE	0.23 / 1,217.53	30

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Gammo Corporation	13482 Brookhurst St Garden Grove, Ca 92843-3119 Garden Grove CA ***FA No**: FA0052965*	ESE	0.15 / 811.75	16

AST ORANGE - Orange County - Aboveground Petroleum Storage Tank Listing

A search of the AST ORANGE database, dated May 15, 2023 has found that there are 2 AST ORANGE site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Russell Westbrook Hyundai Of Garden Grove	9898 Trask Ave Garden Grove, Ca 92844-2800 CA ***Establishment ID**: FA0054812*	SE	0.10 / 547.63	8
Toyota Place	9670 Trask Ave Garden Grove, Ca 92844-2801 CA ***Establishment ID**: FA0051444*	SW	0.11 / 557.72	9

Non Standard

Federal

FED DRYCLEANERS - Drycleaner Facilities

A search of the FED DRYCLEANERS database, dated Jan 6, 2025 has found that there are 1 FED DRYCLEANERS site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA 92843 ***FRS Facility ID**: 110070442968*	NE	0.22 / 1,140.42	29

State

DRYCLEANERS - Dry Cleaning Facilities

A search of the DRYCLEANERS database, dated Dec 20, 2021 has found that there are 1 DRYCLEANERS site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MY FAVORITE CLEANERS	13197 BROOKHURST ST GARDEN GROVE CA	NE	0.22 / 1,140.42	29

INSP COMP ENF - EnviroStor Inspection, Compliance, and Enforcement

A search of the INSP COMP ENF database, dated Nov 23, 2023 has found that there are 1 INSP COMP ENF site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
VETERANS ED'S INC	10372 STANFORD AVENUE #S GARDEN GROVE CA 92840	NE	0.68 / 3,589.02	44

CERS HAZ - California Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the CERS HAZ database, dated May 28, 2025 has found that there are 2 CERS HAZ site(s) within approximately 0.12miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
VUNG TAU AUTO REPAIR	13331 BROOKHURST ST C GARDEN GROVE CA 92843	ENE	0.09 / 494.13	5
QUOC AUTO REPAIR	13331 BROOKHURST ST #A GARDEN GROVE CA 92843	ENE	0.09 / 500.98	6

EMISSIONS - Toxic Pollutant Emissions Facilities

A search of the EMISSIONS database, dated Dec 31, 2021 has found that there are 5 EMISSIONS site(s) within approximately 0.25

miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MY FAVORITE CLEANERS, SEONG HE	13197 BROOKHURST ST. GARDEN GROVE CA 92640	NE	0.22 / 1,140.42	29
KORMEX MANAGEMENT & MARKETING, INC.	13202 BROOKHURST ST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	30
BR PETROLEUM INC	13202 BROOKHURST GARDEN GROVE CA 92843	NE	0.23 / 1,217.53	30

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
GAMMO C30P30ATION	13482 BROOKHURST ST GARDEN GROVE CA 92843	ESE	0.15 / 811.75	16
GAMMO CORPORATION	13482 BROOKHURST ST GARDEN GROVE CA 92843	ESE	0.15 / 811.75	16

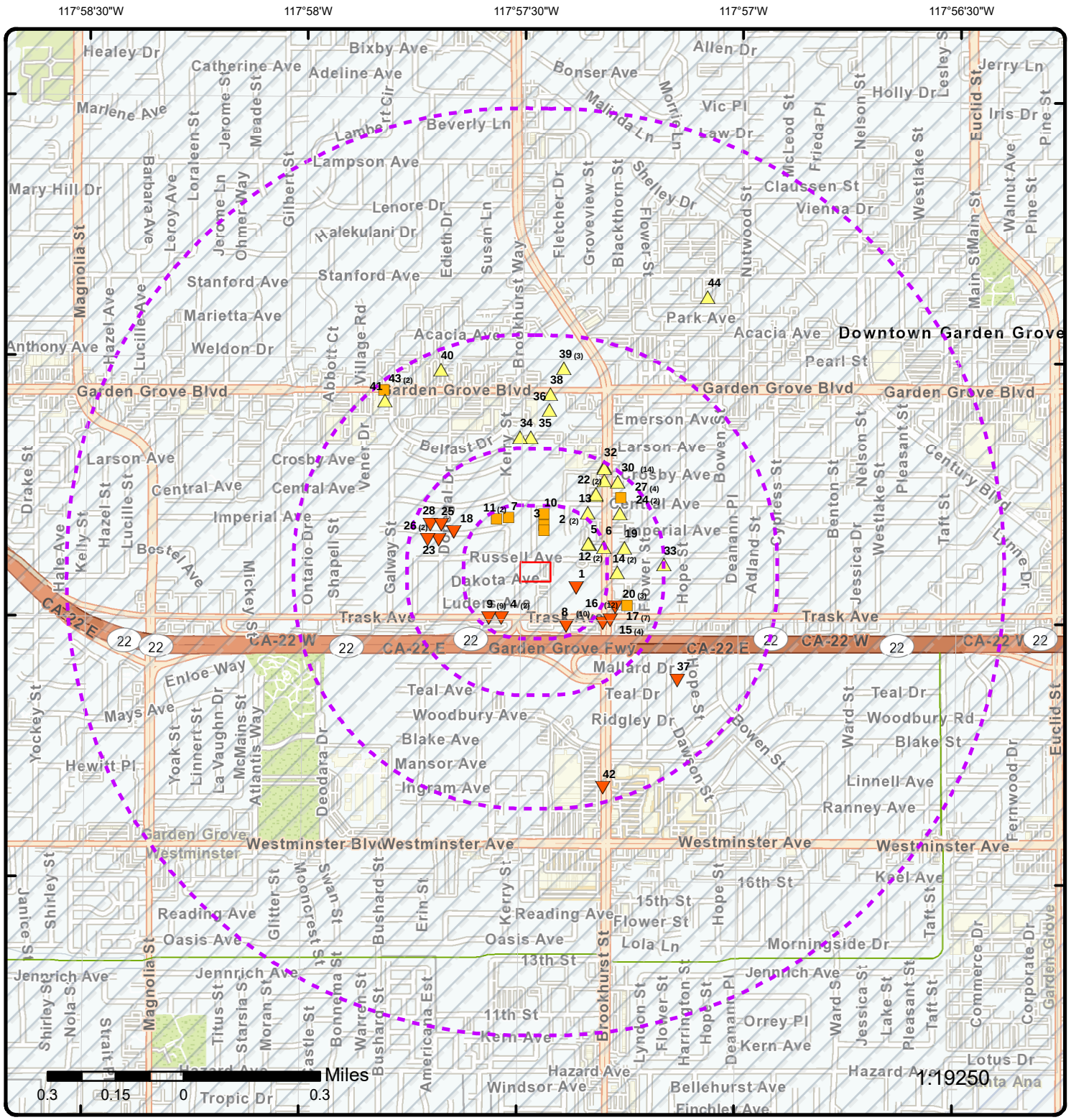
County

HW ORANGE - Orange County - Hazardous Waste Facilities

A search of the HW ORANGE database, dated May 15, 2023 has found that there are 4 HW ORANGE site(s) within approximately 0.12 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Vung Tau Auto Repair	13331 Brookhurst St Ste C Garden Grove, Ca 92843-7000 Garden Grove CA 92843-7000	ENE	0.12 / 649.42	12
Quoc Auto Repair	13331 Brookhurst St Ste A Garden Grove, Ca 92843-7000 Garden Grove CA 92843-7000	ENE	0.12 / 649.42	12

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Russell Westbrook Hyundai Of Garden Grove	9898 Trask Ave Garden Grove, Ca 92844-2800 Garden Grove CA 92844-2800	SE	0.10 / 547.63	8
Toyota Place	9670 Trask Ave Garden Grove, Ca 92844-2801 Garden Grove CA 92844-2801	SW	0.11 / 557.72	9



Map: 1.0 Mile Radius

Order Number: 25061300823

Address: 9822 Russell Avenue, GARDEN GROVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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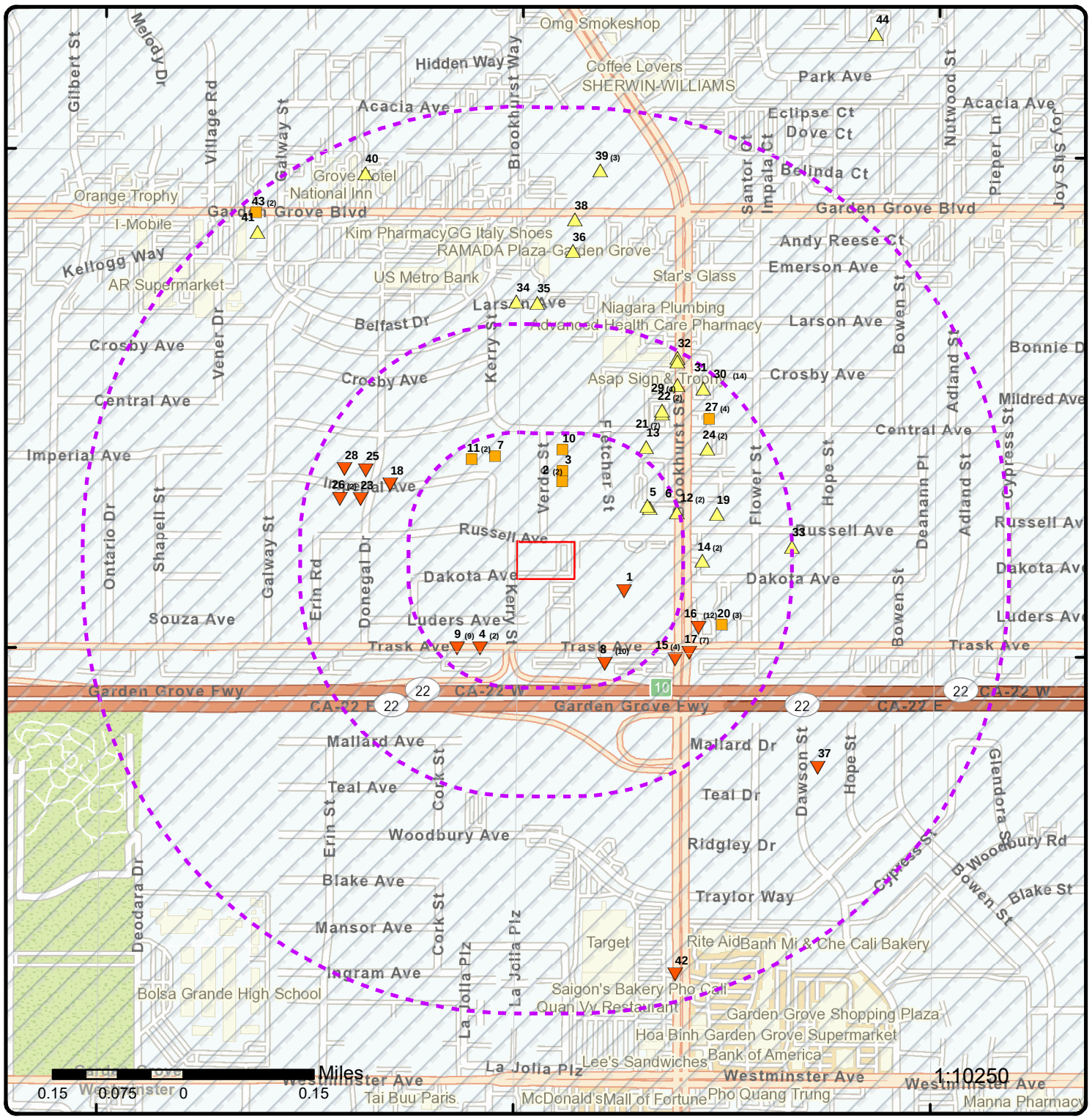

Map: 0.5 Mile Radius

Order Number: 25061300823

Address: 9822 Russell Avenue, GARDEN GROVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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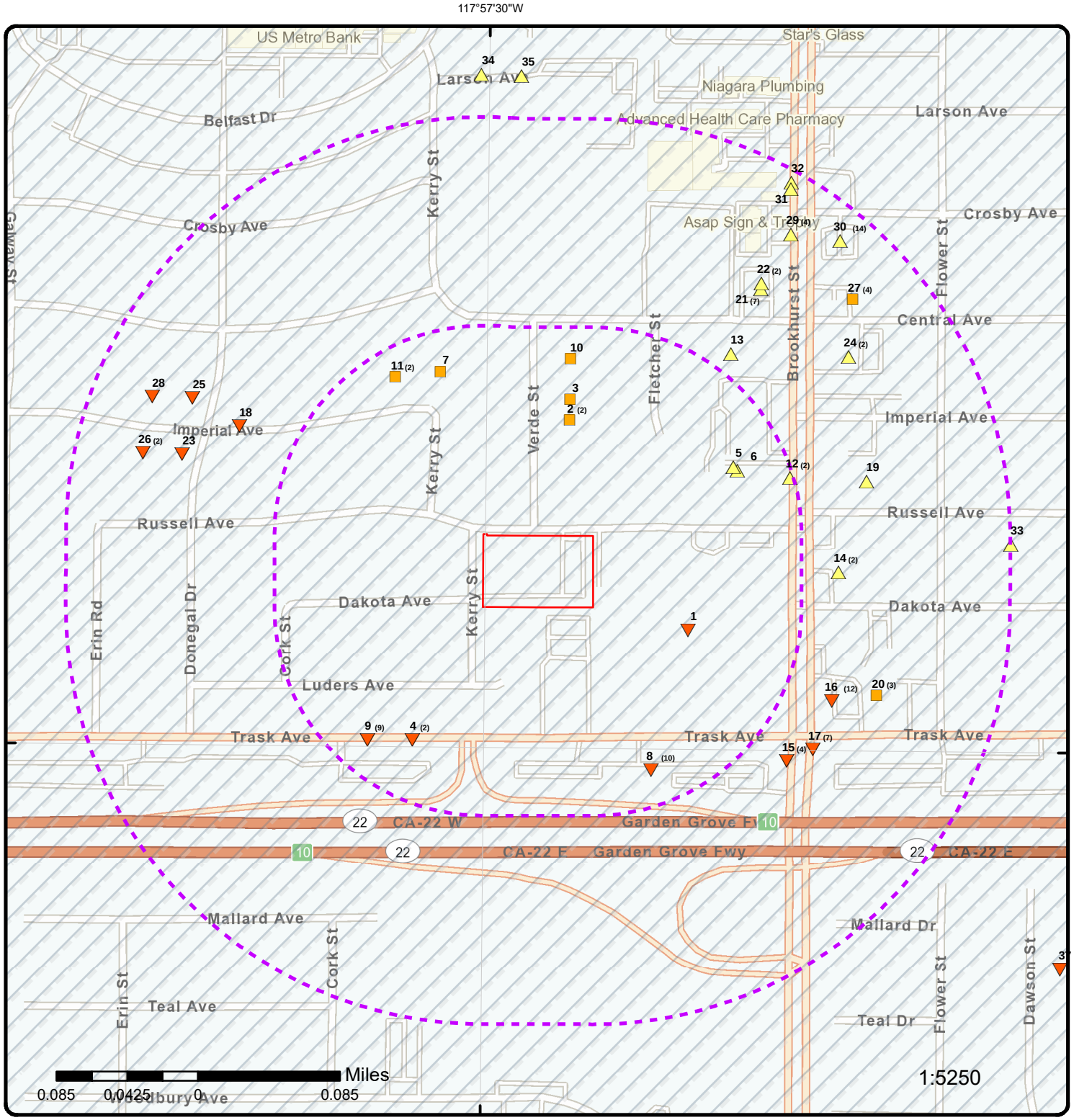

Map: 0.25 Mile Radius

Order Number: 25061300823

Address: 9822 Russell Avenue, GARDEN GROVE, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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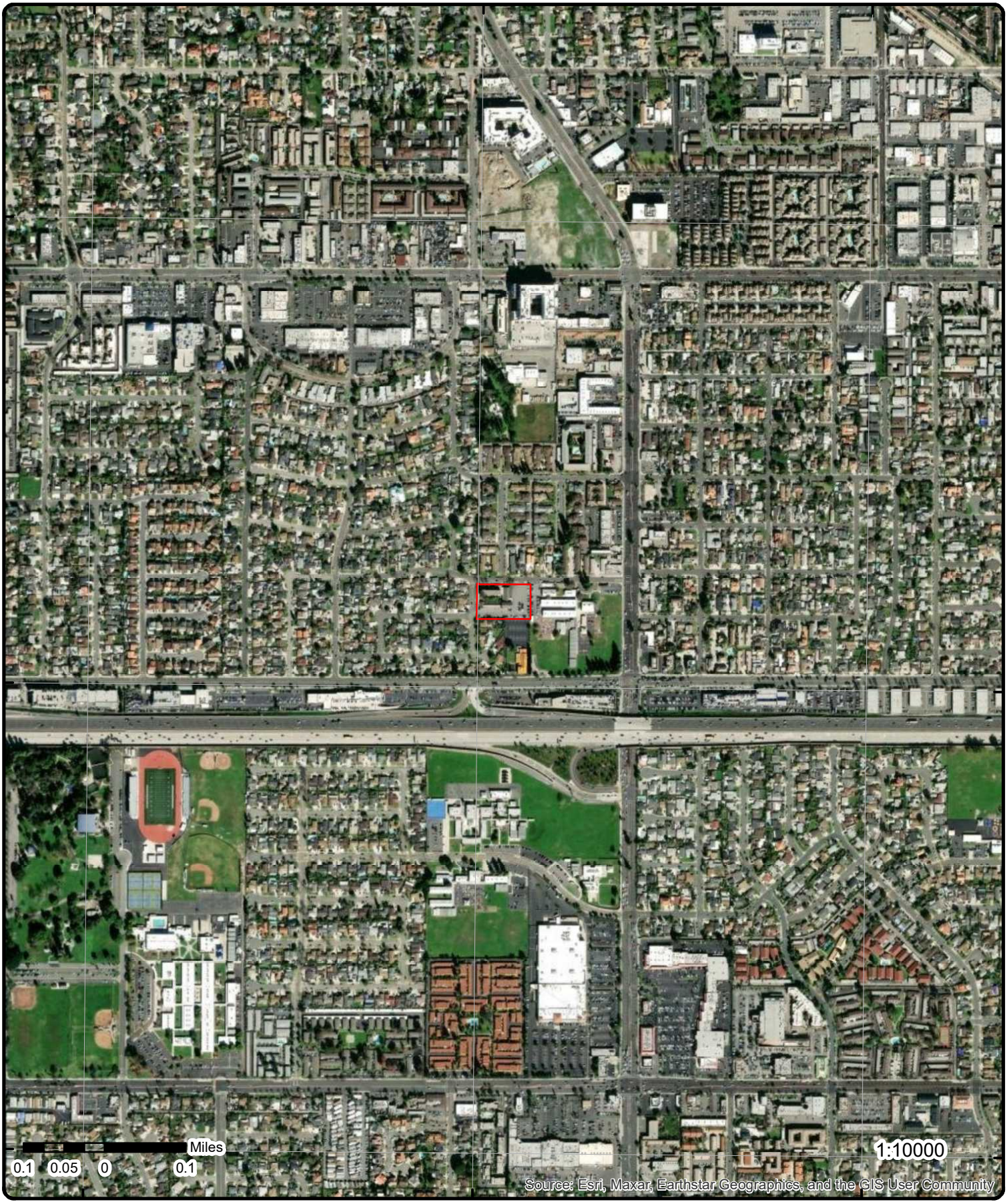

Aerial **Year: 2024**

Order Number: 25061300823

Address: 9822 Russell Avenue, GARDEN GROVE, CA

Source: ESRI World Imagery

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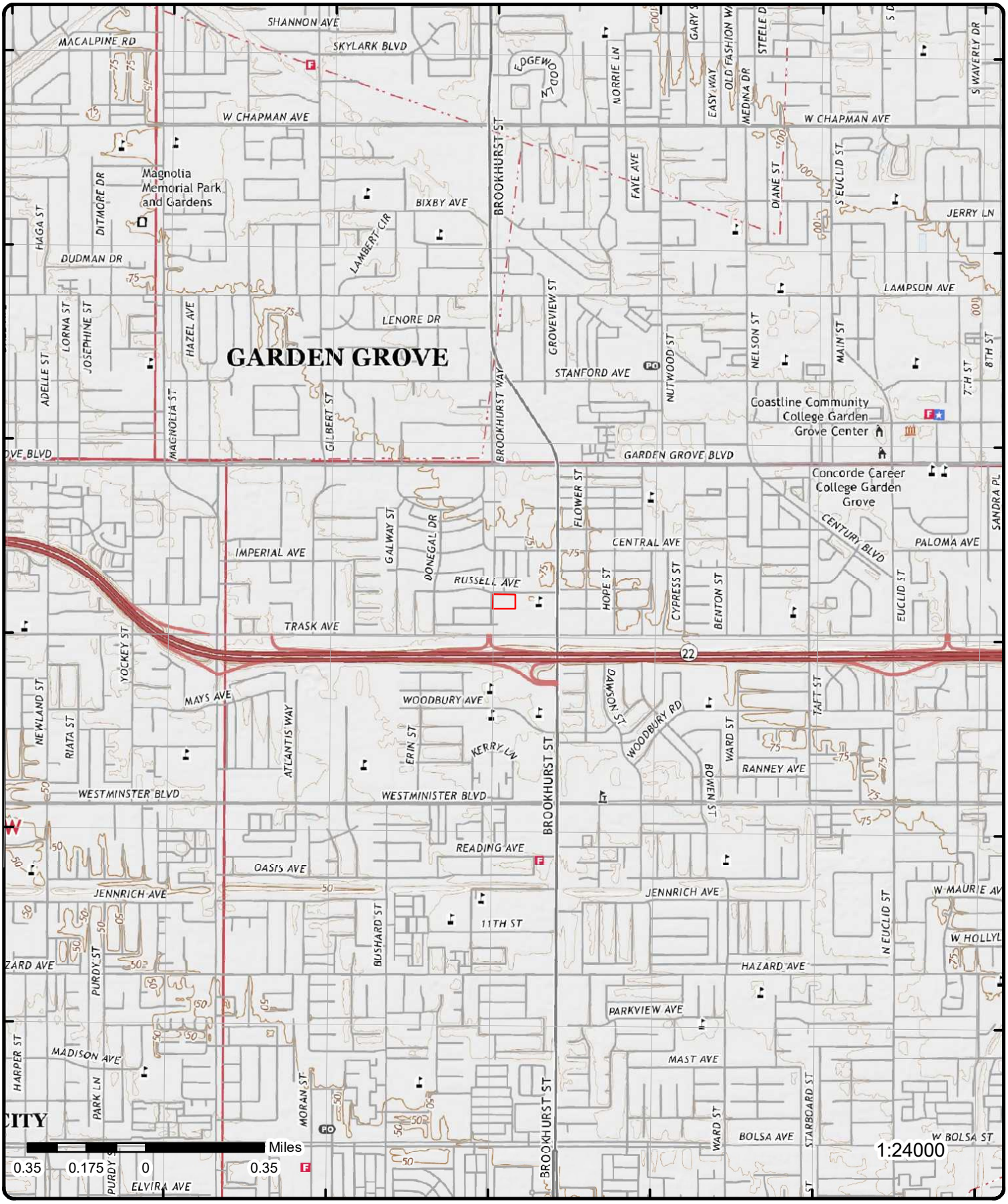

Topographic Map

Year: 2022

Order Number: 25061300823

Address: 9822 Russell Avenue, CA

Quadrangle(s): Newport Beach CA, Anaheim CA

Source: USGS Topographic Map

© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of1	ESE	0.06 / 309.08	72.95 / -1	SUNNYSIDE ELEMENTARY SCHOOL 9972 RUSSELL AVE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003292523
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	611110
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20240917	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: D
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N

Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241001
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	SUNNYSIDE ELEMENTARY SCHOOL
Location Street No:	
Location Street1:	9972 RUSSELL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	SCOTT MACCARTHY
Contact Street No:	
Contact Street1:	11852 KNOTT
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92841
Contact Country:	
Contact Phone And Ext:	714-663-6185
Contact Fax:	
Contact Email Address:	SMACCARTHY@GGUSD.US
Contact Title:	
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20240618
Handler Name:	SUNNYSIDE ELEMENTARY SCHOOL
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified

Source Type: Implementer

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20240917
Handler Name: SUNNYSIDE ELEMENTARY SCHOOL
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: SCOTT MACCARTHY
Dt Became Current:
Dt Ended Current:
Phone: 714-663-6185
Source Type: Implementer
Street No:
Street1: 11852 KNOTT
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92841

Owner/Operator Ind: Current Owner
Type: Other
Name: GGUSD
Dt Became Current:
Dt Ended Current:
Phone: 714-663-6185
Source Type: Implementer
Street No:
Street1: 11852 KNOTT
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92841

Historical Handler Details

Receive Dt: 20240618
Generator Code Description: Not a Generator, Verified
Handler Name: SUNNYSIDE ELEMENTARY SCHOOL

---

2 | **1 of2** | **NNE** | **0.07 / 366.46** | **73.72 / 0** | **LARRY LOCKWOOD**
13292 VERDE ST
GARDEN GROVE CA 92844 | **RCRA NON GEN**

Handler ID: CAC003099098
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Transfer Facility: No
Recycler: No
Onsite Burner Exem: No
Furnace Exemption: No
Underground Injec: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Commercial TSD: No
Recycl Nonstorage: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20201230	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal WrkId:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20210226
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	LARRY LOCKWOOD
Location Street No:	
Location Street1:	13292 VERDE ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US

Contact Name:	LARRY LOCKWOOD
Contact Street No:	
Contact Street1:	13292 VERDE ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-290-9584
Contact Fax:	
Contact Email Address:	SCHEDULING@PWSEI.COM
Contact Title:	
Owner Name:	LARRY LOCKWOOD
Owner Type:	O
Owner Seq:	1
Operator Name:	LARRY LOCKWOOD
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20201230
Handler Name:	LARRY LOCKWOOD
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	13292 VERDE ST
Name:	LARRY LOCKWOOD	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-290-9584	**Country:**	
Source Type:	Implementer	**Zip:**	92844
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	13292 VERDE ST
Name:	LARRY LOCKWOOD	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-290-9584	**Country:**	
Source Type:	Implementer	**Zip:**	92844

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	2 of2	NNE	0.07 / 366.46	73.72 / 0	LARRY LOCKWOOD 13292 VERDE ST GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID:	CAC003114378
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20210412	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20210415		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: LARRY LOCKWOOD
Location Street No:
Location Street1: 13292 VERDE ST
Location Street2:
Location City: GARDEN GROVE
Location State: CA
Location Zip: 92844
Location County Code: CA059
Location County Name: ORANGE
Location Country: US
Contact Name: LARRY LOCKWOOD
Contact Street No:
Contact Street1: 13292 VERDE ST
Contact Street2:
Contact City: GARDEN GROVE
Contact State: CA
Contact Zip: 92844
Contact Country:
Contact Phone And Ext: 714-290-9584
Contact Fax:
Contact Email Address: SCHEDULING@PWSEI.COM
Contact Title:
Owner Name: LARRY LOCKWOOD
Owner Type: O
Owner Seq: 1
Operator Name: LARRY LOCKWOOD
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20210412
Handler Name: LARRY LOCKWOOD
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: LARRY LOCKWOOD
Dt Became Current:
Dt Ended Current:
Phone: 714-290-9584
Source Type: Implementer
Street No:
Street1: 13292 VERDE ST
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Owner/Operator Ind: Current Owner
Type: Other
Name: LARRY LOCKWOOD
Dt Became Current:
Dt Ended Current:
Phone: 714-290-9584
Source Type: Implementer
Street No:
Street1: 13292 VERDE ST
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

3	1 of1	NNE	0.08 / 431.94	73.59 / 0	13282 VERDE ST, #3 13282 VERDE ST, #3 GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003232900
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20230517	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N

Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241212
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	13282 VERDE ST, #3
Location Street No:	
Location Street1:	13282 VERDE ST, #3
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ROBERT KELLEY
Contact Street No:	
Contact Street1:	13282 VERDE ST, #3
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	205-678-0360
Contact Fax:	
Contact Email Address:	ELIZABETHS@PWSEI.COM
Contact Title:	
Owner Name:	ROBERT KELLEY
Owner Type:	O
Owner Seq:	1
Operator Name:	ROBERT KELLEY
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20230517
Handler Name:	13282 VERDE ST, #3
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	13282 VERDE ST, #3
Name:	ROBERT KELLEY	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	205-678-0360	***Country:***	
Source Type:	Implementer	***Zip:***	92844

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**			
Type:	Other	**Street1:**	13282 VERDE ST, #3		
Name:	ROBERT KELLEY	**Street2:**			
Dt Became Current:		**City:**	GARDEN GROVE		
Dt Ended Current:		**State:**	CA		
Phone:	205-678-0360	**Country:**			
Source Type:	Implementer	**Zip:**	92844		

4	1 of2	SW	0.09 / 476.68	70.46 / -3	GARDEN GROVE DODGE/SUBARU/HYUNDAI 9666 TRASK AVE GARDEN GROVE CA 92844	DELISTED TNK

Delisted Storage Tanks

Facility ID:	8659	**County:**	Orange
Latitude:	33.7679355	**Original Source:**	UST
Longitude:	-117.959704	**Record Date:**	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

4	2 of2	SW	0.09 / 476.68	70.46 / -3	QUALITY NISSAN 9666 TRASK AVE GARDEN GROVE CA	UST SWEEPS

C C:	A30-000-12923	**D Filename:**	SITE12A
BOE:		**Page No:**	133
Comp:	12923	**County:**	ORANGE
Status:	ACTIVE	**State :**	CA
No of Tanks:	2	**Zip:**	92644
Jurisdict:	ORANGE COUNTY	**Latitude:**	33.766639
Agency:	ENVIRONMENTAL HEALTH	**Longitude:**	-117.961096
Phone:		**Georesult:**	S5HPNTSC-A

Tank Details

Tank ID:	000007	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-012923-000007	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000005	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-012923-000005	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	
Capac:	1000	**ONA:**	
Tank Use:	PETROLEUM	**D File Name:**	TANK12A

5	1 of1	ENE	0.09 / 494.13	75.55 / 2	VUNG TAU AUTO REPAIR 13331 BROOKHURST ST C GARDEN GROVE CA 92843	CERS HAZ

Site ID:	629686
Latitude:	33.768990

Longitude: -117.955150

Regulated Programs

EI ID: 10567468 ***EI Description:*** Hazardous Waste Generator

EI ID: 10567468 ***EI Description:*** Chemical Storage Facilities

Violations

Violation Date: 09/12/2019 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Notes:

Returned to compliance on 09/30/2019. OBSERVATION: The business failed to establish and implement a business plan when handling hazardous materials at or above the reportable threshold quantities. CORRECTIVE ACTION: Establish and implement a business plan for the facility. Complete the required Hazardous Materials Business Plan via the California Electronic Reporting System http://cers.calepa.ca.gov within 30 days.

Violation Description:

Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 03/07/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 02/01/2017. Used oil tank had faded labels and no longer contained the required information. Violation was noted for improper labeling, and the violation was corrected on-site.

Violation Description:

Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 03/07/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 02/01/2017. Used oil tank's lid was not closed properly. The violation was corrected during the inspection.

Violation Description:

Failure to properly close hazardous waste containers when not in active use.

Violations

Violation Date: 04/29/2024 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Returned to compliance on 04/29/2024. Business failed to certify HMBP by March 1, 2024.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violations

Violation Date: 10/08/2014
Violation Source: CERS
Violation Program: HW
Violation Division: Orange County Environmental Health
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Notes:

Returned to compliance on 12/07/2014. You must obtain an EPA ID # to legally dispose of hazardous waste. Notify this Agency when you have obtained and EPA ID# Contact DTSC to obtain and EPA ID #

Violation Description:

Failure to obtain and/or maintain an Active EPA ID.

Violations

Violation Date: 03/01/2023
Violation Source: CERS
Violation Program: HW
Violation Division: Orange County Environmental Health
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Notes:

Returned to compliance on 03/03/2023. The operator did not have hazardous waste manifests available for the disposal of the following hazardous waste observed onsite: - Used oil metal filters - 55-gallon drum

Violation Description:

Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.

Evaluations

Eval Date: 03/01/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous materials inspection. Consent to enter, inspect, and take photos was given by Van Vong, Owner. The following disclosable materials were observed onsite: - Used oil - New oil CERS submittal was completed onsite. Documented employee training was verified. On an ongoing basis, electronically review and submit/certify the Hazardous Materials Business Plan on the CERS website by March 1st of every year. Emailed a copy of this report to wongisking95@gmail.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/01/2023
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Onsite for a routine hazardous waste inspection. Consent to enter and inspect was granted by Van Vong, Owner. The facility generates the following automotive wastes: - Used oil - Used oil filters (metal/paper) - Waste coolant Hazardous waste label requirements were discussed on site. On an ongoing basis, labels are required to have the following information: 1) the words "Hazardous Waste"; 2) name and address of generator; 3) hazardous properties; 4) physical state; 5) composition (contents); 6) accumulation start date. Observed facility, hazardous waste storage area, perimeter, and dumpster area. Hazardous waste containers were stored closed. No indication of hazardous waste spillage, runoff, or illegal disposal was observed. Emergency response plan in onsite. Employees are reported to be trained. Facility has 1 employee. Emailed a copy of this report to

wnguyen630@gmail.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/30/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENT: On-site for a follow-up hazardous materials business plan inspection. Assisted the owner with document submission via California Environmental Reporting System. Facility has successfully submitted a hazardous materials business plan with all the required documents via the California Environmental Reporting System. The following violation has been corrected: I208- Established/implemented a business plan when handling hazardous materials in reportable quantities Facility does not have any other open hazardous materials business plan violation at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/07/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

3/7/2016- Vung Tau Auto Repair On site to conduct a routine hazardous material and business plan inspection. The site had moved from 10151 Garden Grove Blvd. Ste J to 13331 Brookhurst Street. The business is still operating as an Auto repair shop. Consent to enter, inspect and take pictures was given by Van Vong at 1:05 pm. Walked the site with Mr. Vong and observed the hazardous material storage areas throughout the auto body shop and the following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Oxygen, (2X145 CF), total oxygen = 290 CF - Acetylene (2X150 CF), total acetylene = 300 CF - Engine Oil (27 boxes of 12X1 quart), total oil = 81 gallons - Used Oil = 1X 200 gallon poly tote - Used Oil filters = 10 items (1X55 gallon drum) As the materials stored on site exceed 55 gallons in liquid and 200 cubic feet of gas, the owner was asked to complete and submit a hazardous material business emergency plan within [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/03/2024
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The purpose of this off-site reinspection is to follow up on a violation cited on a previous inspection report. The Hazardous Materials Business Plan (HMBP) was submitted in CERS on 4/27/24. Violation 1010008 has been corrected. No outstanding violations remain. A copy of this report will be emailed to wongisking95@gmail.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/29/2024
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

According to the CERS database, your business remains out of compliance with the annual certification requirement and a violation is being cited. Businesses are required to annually review and certify that their information in the California Electronic Reporting System (CERS) is complete, accurate and in compliance by March 1st. Your business was notified via email on March 27, 2024 that your facility was out of compliance with this requirement. Please note the following important details: 1) Complete submittal includes the HazMat Inventory AND the Emergency Plan / Training sections. Both sections must be submitted. 2) If your business qualifies (see below) you may submit 2024 via the Certify option available on CERS. You must be logged in to use. HMBP Certify: A business may use the Certify option button located on their forms page if: 1) A previous, complete submittal was made the prior year, and 2) The business is not subject to the Federal EPCRA reporting requirements, and 3) The; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/08/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

VUNG TAU AUTO REPAIR MUFFLER AND TIRE 13331 Brookhurst #c Garden Grove CA 92843 714-534-4800 owner is VAN VONG CAL000071804 Facility has one 250 gallon tote for waste oil, one 55 gallon drum of waste coolant, and one 55 gallon drum of used oil filters You must obtain an EPA ID # to legally dispose of hazardous waste. Notify this Agency when you have obtained and EPA ID# Drums are labeled and stored closed; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/16/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On-site for routine inspection. Consent to enter, inspect, and take photographs granted by Jack Nguyen this date. Hazardous Waste receipts from Action Waste Oil made available and reviewed. HW containers properly labeled and stored closed. Accumulation start dates 8-16-13 are on the labels Emergency numbers posted at site. Inspected trash/dumpster and it does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/07/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

out of business no hazm mat at site from this business .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/07/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

3/7/2016- Vung Tau Auto Repair On site to conduct a routine hazardous waste inspection. Consent to enter, inspect and take pictures was given by Van Vong at 1:05 pm. The hazardous waste containers found here: a. Used Oil = 1X 200 gallon poly tote b. Used Oil filters = 10 items (1X55 gallon drum) Manifests were available and were checked. The generator was using their old EPA ID (CAL00071804) from 10151 Garden Grove Blvd. Informed Mr. Vong to utilize the new EPA ID #: CAL000401291 moving forward to dispose of hazardous waste. Dumpster was covered for rain, but no hazardous waste was observed. Per Mr. Vong quarterly trainings are being conducted to educate employee on proper disposal techniques. Walked the perimeter of the site, and there were no hazardous waste spills or discharges observed during this inspection. Minor Violations: a. Used oil tank had faded labels and no longer contained the required information. Violation was noted for improper labeling, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/08/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Facility is out of business before June 2014 New Business at site is VUNG TAU AUTO REPAIR MUFFLER AND TIRE 13331 Brookhurst #c Garden Grove CA 92843 714-534-4800 owner is VAN VONG CAL000071804 Facility has one 250 gallon tote for waste oil, one 55 gallon drum of waste coolant, and one 55 gallon drum of used oil filters One manifest for waste oil hauled by Action Waste Oil at site Drums are labeled and stored closed; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/12/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENT: On site for a routine hazardous waste inspection. Walked throughout the facility. Observed hazardous waste storage areas. Containers were closed and properly labeled. Employees are reported to be trained. Manifests were available for review. Facility generates the following waste streams: - Waste Coolant - Waste Oil - Drained Used Oil Filters Emergency plan is available on site. No hazardous waste or universal waste observed in the dumpster/enclosure area. No hazardous waste violations were observed this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/12/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENT: On-site for a hazardous materials business plan inspection. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Waste Oil (250 gallons) REQUIREMENT FOR ELECTRONIC SUBMITTAL OF HMBEP DOCUMENTS: This report serves as a notice that the facility must electronically submit a Hazardous Materials Business Emergency Plan (HMBEP), which includes the following documents within 30 days of this report: - Business Activities - Owner/Operator Information - Hazardous Materials Inventory - Site Map - Emergency Response Plan - Employee Training Plan Facility must conduct and document annual training for employees as specified in the employee training plan. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds of 55 gallons for a liquid, 500 pounds for a solid, and 200 cubic feet for a compressed If [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/22/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS ID- reissue 10567468; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 13331 Brookhurst St Ste. C

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
City:		Garden Grove				
State:		CA				
Country:						
Zip Code:		92843				
Phone:						
Affil Type Desc:		Environmental Contact				
Entity Name:		Van Vong				
Entity Title:						
Address:		13331 Brookhurst St Ste. C				
City:		Garden Grove				
State:		CA				
Country:						
Zip Code:		92843				
Phone:						
Affil Type Desc:		Document Preparer				
Entity Name:		van vong				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Identification Signer				
Entity Name:		van vong				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Legal Owner				
Entity Name:		VAN CA VONG				
Entity Title:						
Address:		13331 Brookhurst St Ste. C				
City:		Garden Grove				
State:		CA				
Country:		United States				
Zip Code:		92843				
Phone:		(714) 791-3779				
Affil Type Desc:		Operator				
Entity Name:		Van Vong				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:		(714) 791-3779				
Affil Type Desc:		Parent Corporation				
Entity Name:		VUNG TAU AUTO REPAIR				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
6	***1 of1***	***ENE***	***0.09 / 500.98***	***75.55 / 2***	***QUOC AUTO REPAIR 13331 BROOKHURST ST #A***	***CERS HAZ***

GARDEN GROVE CA 92843

Site ID: 437384
Latitude: 33.768990
Longitude: -117.955150

Regulated Programs

EI ID: 10567474 ***EI Description:*** Hazardous Waste Generator

EI ID: 10567474 ***EI Description:*** Chemical Storage Facilities

Violations

Violation Date: 07/25/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 10/15/2014 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 10/15/2014. The waste oil drum label did not have the correct beginning date of accumulation written on it. The date wast added at my request and the violation was abated.

Violation Description:

Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 12/04/2019 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Notes:

Returned to compliance on 12/04/2019. OBSERVATION: Facility is storing hazardous materials over reportable quantities on site and has not electronically submitted a Hazardous Materials Business Emergency Plan (HMBEP). CORRECTIVE ACTION: Business has submitted their HMBEP to CERS during the inspection. No further action required.

Violation Description:

Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 12/04/2019 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 12/04/2019. OBSERVATION: The following hazardous waste drums were observed in the shop area without a hazardous waste label: - (3) 55 gallon drums of Used Oil - One 55 gallon drum of Metal Used Oil Filters - One 55 gallon drum of Paper Used Oil Filters - One 55 gallon drum of Waste Antifreeze CORRECTIVE ACTION: Hazardous waste drums were labeled during the inspection. No further action required.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Evaluations

Eval Date: 07/25/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CHEMICAL INVENTORY IS INCOMPLETE.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/08/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Your HMBEP has been declined, please revise and resubmit within 30 days. Your EPA ID# is inactive, please reactivate your number. For your chemical "oil filters" if you only have one drum of filters, which weigh about 200 pounds when full, you are under threshold quantities for a solid, which is 500 pounds. Please remove this chemical entirely from your submittal. For your site map please add the location of the evacuation staging area, nearby storm drains and sewers, and emergency response equipment. If you have any questions please contact me at anesbit@ochca.com or 714-640-4249. Thank you; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/01/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Onsite to conduct a routine hazardous materials inspection. Consent to enter and inspect was granted by Victor Nguyen, Owner. Observed the following disclosable materials: - Used oil Documented employee training was verified. On an ongoing basis, electronically review and submit/certify the Hazardous Materials Business Plan on the CERS website by March 1st of every year. Emailed a copy of this report to wnguyen630@gmail.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/12/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 12/04/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a routine hazardous waste inspection. Consent to inspect and take any necessary photos was given by Victor Nguyen, Owner. The Owner's son-in-law, Cory Freitas was also present during the inspection. Walked throughout the facility. Observed hazardous waste storage areas. Manifests were available and reviewed. Emergency plan is posted in the shop. No hazardous waste or universal waste observed in the dumpster/enclosure area.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Victor Nguyen, Owner. The Owner's son-in-law, Corey Freitas, was also present for the inspection. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - 165 gallons of Waste Motor Oil The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds of 55 gallons for liquids, 500 pounds for solids, & 200 cubic feet for gases. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change. Hazardous Materials documents can be submitted via the California Environmental Reporting System (CERS) located at http://cers.calepa.ca.gov/.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/12/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Victor Nguyen, owner. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: -Waste oil, 3 x 55 gallon drums. -Waste antifreeze, 1 x 55 gallon drums. Business emergency plan was available. Mr. Nguyen is the only employee at the facility and is exempt from the training requirements. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/21/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Facility has three 55 gallon drums for waste oil, one drum filters, and one drum for waste coolant. All waste is hauled by Action Waste Oil. EPA ID# CAL00-0330210 verified active.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/15/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Consent to enter ,inspect and take photographs granted by the owner Mr. Victor

Nguyen. The facility generates waste oil , drained used oil filters and coolant waste. Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Emergency Response Informational Sticker was available for review. The beginning date of accumulation was added to the waste oil storage tote. Hazardous waste containers must be properly labeled and covered . Each container and portable tank holding hazardous waste must be marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date Reviewed manifests, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/01/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Onsite for a routine hazardous waste inspection. Consent to enter and inspect was granted by Victor Nguyen, Owner. The facility generates the following automotive wastes: - Used oil - Used oil filters (metal/paper) - Waste coolant Hazardous waste label requirements were discussed on site. On an ongoing basis, labels are required to have the following information: 1) the words "Hazardous Waste"; 2) name and address of generator; 3) hazardous properties; 4) physical state; 5) composition (contents); 6) accumulation start date. Observed facility, hazardous waste storage area, perimeter, and dumpster area. Hazardous waste containers were stored closed. No indication of hazardous waste spillage, runoff, or illegal disposal was observed. Emergency response plan in onsite. Employees are reported to be trained. Manifests were available for review. Facility has 1 employee. Emailed a copy of this report to wnguyen630@gmail.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Victor Nguyen
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Victor Nguyen
Entity Title:
Address: 13331 Brookhurst st #A
City: Garden Grove
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 530-5138

Affil Type Desc: Environmental Contact
Entity Name: Wendy Freitas
Entity Title:
Address: 13331 Brookhurst st #A
City: Garden Grove
State: CA
Country:
Zip Code: 92843
Phone:

Affil Type Desc: Document Preparer
Entity Name: Victor Nguyen
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 13331 Brookhurst st #A
City: Garden Grove
State: CA
Country:
Zip Code: 92843
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Parent Corporation
Entity Name: QUOC AUTO REPAIR
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Victor Nguyen
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 343-3727

7	1 of1	NNW	0.10 / 531.25	73.85 / 0	KHOI VU 9791 IMPERIAL AVE GARDEN GROVE CA 92844-2413	RCRA NON GEN

Handler ID: CAC003060207
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		

Used Oil Market Burner: No

Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20200316	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200320
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	KHOI VU
Location Street No:	
Location Street1:	9791 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844-2413
Location County Code:	CA059
Location County Name:	ORANGE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Country:	US
Contact Name:	KHOI VU
Contact Street No:	
Contact Street1:	9791 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844-2413
Contact Country:	
Contact Phone And Ext:	909-364-1904
Contact Fax:	
Contact Email Address:	NANCYRUIZ@ALLIANCE-ENVIRO.COM
Contact Title:	
Owner Name:	KHOI VU
Owner Type:	O
Owner Seq:	1
Operator Name:	KHOI VU
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200316
Handler Name:	KHOI VU
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	9791 IMPERIAL AVE
Name:	KHOI VU	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	909-364-1904	**Country:**	
Source Type:	Implementer	**Zip:**	92844-2413
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	9791 IMPERIAL AVE
Name:	KHOI VU	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	909-364-1904	**Country:**	
Source Type:	Implementer	**Zip:**	92844-2413

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of10	SE	0.10 / 547.63	72.11 / -2	UNION DODGE 9898 TRASK AVE GARDEN GROVE CA 92844	RCRA SQG

Handler ID:	CAD982313199
Generator Status:	SQG
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	***NAIC 1:***	
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	19970714	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:	P	***Location Latitude:***	33.766389
In Handler Univ:	Y	***Location Longitude:***	-117.956457
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	SQG	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	CA
Accessibility:		***State District:***	4
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:			
State Waste Generator:			
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20020627		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	UNION DODGE
Location Street No:	
Location Street1:	9898 TRASK AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	TED OKADA
Contact Street No:	
Contact Street1:	9898 TRASK AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	US
Contact Phone And Ext:	714-539-5757
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	CHARLES LEE
Owner Type:	P
Owner Seq:	3
Operator Name:	NOT REQUIRED
Operator Type:	P
Operator Seq:	4
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19970714
Handler Name:	UNION DODGE
Fed Waste Generator:	2
Generator Code Description:	Small Quantity Generator
Source Type:	Notification

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	9898 TRASK AVE
Name:	CHARLES LEE	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-539-5757	***Country:***	
Source Type:	Notification	***Zip:***	92844
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	NOT REQUIRED	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	
Source Type:	Notification	***Zip:***	99999

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	*2 of10*	*SE*	*0.10 / 547.63*	*72.11 / -2*	***GARDEN GROVE MITSUBISHI*** ***9898 TRASK AVE*** ***GARDEN GROVE CA 92844***	***DELISTED TNK***

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Delisted Storage Tanks

Facility ID: 6947
Latitude: 33.767813
Longitude: -117.954121
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

8	3 of10	SE	0.10 / 547.63	72.11 / -2	Russell Westbrook Hyundai Of Garden Grove 9898 Trask Ave Garden Grove, Ca 92844-2800 CA	AST ORANGE

Establishment ID: FA0054812

8	4 of10	SE	0.10 / 547.63	72.11 / -2	9898 TRASK AVE GARDEN GROVE CA 92844	AST

Total Capacity(Gal): 1,320
CUPA: Orange
Owner Name: UNION DODGE
County: Orange

8	5 of10	SE	0.10 / 547.63	72.11 / -2	Russell Westbrook Hyundai Of Garden Grove 9898 Trask Ave Garden Grove, Ca 92844-2800 Garden Grove CA 92844-2800	HW ORANGE

Establishment ID: FA0054812

8	6 of10	SE	0.10 / 547.63	72.11 / -2	Garden Grove Hyundai 9898 TRASK AVE GARDEN GROVE CA 92844	CERS TANK

Site ID: 118782
Latitude: 33.766479
Longitude: -117.956551

Regulated Programs

EI ID: 10489162
EI Description: Aboveground Petroleum Storage

Violations

Violation Date: 03/23/2016
Violation Program: HW
Violation Source: CERS
Violation Division: Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 03/23/2016. Used oil filter did not have a cover. A cover was located by Mr. Atchison and the violation was corrected during the inspection.

Violation Description:

Failure to properly close hazardous waste containers when not in active use.

Violations

Violation Date: 04/29/2014 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 05/02/2017. Locate the SPCC plan or develope a plan if one has not been completed and notify this agency when the plan has been completed

Violation Description:

Failure to maintain SPCC plan onsite (applies if facility is manned at least four (4) hours per day).

Violations

Violation Date: 06/18/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Notes:

Returned to compliance on 12/17/2021. The SPCC plan is dated 2-15-13 and must be reviewed every 5 years submit the date reviewed on CERS

Violation Description:

Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.

Violations

Violation Date: 04/29/2014 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 04/29/2014. One of the three drums on waste oil filters was not stored with the lid closed. The drum was closed at my request this date. Make sure that all hazardous waste containers are stored closed and the violation was abated.

Violation Description:

Failure to properly close hazardous waste containers when not in active use.

Violations

Violation Date: 03/23/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 23 66273.34 - California Code of Regulations, Title 22, Chapter 23, Section(s) 66273.34
Violation Notes:

Returned to compliance on 03/23/2016. Waste Fluorescent lamps were in a 4' tall box, the container was unlabeled. Issue was rectified during the inspection, as Mr. Atchison labeled the box as Universal Waste and added the accumulation start date to the box.

Violation Description:

Failure to properly label the following categories of universal waste as:
1) Each batteries or the container in which the batteries are contained as "Universal Waste-Battery(ies)".
2) Each mercury-containing equipment or the container in which the mercury-containing equipment is contained as "Universal Waste -Mercury-Containing Equipment".
3) Each Florescent lamp or the container or package in which the lamps are contained as "Universal Waste-Lamp(s)".
4) Each electronic devices or the container or pallet in or on which the electronic devices are contained as "Universal Waste-Electronic Device(s)".
5) Each CRTs or the container or pallet in or on which the CRTs are contained as "Universal Waste-CRT(s)".
6) A container of CRT glass shall be labeled or marked clearly with the following phrase: "Universal Waste-CRT glass".
7) In lieu of labeling individual electronic devices, CRTs, and/or containers of CRT glass pursuant to subsections d) through f) of this section, a universal waste handler may combine, package, and accumulate those universal wastes in appropriate containers or within a designated area demarcated by

boundaries that are clearly labeled with the applicable portion(s) of the following phrase: "Universal Waste-Electronic Device(s)/Universal Waste - CRT (s)/Universal Waste-CRT Glass".

Violations

Violation Date: 03/23/2016
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Orange County Environmental Health
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Notes:

Returned to compliance on 06/13/2017. A copy of the hazardous material business emergency program was not present on site. The facility's point of contact was not able to access the HMBP plan on CERS either. The facility primary contact email needs to be updated on CERS. Please maintain an updated copy of HMBP plan on site.

Violation Description:

Business Plan Program - Administration/Documentation - General

Evaluations

Eval Date: 01/10/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Emergency plan reviewed and accepted by M Sutphin SPCC plan at site notification accepted by M Sutphin Bussiness activity and owner information accepted by M Sutphin Hazmat inventory and site map reviewed and accepted by M Sutphin; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/21/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS submittal Hazmat business emergency plan reviewed and accepted by M Sutphin .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/04/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS 10489162 The 2017 HMBEP submittal was accepted today. NOTE the cleaners and the waste absorbents were asked to be removed from the disclosure because they were not at the regulated volume.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/30/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP

Eval Source: CERS
Eval Notes:

Review of CERs submittal. Accepted facility info for 2016; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a routine hazardous waste inspection. Facility went through a change of ownership on 11/7/2022. Business will be removed from the hazardous waste program.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/29/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On-site for a routine inspection. Met with Vagas Le and Abel Lara this date. There is 2,740 gallons of petroleum storage on-site in above ground tanks No SPCC Plan could be located. A spill prevention control and counter measure plan (SPCC) must be developed for the aboveground storage at your facility. For more information on the SPCC please visit http://www.calepa.ca.gov/CUPA/Aboveground/FactSheetSPCC.pdf. --Facilities with less than 10,000 gallons of petroleum storage on-site and no one single container more than 5,000 gallons can complete and self certify an SPCC template which can be found at http://www.epa.gov/fedrgstr/EPA-WASTE/2008/December/Day-05/f28159.pdf (appendix G). --Facilities with less than 10,000 gallons on-site and have individual containers more than 5,000 gallons can prepare and self certify SPCC in accordance with 40 CFR 112.6, 112.7 and subpart B. --Facilities with greater than 10,000 gallons of petroleum storage on-site are [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/23/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Garden Grove Hyundai – 3/23/2016 On site to conduct a routine hazardous waste inspection. Consent to enter, inspect and take pictures was given by Mr. Craig Atchison at 11:07 am. The hazardous waste containers found here: a. Used Oil filters = 600 items (4X 55 gallon drums) b. Used Motor Oil = 600 gallons (one 1000 gallon tank, 2/3 full) c. Used Antifreeze = 100 gallons (one 500 gallon tank) d. Waste absorbent = 250 pounds e. Fluorescent light bulbs = 20 tubes (4' cardboard box) Manifests were available and reviewed. Walked the perimeter of the site, and there were no hazardous waste spills or discharges were observed during this inspection. Emergency response poster were posted with necessary information at the common area. The common dumpster on site was checked and empty aerosol cans and empty oil filter boxes were found. Owner was notified to dispose of aerosol cans as universal waste if the aerosol cans are not empty. Training documents were [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/18/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine Hazmat facility inspection. Permission to enter, inspect, and take photographs granted by David Sanchez Car dealership generates hazardous waste from servicing autos and has disclosed 5 hazardous materials Facility has active EPA ID#.CAL000438576. Facility has Submitted a Hazmat Emergency Plan on CERS 10489162. The hazmat plan appears correct. The facility has implemented a Hazmat Business plan and provides employee training.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/30/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS 10489162 reviewed and accepted by M Sutphin Facility has listed lube oil, coolant, waste oil, waste coolant, cleaner soap, degreaser, and fuel contaminated absorbent. ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/02/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site to conduct a routine Aboveground Petroleum Storage Tank inspection. Consent to inspect, take photos and collect samples was provided by Craig Atchinson. The facility has the following Petroleum products stored in aboveground tanks or containers equal to or greater than 55 gallons: - 1000 gallons waste oil - 1000 gallons motor oil (5W-20) - 100 gallons ATF - 500 gallon motor oil (5W-30) - 100 gallon motor oil The facility provided a copy of a current Spill Prevention Control & Countermeasures Plan and it was available for review at the facility. A training records for training conducted with regards the SPCC plan was also available for review. No APST violations were issued to the facility on this date. Thank you; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials and Business Emergency Plan (HMBEP) inspection. Consent to enter, inspect and take any necessary photos was given by Parts Manager, Paco Montiel. Observed the facility and inspected hazardous materials storage. The hazardous materials observed were in amounts that met or exceeded the minimum volumes required for disclosure: - Lubricating Oils 1500 gallons - Used Oil 1000 gallons - Coolant 100 gallons - Used Coolant 500 gallons - Cleaners/Soaps 55 gallons - Waste Absorbent 55 gallons Employee training documentation was available for review. Emergency Response Notification is posted in the office. Facility went through a change of ownership and a new CERS (California Environmental Report System) submittal has not been submitted under the new ownership, Garden Grove HY LLC. Hazardous Materials documents can be submitted via the California Electronic Reporting System (CERS) located at http://cers.calepa.ca.gov/. Please note, you are required t; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/02/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a routine Hazardous Materials Business Emergency Plan inspection. Consent to inspect and take photos was provided by Craig Atchison. THe facility has submitted in CERS (10489162). A walk through of the facility was conducted. The following Hazardous Substances were observed being stored at above the reporting threshold: HM -Motor oil -Antifreeze Coolant -Degreaser HW -Waste Oil -Waste Coolant This facility is responsible for identifying all hazardous materials and hazardous wastes, which are above the following disclosure thresholds: Solids > 500 pounds. Liquids > or = 55 gallons Gas > or = 200 cubic feet Site map is available for review. Employee training is available for review. Ensure the HMBEP is resubmitted by March 1st every year.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/20/2020
Violations Found: No
Eval General Type: Other/Unknown

Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Reviewed CERS , hw inspections , AST and HMBP; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/20/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Reviewed CERS , hw inspections and HMBP; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/13/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

SPCC plan at site per last inspection Facility has submitted SPCC information on CERS for 2795 gallons of petroleum and notification that the SPCC plan was completed 2-15-13; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/18/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by David Sanchez Car dealership generates hazardous waste from servicing autos Facility has active EPA ID#.CAL000428944 Facility has 1000 gallon waste oil capacity in a double walled above ground storage tank. Facility has one 500 gallon double walled AST for waste coolant. Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Emergency Response Information was available for review. Hazardous waste containers were properly labeled and covered. Containers holding hazardous waste were marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/23/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Garden Grove Hyundai – 3/23/2016 On site to conduct a routine hazardous material and business plan inspection. Consent to enter, inspect and take pictures was given by Mr. Craig Atchison at 11:07 am. Walked the site with Mr. Atchison and observed the hazardous material storage areas throughout car dealership and the following hazardous materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: Motor oil = 1000 gallons (two 500 gallon tanks) Engine oil = 120 gallons Coolant = 150 gallons Used Oil filters = 600 items (4X 55 gallon drums) Used Motor Oil = 600 gallons (one 1000 gallon tank, 2/3 full) Used Antifreeze = 100 gallons (one 500 gallon tank) A copy of the hazardous material business emergency program was not present on site. The facility primary contact email needs to be updated on CERS. Update chemical inventory to reflect what's currently on site. Emergency response equipment was present onsite and [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine hazardous materials inspection. Facility went through a change of ownership on 11/7/2022. Business will be removed from the hazardous materials program.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/18/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine Above ground Tank (AST) facility inspection. Permission to enter, inspect, and take photographs granted by David Sanchez Facility has submitted HMBP on CERS ID 10489162 The SPCC template is available at www.occupainfo.com Auto dealership service department has disclosed 1550 gallons of petroleum in ASTs and 1000gallons of waste oil is ASTs. The Plan also lists 500 gallons of waste antifreeze that does not need to be listed since it is not petroleum. Weekly inspections logs must be kept for the oil tanks. The SPCC plan reviewed at site was dated 2-15-13 and must be recertified every 5 years . please review sign and date the SPCC plan .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/25/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

SPCC plan at site per last inspection Facility has submitted SPCC information on CERS for 2795 gallons of petroleum and notification that the SPCC plan was completed 2-15-13. Please note that the SPCC plan must be reviewed every 5 years and recertification date listed on the CERS APSA facility form must list a date within 5 years , not 2-15-2013. Please note the SPCC plan at site must also list a certification date within 5 years.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/01/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Reviewed and accepted by M Sutphin.SPCC plan at site per last inspection Facility has submitted SPCC information on CERS for 2795 gallons of petroleum and notification that the SPCC plan was completed 2-15-13. and has been re certified in 2021; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Reviewed and approved CERS APSA submittal; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/20/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed the facility's 2018 CERS HMBP submission. Facility Information accepted. Waste Coolant/Ethylene Glycol – Please remove the obsolete federal hazard categories listed for this material and check off the appropriate updated federal hazard categories. Emergency Response/Contingency Plan declined - Section C. Emergency Communications... change Local Unified Program Agency (UPA/CUPA) to (714)433-6000.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct routine Hazardous Waste Inspection. Consent to enter, inspect and take any necessary photos was given by Paco Montiel, Parts Manager. Observed facility, hazardous waste storage area, perimeter, and dumpster area. Hazardous waste containers were stored closed and properly labeled. No indication of hazardous waste spillage, runoff, or illegal disposal was observed. Manifests and emergency response plan were reviewed. Training was reported to be done for employees. No hazardous waste violations were observed on this date. This inspection report was sent to leonarda@gghyundai.com and pacom@hbhyundai.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/02/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Consent to inspect and take photos at the facility was provided by Craig Atchison. Municipal dumpster area does not contain any hazardous waste. The perimeter of the facility was also inspected; no signs of releases were noted. Emergency Response Information was complete. Hazardous waste containers were properly labeled and covered. Reviewed manifests, bills of lading and consolidated manifests for all hazardous waste streams. For further information about Hazardous Waste management, please refer to the Orange County CUPA website at www.occupainfo.com and open the PDF "Hazardous Waste the Basics". No hazardous waste violations noted today.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/29/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On-site for routine hazardous waste generator inspection. Permission to enter, inspect, and take photographs granted by Vargas Le the service manager. Abel Lara the parts manager was also present during the inspection this date. Hazardous Waste receipts made available and reviewed Facility generates Safety-Kleen parts washers waste, clarifier sump waste, waste coolant, oil, and used oil filters. HW containers properly labeled and dated with the beginning date of accumulation One of the three drums on waste oil filters was not stored with the lid closed. The drum was closed at my request this date. Make sure that all hazardous waste containers are stored closed Emergency numbers posted at site Inspected trash/dumpster and it does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. A waste tire generator inspection was also performed this date and a copy of the report will be [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/10/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

SPCC plan at site notification accepted by M Sutphin Bussiness activity and owner information accepted by M Sutphin; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/21/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Legal Owner
Entity Name: GARDEN GROVE HY LLC
Entity Title:
Address: 9898 Trask Ave
City: Garden Grove
State: CA
Country: United States
Zip Code: 92844
Phone: (714) 793-0035

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 9898 Trask Ave
City: Garden Grove
State: CA
Country:
Zip Code: 92844
Phone:

Affil Type Desc: Identification Signer
Entity Name: Leonard Arsanos
Entity Title: Service Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Garden Grove Hyundai
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: ARMINA MJERIAN
Entity Title:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Address:
City:
State:
Country:
Zip Code:
Phone: (714) 793-0035

Affil Type Desc: Environmental Contact
Entity Name: Leonard Arsanos
Entity Title:
Address: 9898 Trask Ave
City: Garden Grove
State: CA
Country:
Zip Code: 92844
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Document Preparer
Entity Name: Celly Services, Inc.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Coordinates

Env Int Type Code:	HWG	**Longitude:**	-117.956920
Program ID:	10489162	**Coord Name:**	
Latitude:	33.766490	**Ref Point Type Desc:**	Center of a facility or station.

8	7 of10	SE	0.10 / 547.63	72.11 / -2	DYNAMIC AUTO IMAGES 9898 TRASK AVENUE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAL000429991
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No

Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811192
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20170810	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.766389
In Handler Univ:	Y	**Location Longitude:**	-117.956457
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180907
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	DYNAMIC AUTO IMAGES
Location Street No:	
Location Street1:	9898 TRASK AVENUE
Location Street2:	
Location City:	GARDEN GROVE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location State: CA
Location Zip: 92844
Location County Code: CA059
Location County Name: ORANGE
Location Country: US
Contact Name: COREY MILLER
Contact Street No:
Contact Street1: 1407 N BATAVIA ST STE 102
Contact Street2:
Contact City: ORANGE
Contact State: CA
Contact Zip: 92867
Contact Country:
Contact Phone And Ext: 714-981-4367
Contact Fax: 714-646-5458
Contact Email Address: ELISA@DYNAMICAUTOIMAGES.COM
Contact Title:
Owner Name: TOM MILLER
Owner Type: O
Owner Seq: 1
Operator Name: COREY MILLER
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20170810
Handler Name: DYNAMIC AUTO IMAGES
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: TOM MILLER
Dt Became Current:
Dt Ended Current:
Phone: 714-771-3400
Source Type: Implementer
Street No:
Street1: 1407 N BATAVIA ST STE 102
Street2:
City: ORANGE
State: CA
Country:
Zip: 92867

Owner/Operator Ind: Current Operator
Type: Other
Name: COREY MILLER
Dt Became Current:
Dt Ended Current:
Phone: 714-981-4367
Source Type: Implementer
Street No:
Street1: 1407 N BATAVIA ST STE 102
Street2:
City: ORANGE
State: CA
Country:
Zip: 92867

8	8 of10	SE	0.10 / 547.63	72.11 / -2	YNOT6 II LLC DBA GARDEN GROVE HYUNDAI 9898 TRASK AVE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAL000428944
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	44111
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20170706	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.766389
In Handler Univ:	Y	***Location Longitude:***	-117.956457
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		

Fa Required:	-----
Hhandler Last Change:	20180907
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	YNOT6 II LLC DBA GARDEN GROVE HYUNDAI
Location Street No:	
Location Street1:	9898 TRASK AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	MEHRZAD KHAJENOORI
Contact Street No:	
Contact Street1:	6400 CHRISTIE AVE #5405
Contact Street2:	
Contact City:	EMERYVILLE
Contact State:	CA
Contact Zip:	94608
Contact Country:	
Contact Phone And Ext:	415-867-8644
Contact Fax:	949-606-8190
Contact Email Address:	MEHRZAD@BNDEALERSHIPS.COM
Contact Title:	
Owner Name:	YNOT6 II LLC
Owner Type:	O
Owner Seq:	1
Operator Name:	MEHRZAD KHAJENOORI
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20170706
Handler Name:	YNOT6 II LLC DBA GARDEN GROVE HYUNDAI
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	6400 CHRISTIE AVE #5405
Name:	YNOT6 II LLC	***Street2:***	
Dt Became Current:		***City:***	EMERYVILLE
Dt Ended Current:		***State:***	CA
Phone:	405-620-0511	***Country:***	
Source Type:	Implementer	***Zip:***	94608

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	6400 CHRISTIE AVE #5405
Name:	MEHRZAD KHAJENOORI	***Street2:***	
Dt Became Current:		***City:***	EMERYVILLE
Dt Ended Current:		***State:***	CA
Phone:	415-867-8644	***Country:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Source Type: Implementer **Zip:** 94608

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8 **9 of10** **SE** **0.10 / 547.63** **72.11 / -2**

GARDEN GROVE MITSUBISHI
9898 TRASK AVE
GARDEN GROVE CA

UST SWEEPS

C C:	A30-000-6947	**D Filename:**	SITE12A
BOE:	44-016549	**Page No:**	133
Comp:	6947	**County:**	ORANGE
Status:	ACTIVE	**State :**	CA
No of Tanks:	2	**Zip:**	92644
Jurisdict:	ORANGE COUNTY	**Latitude:**	33.76667
Agency:	ENVIRONMENTAL HEALTH	**Longitude:**	-117.95677
Phone:		**Georesult:**	S5HPNTSC-A

Tank Details

Tank ID:	000001	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-006947-000001	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	3000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000002	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-006947-000002	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	
Capac:	550	**ONA:**	
Tank Use:	PETROLEUM	**D File Name:**	TANK12A

---

8 **10 of10** **SE** **0.10 / 547.63** **72.11 / -2**

UNION CHRYSLER JEEP DODGE
9898 TRASK AVE
GARDEN GROVE CA 92844

C&D
DEBRIS RECY

County: ORANGE

Activity Type: USED OIL COLLECTION
Phone No: (714) 741-3100

---

9 **1 of9** **SW** **0.11 / 557.72** **70.33 / -3**

QUALITY NISSAN
9670 TRASK AVE
GARDEN GROVE CA 92844

RCRA SQG

Handler ID: CAD982357949
Generator Status: SQG
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	***NAIC 1:***	
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	19970129	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:	P	***Location Latitude:***	33.766673
In Handler Univ:	Y	***Location Longitude:***	-117.959531
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	SQG	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	CA
Accessibility:		***State District:***	4
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:			
State Waste Generator:			
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20020627		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		

Contact Language:	EN
Handler Name:	QUALITY NISSAN
Location Street No:	
Location Street1:	9670 TRASK AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	TED DIESEL
Contact Street No:	
Contact Street1:	9670 TRASK AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92644
Contact Country:	US
Contact Phone And Ext:	714-537-0900
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	QUALITY NISSAN
Owner Type:	P
Owner Seq:	4
Operator Name:	NOT REQUIRED
Operator Type:	P
Operator Seq:	5
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19970129
Handler Name:	QUALITY NISSAN
Fed Waste Generator:	2
Generator Code Description:	Small Quantity Generator
Source Type:	Notification

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	NOT REQUIRED	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	
Source Type:	Notification	***Zip:***	99999
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	9670 TRASK AVE
Name:	QUALITY NISSAN	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-537-0900	***Country:***	
Source Type:	Notification	***Zip:***	92644

9	***2 of9***	***SW***	***0.11 / 557.72***	***70.33 / -3***	***QUALITY NISSAN 9670 TRASK AVE GARDEN GROVE CA 92844***	***DELISTED TNK***

Delisted Storage Tanks

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility ID: 12923
Latitude: 33.7677806
Longitude: -117.9600233
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

9	3 of9	SW	0.11 / 557.72	70.33 / -3	Toyota Place 9670 Trask Ave Garden Grove, Ca 92844-2801 CA	AST ORANGE

Establishment ID: FA0051444

9	4 of9	SW	0.11 / 557.72	70.33 / -3	9670 TRASK AVE GARDEN GROVE CA 92844	AST

Total Capacity(Gal): 1,320
CUPA: Orange
Owner Name: TOYOTA PLACE
County: Orange

9	5 of9	SW	0.11 / 557.72	70.33 / -3	Toyota Place 9670 Trask Ave Garden Grove, Ca 92844-2801 Garden Grove CA 92844-2801	HW ORANGE

Establishment ID: FA0051444

9	6 of9	SW	0.11 / 557.72	70.33 / -3	TOYOTA PLACE 9670 TRASK AVE GARDEN GROVE CA 92844	CERS TANK

Site ID: 178742
Latitude: 33.766693
Longitude: -117.960300

Regulated Programs

EI ID: 10563634
EI Description: Aboveground Petroleum Storage

Violations

Violation Date: 03/10/2022
Violation Program: HW
Violation Source: CERS
Violation Division: Orange County Environmental Health
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16
Violation Notes:

Documented training of personnel was not available at the time of inspection. CORRECTIVE ACTION: Locate training documentation or conduct training with applicable personnel and document it. Training program must be run by a person trained in hazardous waste management procedures, shall teach personnel hazardous waste management procedures relevant to the positions in which they are employed (including contingency plan implementation), and shall be designed to ensure that facility personnel are able to respond to emergencies by familiarizing them with emergency procedures, equipment, and systems. Facility employees shall complete the training within 6 months of hire/assignment and shall have annual review of the initial training material. Written documentation must include the job title for each person at the facility related to hazardous waste management, name of each employee filling each of these jobs, written job description for each of these positions, to [Truncated]

Violation Description:

Failure to provide employees with hazardous waste training program of class room instructions or on-the-job training within the first six months after the date of their employment or assignment to a facility, or to a new position at a facility and annually thereafter. Training records on current personnel shall be kept until closure of the facility and for former employees the record shall be kept for at least three years from the date the employee last worked at the facility. The records shall include the following: the job title for each position at the facility related to hazardous waste management, and the name of

the employee filling each job; a written job description for each position, duties of facility personnel assigned to each position, and a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 06/08/2022. The following hazardous waste observed inside of the shop area were without a hazardous waste label: -Used oil paper filter - 55 gallon drum -Used oil metal filters - three 55 gallon drums CORRECTIVE ACTION: Submit a photo demonstrating that the containers listed above have been properly labeled to this Agency by email within 30 days.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.192(a) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.192(a)
Violation Notes:

A written hazardous waste tank assessment has not been obtained for the used oil and waste antifreeze tank systems prior to placing the systems into service. CORRECTIVE ACTION: Obtain a written hazardous waste tank system assessment for the used oil and waste antifreeze tank systems in accordance with 22 CCR 15 66265.192 and submit a copy to this Agency by email within 30 days.

Violation Description:

Failure to obtain and maintain a written assessment reviewed and certified by an independent, qualified, professional engineer prior to placing the tank system in service. The written assessment shall state that, the new hazardous waste tank system has sufficient structural integrity, is acceptable for the transferring, storing and treating of hazardous waste, and that the tanks and containment system including the foundation, structural support, seams, connections, and pressure controls (if applicable) are suitably designed to meet the regulation.

Violations

Violation Date: 09/27/2017 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 10/19/2017. The facility dod not have a record for the inspections conducted on the Aboveground Petroleum Storage Tanks. The facility must conduct inspections in accordance with written procedures and maintain records for 3 years. An inspection checklist was created from the SPCC plan and an inspection was documented today. Ensure the inspection log for the Aboveground tanks is keep and please send me proof of completion of the log after 30 days, send a copy of the completed inspection log to berdman@ochca.com .

Violation Description:

Failure to comply with one or more of the following requirements:

1. Have record of inspections and integrity tests signed by the appropriate supervisor or inspector.

2. Keep written procedures and records of inspections and integrity tests for at least three years.

3. Keep comparison records.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS

Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 06/22/2022. The owner/operator failed to ensure that tanks are inspected by an appropriately qualified person in accordance with industry standards. The operator is inspecting tanks on a monthly basis but has not been conducting inspections of the tanks' interstitial space or the system's piping runs. CORRECTIVE ACTION: Ensure that tanks are inspected by an appropriately qualified person in accordance with industry standards. Provide proof of compliance to this Agency by email within 30 days.

Violation Description:

Failure to ensure that tanks are inspected and tested by an appropriately qualified person in accordance with industry standards.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 06/22/2022. The owner/operator failed to regularly inspect aboveground valves, piping, and appurtenances. CORRECTIVE ACTION: Inspect aboveground valves, piping, and appurtenances on a monthly basis. Provide proof of compliance to this Agency by email within 30 days.

Violation Description:

Failure to regularly inspect aboveground valves, piping, and appurtenances.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 06/22/2022. The owner/operator failed to follow procedures to prevent overfills as described in the SPCC Plan, and/or failure to routinely test to ensure proper operation. The operator stated that a facility employee is not present during filling of the motor oil and AFT tanks. CORRECTIVE ACTION: Begin following procedures to prevent overfills as described in SPCC plan, and routinely test systems or devices used to prevent overfilling. Provide proof of compliance to this Agency by email within 30 days.

Violation Description:

Failure to provide systems or follow procedures to prevent overfills as described in the SPCC Plan, and/or failure to routinely test to ensure proper operation.

Violations

Violation Date: 04/13/2016 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)
Violation Notes:

Returned to compliance on 06/12/2017. The chemicals present on site were not representative of what was reported on the HMBP. Please revise the chemical inventory form on CERS and add the additional chemicals that meet or exceed threshold within 30 days.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
A 100 percent or more increase in the quantity of a previously disclosed material.
Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
A change of business address, business ownership, or business name.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 05/26/2023. The owner/operator failed to schedule and conduct spill prevention briefings at least once a year and/or to maintain records of briefings. CORRECTIVE ACTION: Conduct spill prevention briefings annually. Provide proof of compliance to this Agency by email within 30 days.

Violation Description:

Failure to conduct spill prevention briefing for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 06/22/2022. The owner/operator failed to provide Aboveground Storage Tank training to all oil-handling personnel on an annual basis and/or failed to maintain records of training. CORRECTIVE ACTION: Provide training in: 1. The operation and maintenance of equipment to prevent discharges; 2. Discharge procedure protocols; 3. Applicable pollution control laws, rules, and regulations; 4. General facility operations; AND 5. The contents of the SPCC Plan. Provide proof of employee training to this Agency by email within 30 days.

Violation Description:

Failure to provide the following training to all oil-handling personnel:

1. Operation and maintenance of equipment to prevent discharges.

2. Discharge procedure protocols.

3. Applicable pollution control laws, rules, and regulations.

4. General facility operations.

5. Contents of the SPCC Plan.

Violations

Violation Date: 04/13/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 07/03/2017. Four used oil filter drums were not closed and had used oil filters pilled up on the drum. Please dispose of used oil filters immediately or start a new drum to accumulate the used oil filters. All hazardous waste drums must be closed unless you are in the process of filling or emptying the drum. Violation was corrected during the inspection.

Violation Description:

Failure to properly close hazardous waste containers when not in active use.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 06/08/2022. 1. The following hazardous waste observed inside of the shop area were observed to be open/missing a lid: -

Used oil paper filter - 55 gallon drum -Used oil metal filters - three 55 gallon drums CORRECTIVE ACTION: Submit a photo to this Agency by email within 30 days, demonstrating that the containers listed above have been properly closed.

Violation Description:

Failure to meet the following container management requirements:
(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.174 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.174
Violation Notes:

Returned to compliance on 06/08/2022. The owner/operator failed to document the weekly inspections of the following hazardous waste containers: • Used absorbent contaminated with used oil • Used oil paper filters • Used oil metal filters • Used absorbent contaminated with gasoline CORRECTIVE ACTION: Submit a copy of the inspection log demonstrating that the hazardous waste containers are being inspected weekly to this Agency by email within 30 days.

Violation Description:

Failure to inspect weekly, areas where hazardous waste containers are stored or transferred. The owner or operator shall look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Returned to compliance on 05/27/2022. Make the following corrections/additions to the Site Map section: a. Add the location of the absorbent, hazardous waste storage, and brake cleaner 55 gallon drum, in the area labeled as Tool Room, b. Add the two eyewash stations adjacent to the Tool Room and Electrical Shut-Off switch room, c. Add the location of the 200 gallons of ATF in the oil storage room, and d. Add the location of the loading area, and storm drains. CORRECTIVE ACTION: Make all mentioned corrections on the CERS website, https://cers.calepa.ca.gov/, within 30 days.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date: 04/13/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)
Violation Notes:

Returned to compliance on 07/03/2017. A drum with a hazardous waste label for used antifreeze was found on the west side dumpster enclosure. The drum was not in not condition and had about 10 gallons of used antifreeze inside. Please move drum to hazardous waste storage area and dispose of the drum immediately. Please send me a copy of the manifest from the disposal within 30 days.

Violation Description:

Failure to dispose of hazardous waste within 180 days (or 270 if waste is transported over 200 miles) for the generator who generates less than 1000 kilogram per month, but more than 100 kilograms per month.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health

Citation: 22 CCR 15 66265.195(c) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.195(c)
Violation Notes:

Returned to compliance on 06/08/2022. Daily inspections of the waste coolant and used oil tank systems have not been conducted and documented. CORRECTIVE ACTION: Submit documentation to this Agency by email within 30 days demonstrating that the waste coolant and used oil tank systems are being properly inspected daily and that the inspections are being documented.

Violation Description:

Failure to conduct and document inspections of hazardous waste tank systems each operating day and retain records of those inspections at the facility.

Violations

Violation Date: 09/27/2017 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Notes:

Returned to compliance on 09/27/2017. Failure to perform the five-year review of the SPCC plan. The facility provided a copy of an Spill Prevention Control & Countermeasures Plan and the 5 year review of the SPCC Plan was due on 5-14-17. The facility was able to conduct a 5 year amendment and the signed updated SPCC plan today 9-27-17. Violation I757 is corrected.

Violation Description:

Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.

Violations

Violation Date: 03/10/2022 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Returned to compliance on 05/27/2022. Make the following correction to the Hazardous Materials Inventory section: a. Disclose Motor Oil and ATF separately, b. Remove Glass Cleaner, Wash n Wax Solution, and Degreaser as they are not stored on-site above reportable threshold quantities, c. Add Brake Cleaner - 55 gallons, d. For Used Oil Filters, add the annual waste amount and the waste code (221), and e. For Lead Acid Batteries, correct the Units to gallons (Gallons of electrolytes), convert all quantities to gallons, and add the Waste Code. CORRECTIVE ACTION: Make all mentioned corrections on the CERS website, https://cers.calepa.ca.gov/, within 30 days.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Evaluations

Eval Date: 07/16/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and not accepted by M Sutphin Please correct the following List waste antifreeze as a waste not pure also list the CAS # 107-21-1 in the mixture component box for waste antifreeze List the CAS# for waste oil 64742-54-7 in the mixture component box for waste oil; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/04/2025
Violations Found: No
Eval General Type: Compliance Evaluation Inspection

Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a routine Hazardous material inspection. Consent to enter and inspect was granted by Bruce Granse. Verified Hazardous Material Business Plan (HMBP) components submitted in the California Environmental Reporting System (CERS). Employee training records were reviewed. A copy of this report will be emailed to andy@toyotapalace.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/09/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a routine non-RCRA LQG hazardous waste inspection. Andy Fu, the Service Manager, was present for the inspection. The following hazardous waste streams were observed: • Used oil • Used absorbent contaminated with used oil • Used oil paper filters • Used oil metal filters • Used absorbent contaminated with gasoline • Waste ethylene glycol • Aerosol waste Walked the interior and exterior of the facility to inspect the hazardous waste storage area and trash dumpster. Hazardous wastes are stored in containers or tanks that are in good condition, closed, and properly labeled. No hazardous waste was observed in the dumpster. Hazardous Waste Emergency Response information was posted. Manifest were available and reviewed. Provided hazardous waste information for the business. Provided education in regards to containers being labeled and emptied daily for the waste oil plumbing lines and the aerosol cans crusher catch buckets. E-mailed [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/16/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

cers 10563634 REVIEWED FACILITY HAS REPORTABLE QUANTITIES OF WASTE OIL AND WASTE COOLANT; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/13/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

SPCC plan at site per last inspection Facility has submitted SPCC information on CERS for 2400 gallons of petroleum and notification that the SPCC plan review was completed 9-27-17 Business Emergency Contingency plan reviewed and accepted by M Sutphin; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/03/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted by M Sutphin the waste antifreeze was corrected to waste for type of hazardous material; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/13/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Toyota Place – 4/13/16 On site to conduct a routine hazardous waste inspection. Consent to enter, inspect and take pictures was given by the Parts & Service director Pat Petty at 7:27 am. The hazardous waste containers found inside the Toyota Car dealership are: - Used oil = 600 gallons (AST) - Used antifreeze = 300 gallons (AST and one 55 G drum) - Used oil filters = 600 items (Four 55 G drums) Manifests were available and reviewed. Hazardous waste was picked up by Asbury Environmental services. Emergency response information was posted in the common area and lunch area for employees. Walked the perimeter of the site with Mr. Doan, and there were no hazardous waste spills or discharges observed during this inspection. The dumpsters in the east and west end of the facility was inspected. A drum with a hazardous waste label for used coolant was found on the west side dumpster enclosure with very little liquid. Mr. Doan was asked to dispose of it [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine Hazmat facility inspection. Permission to enter, inspect, and take photographs granted by Randy Doan Facility has submitted a hazmat business plan on CERS 10563634 Facility has disclosed 11 hazardous materials above reportable quantities. Hazmat disclosure appears correct and site map appears correct. Facility has submitted an SPCC plan Facility has implemented hazmat business plan and provides employee training.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/18/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The following documents were reviewed and ACCEPTED on CERS: - Hazardous Materials Inventory (2) - Site Map - Emergency Response Plan - Training Plan; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/23/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Off-site reinspection. The following documents were reviewed by this Agency: -CERS submittal submitted for CERS ID 10563634 on 5/27/2022. The Hazardous Materials Inventory and the Site Map were corrected. Violations I169 and I632 were observed corrected. All violations have been corrected. No further action is required at this time. A copy of this inspection report will be emailed to bruce@toyotaplace.com; andy@toyotaplace.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/02/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and not accepted by M Sutphin. For the waste antifreeze please change the hazardous material type from pure to waste; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/05/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Coded 3-3-15 has mat review to HW; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/19/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

This is an in-office inspection report. A copy of the Inspection record for the Aboveground Petroleum Storage Tanks was received and has been completed for this month. Violation I258 is corrected. No outstanding APST violations remain at this time. Thank you; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/27/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

The following documents were reviewed by this Agency: 1. Training documents (Received 6/22/2022). Refer to violation I284. 2. Pictures of hazardous waste labeled containers (Received 6/8/2022). Correcting violation I400. 3. Pictures of hazardous waste closed containers (Received 6/8/2022). Correcting violation I617. 4. Hazardous waste areas weekly inspection logs dated 3/14/2022 - 6/6/2022 (Received 6/8/2022). Correcting violation I364. 5. Written hazardous waste tank system assessment for the 313 gallon waste coolant tank and the 721 gallon waste oil tank (Received 6/23/2022 and 6/27/2022). Refer to violation I162. 6. Daily inspection logs of the waste coolant and used oil tank systems (Received 6/8/2022). Correcting violation I266. The following violations were observed corrected and will be abated: I400, I617, I364, and I266. CORRECT ALL VIOLATIONS NOTED ON THIS INSPECTION REPORT. 1. Violation I284 Training documents were provided to this Agency but did not include: a. Teach; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/15/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The facility has made required changes to their Hazmat inventory. All submittal elements have been accepted. 2018 Annual HMBP Certification is approved.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/17/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval Notes:

Reviewed and accepted by M Sutphin APSA SPCC in Emergency Response/Contingency Plan in CERS 10563634 ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/13/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 03/09/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site to conduct a routine Aboveground Petroleum Storage Act (APSA) inspection. Consent to inspect was given from Andy Fu, the Service Manager. Facility has approximately 2600 gallons of petroleum stored. The facility has the following petroleum storage containers and tanks on site regulated under APSA: • Waste Oil tank - 700 gallon tank • Motor Oil - Two 500 gallon tanks • ATF - Two 350 gallon tanks and 200 gallon tank Spill prevention Control and Countermeasure (SPCC) plan was on site and reviewed. SPCC plan was last reviewed and certified on 9/27/2017.The SPCC Plan will need to be recertified by September 2022. No spills greater than 42 gallons were reported by Mr. Fu. This inspection report will be sent to bruce@toyotaplace.com; andy@toyotaplace.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/24/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Mark Sutphin on site for routine aboveground petroleum storage tank (APST) inspection. Permission to enter, inspect, and take photographs granted by Doug Graf The facility has the following aboveground petroleum storage: - 2,000 gallon split tank with the following storage: 1 x 700 gallons of waste oil, 2 x 500 gallons of new oil, 1 x 300 gallons of waste antifreeze (not regulated under APST program) - 1 x 350 gallons of ATF - 1 x 350 gallons of Dextron (transmission fluid) All tanks have integral secondary containment. The SPCC plan is dated 5/14/12. Training records are available for review. .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/16/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Facility has notified of APST on CERS 10563634 Facility has 1700 gallons of good oil and 300 gallons of waste oil in ASTs SPCC plan is kept at site ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Randy Doan Facility generates hazardous waste from servicing autos Facility has active EPA ID# Manifests from Asbury / World oil reviewed at site and in good order Facility has one 500 gallon waste oil AST and one 500 gallon waste coolant AST, waste oil filters are stored in closed drums . Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Emergency Response Information was available for review. Hazardous waste containers were properly labeled and covered. Containers holding hazardous waste were marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/13/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Toyota Place – 4/13/16 On site to conduct a routine hazardous material and business plan inspection. Consent to enter, inspect and take pictures was given by the Parts & Service director Pat Petty at 7:27 am. Walked the site with the Warranty Administrator Randy Doan and observed the hazardous material storage areas throughout the Toyota car dealership and the following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Brake Fluid = 110 gallons (2X 55 gallon drums) - Nitrogen = 300 CF - Degreaser = 110 gallons (2X55 gallons) - Propane = 14 gallons - Clean Glass cleaners = 55 gallons - Wash and Wax solution = 55 gallons - Motor Oil = 1000 gallons (AST) - Used Oil = 600 gallons (AST) - Used antifreeze = 300 gallons (AST and one 55 G drum) - Antifreeze = 70 gallons (multiple 1 gallon containers) - Used oil filters = 600 items (Four 55 G drums) -Car batteries Business emergency plan was completed and [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/27/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

THIS REPORT SUPERSEDES THE PREVIOUS REPORT The following documents were reviewed by this Agency: 1. Training documentation (Received 6/22/2022). Correcting violation I009. 2. AST system inspection logs from 1/3/2022 - 6/22/2022 (Received 6/22/2022). Correcting violation I383 and I722. 3. Notification that the facility is following its procedures to prevent overfills as described in the SPCC Plan (Employee is present during filling of the motor oil and AFT tanks). Correcting violation I037. The following violations were observed corrected and will be abated: I009, I383, I722, and I037. CORRECT ALL OF THE VIOLATIONS NOTED ON THIS INSPECTION REPORT: 1. Violation I039 The owner/operator failed to schedule and conduct spill prevention briefings at least once a year and/or to maintain records of briefings. CORRECTIVE ACTION: Conduct spill prevention briefings annually. Provide proof of compliance to this Agency by email immediately. A copy of this inspection report will be emailed; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/25/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The facility's CERS HMBEP Submission was reviewed. All submittal elements were accepted.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/04/2025
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Consent to enter and inspect was granted by Bruce Granse. The facility is a Non-RCRA large quantity generator of automotive repair waste. A hazardous waste tank assessment for waste oil and waste coolant tank were available for review, completed 6-1-22. Daily tank inspections are currently being conducted. Hazardous waste containers were observed closed and properly labeled. Hazardous waste manifests were available for review. No hazardous waste was observed in the municipal trash area. Employees are reported to have completed hazardous waste training. A copy of this report will be provided to andy@toyotapalace.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/12/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Arrived on site to perform an inspection. Manager was not available on site, and had to make an appointment for tomorrow.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/13/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 09/27/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site to conduct a routine Aboveground Petroleum Storage Tank inspection. Consent to inspect was provided by Pat Petty. The facility has the following Petroleum products stored in aboveground tanks or containers equal to or greater than 55 gallons: - 350 gallons 5W - 20 - 350 gallons 5W - 30 - 55 gallons ATF - 700 galons Used oil - 500 gallons OW - 20 - 500 gallons OW - 20 - 55 Brake Cleaner Total = 2510 gallons The facility provided a copy of an Spill Prevention Control & Countermeasures Plan and it was available for review at the facility however the 5 year review and amendment was due on 5-14-17 (see violation). The facility was able to conduct a 5 year review and signed an updated SPCC plan today 9-27-17. A training record for training conducted with regards the SPCC plan was also available for review. The facility APST Inspections have not been conducted. An Inspection Log was printed and completed during this inspection. However as per Susan [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/09/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine hazardous materials inspection. Andy Fu, the Service Manager, was present for the inspection. Observed the following disclosable materials: • Waste Oil - 500 gallons • Motor Oil - 1000 gallons • ATF - 700 gallons • Waste antifreeze - 150 gallons • Antifreeze - 55 gallons • Liquefied Petroleum Gas - 14 gallons • Used oil filters - 500 pounds • Brake fluid - 55 gallons • Brake Cleaner -55 gallon drum • Lead acid batteries The Hazardous Materials Business Plan submitted on CERS on 2/21/2022 was reviewed/verified this date. REQUIREMENT FOR ELECTRONIC SUBMITTAL OF HMBEP DOCUMENTS: This report serves as notice that the facility must submit the following documents electronically within 30 days of this report: • Hazardous Materials Inventory • Site Map Documented employee training was verified. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/28/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The following documents were reviewed and ACCEPTED on CERS: - Hazardous Materials Inventory (9)- Please include the car batteries as they were observed above the threshold quantity. - Site Map - Facility information Please contact Shruthi Sill at ssill@ochca.com with regards to any questions. Submitted RUR to change status to 5802.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/24/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on-site for routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Doug Graf the Building Operations Manager this date. The facility generates waset oil, filters, coolant, and brake cleaner Hazardous Waste receipts made available and reviewed. Garden Grove BEP on-site and contains contact information for the emergency coordinator. Inspected trash/dumpster and it does not appear to contain any hazardous waste. facility has an SPCC plan and has over 1320 gallons of petroleum stored in above ground tanks .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine SPCC facility inspection. Permission to enter, inspect, and take photographs granted by Randy Doan Facility has submitted a hazmat business plan on CERS 10563634 Facility has completed an SPCC plan and the plan was reviewed at site. Facility has reported 2750 gallons of petroleum product and waste at site in 55 gallon drums or greater. Please note that the 500 gallon tank of waste coolant should not be included in the SPCC plan. Facility has implemented an SPCC plan and provides employee training.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

CERS submittal 10514770 reviewed and declined 3-3-15 by M Sutphin Submittal reviewed by M Sutphin. Correct the hazmat inventory with the CAS #s in the mixture box ATF mineral oil 64743570, Alkyl phosphites 66610-62-8, waste antifreeze 20 to 100 % Ethylene Glycol 107211 On the plot plan note the location of the storm drains , the fire hydrants, electrical shut off, water shut off and other areas that are noted in the legend but are not noted on the map .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/23/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

APSA facility SPCC plan certification dated 9-27-17 submitted on CERS . 2400 gallons of petroleum noted; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Environmental Contact
Entity Name: Andy Fu
Entity Title:
Address: 9670 TRASK AVE
City: GARDEN GROVE
State: CA
Country:
Zip Code: 92844
Phone:

Affil Type Desc: Operator
Entity Name: Sam Chaalan
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 895-5595

Affil Type Desc: Parent Corporation
Entity Name: TOYOTA PLACE
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Chris Mamoulelis, Celly Services, Inc.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 9670 TRASK AVE
City: GARDEN GROVE
State: CA
Country:
Zip Code: 92844
Phone:

Affil Type Desc: Legal Owner
Entity Name: Noarus TGG, Inc.
Entity Title:
Address: 9670 TRASK AVE
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92844
Phone: (714) 895-5595

Affil Type Desc: Identification Signer
Entity Name: Andy Fu

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Entity Title: Service Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Coordinates

Env Int Type Code: HWG
Program ID: 10563634
Latitude: 33.766690
Longitude: -117.960300
Coord Name:
Ref Point Type Desc: Center of a facility or station.

9	7 of9	SW	0.11 / 557.72	70.33 / -3	NOARUS TGG INC DBA TOYOTA PLACE 9670 TRASK AVE GARDEN GROVE CA 92844-2801	RCRA NON GEN

Handler ID: CAL000330099
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Transfer Facility: No
Recycler: No
Onsite Burner Exem: No
Furnace Exemption: No
Underground Injec: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Commercial TSD: No
Recycl Nonstorage: No

Additional Handler Summary Details

Source Type: I
Seq No: 1
Non Notifier:
Receive Date: 20080226
Active Site: H----
Land Type:
In Handler Univ: Y
In A Universe: Y
Gen Status: N
NAIC 1: 44111
NAIC 2:
NAIC 3:
NAIC 4:
State: CA
Location Latitude: 33.766673
Location Longitude: -117.959531
Loc GIS Primary: N
Loc GIS Origin: AG

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20180905		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		
Contact Language:	EN		
Handler Name:	NOARUS TGG INC DBA TOYOTA PLACE		
Location Street No:			
Location Street1:	9670 TRASK AVE		
Location Street2:			
Location City:	GARDEN GROVE		
Location State:	CA		
Location Zip:	92844-2801		
Location County Code:	CA059		
Location County Name:	ORANGE		
Location Country:	US		
Contact Name:	PAT PETTY		
Contact Street No:			
Contact Street1:	9670 TRASK AVE		
Contact Street2:			
Contact City:	GARDEN GROVE		
Contact State:	CA		
Contact Zip:	92844		
Contact Country:			
Contact Phone And Ext:	714-895-5595		
Contact Fax:	714-889-2107		
Contact Email Address:	PAT@TOYOTAPLACE.COM		
Contact Title:			
Owner Name:	NORRIS J BISHTON		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner Type: O
Owner Seq: 1
Operator Name: PAT PETTY
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20080226
Handler Name: NOARUS TGG INC DBA TOYOTA PLACE
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: PAT PETTY
Dt Became Current:
Dt Ended Current:
Phone: 714-895-5595
Source Type: Implementer
Street No:
Street1: 9670 TRASK AVE
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Owner/Operator Ind: Current Owner
Type: Other
Name: NORRIS J BISHTON
Dt Became Current:
Dt Ended Current:
Phone: 714-895-5545
Source Type: Implementer
Street No:
Street1: 9670 TRASK AVE
Street2:
City: GARDEN GROVE
State: VA
Country:
Zip: 22102-4909

9	8 of9	SW	0.11 / 557.72	70.33 / -3	NISSAN 9670 TRASK AVE GARDEN GROVE CA 92844-2801	AST SWRCB

Total Gals: 0
Owner Name: NISSAN
Data Source: SWRCB Aboveground Storage Tanks Listing 2003;SWRCB Aboveground Storage Tanks Listing 2005;SWRCB Aboveground Storage Tanks Listing 2007

9	9 of9	SW	0.11 / 557.72	70.33 / -3	TOYOTA PLACE 9670 TRASK AVE GARDEN GROVE CA 92844	C&D DEBRIS RECY

County: ORANGE

Activity Type: USED OIL COLLECTION
Phone No:

10	1 of1	N	0.11 / 559.27	73.61 / 0	ROBERT KELLEY 13262 VERDE ST, UNIT 1 GARDEN GROVE CA 92884	RCRA NON GEN

Handler ID: CAC003203540
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report

Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20221109	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		

Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20221109
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	ROBERT KELLEY
Location Street No:	
Location Street1:	13262 VERDE ST, UNIT 1
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92884
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ROBERT KELLEY
Contact Street No:	
Contact Street1:	13262 VERDE ST, UNIT 1
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92884
Contact Country:	
Contact Phone And Ext:	205-678-0360
Contact Fax:	
Contact Email Address:	ELIZABETHS@PWSEI.COM
Contact Title:	
Owner Name:	ROBERT KELLEY
Owner Type:	O
Owner Seq:	1
Operator Name:	ROBERT KELLEY
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20221109
Handler Name:	ROBERT KELLEY
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	13262 VERDE ST, UNIT 1
Name:	ROBERT KELLEY	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	205-678-0360	***Country:***	
Source Type:	Implementer	***Zip:***	92884
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	13262 VERDE ST, UNIT 1
Name:	ROBERT KELLEY	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Dt Ended Current:		**State:**	CA
Phone:	205-678-0360	**Country:**	
Source Type:	Implementer	**Zip:**	92884

11	1 of2	NW	0.11 / 569.37	73.57 / 0	LORI DUNHAM 9771 IMPERIAL AVE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003174431
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20220504	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------

Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20220509
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	LORI DUNHAM
Location Street No:	
Location Street1:	9771 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ASBESTOS ABATEMENT INC
Contact Street No:	
Contact Street1:	2296 E VIA BURTON
Contact Street2:	
Contact City:	ANAHEIM
Contact State:	CA
Contact Zip:	92806
Contact Country:	
Contact Phone And Ext:	714-780-1701
Contact Fax:	
Contact Email Address:	ELENA@ABGCONSTRUCTIONCO.COM
Contact Title:	
Owner Name:	LORI DUNHAM
Owner Type:	O
Owner Seq:	1
Operator Name:	ASBESTOS ABATEMENT INC
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20220504
Handler Name:	LORI DUNHAM
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	2296 E VIA BURTON
Name:	ASBESTOS ABATEMENT INC	**Street2:**	
Dt Became Current:		**City:**	ANAHEIM
Dt Ended Current:		**State:**	CA
Phone:	714-780-1701	**Country:**	
Source Type:	Implementer	**Zip:**	92806

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	9771 IMPERIAL AVE
Name:	LORI DUNHAM	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-397-9180	**Country:**	
Source Type:	Implementer	**Zip:**	92844

11	2 of2	NW	0.11 / 569.37	73.57 / 0	9771 IMPERIAL AVE 9771 IMPERIAL AVE GARDEN GROVE CA 92840-3434	RCRA NON GEN

Handler ID: CAC003214811
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20230130	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		

Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241212
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	9771 IMPERIAL AVE
Location Street No:	
Location Street1:	9771 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92840-3434
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	LORI DUNHAM
Contact Street No:	
Contact Street1:	9771 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92840-3434
Contact Country:	
Contact Phone And Ext:	714-397-9180
Contact Fax:	
Contact Email Address:	ERNIE@SIRRIS.BIZ
Contact Title:	
Owner Name:	LORI DUNHAM
Owner Type:	O
Owner Seq:	1
Operator Name:	LORI DUNHAM
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20230130
Handler Name:	9771 IMPERIAL AVE
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	9771 IMPERIAL AVE
Name:	LORI DUNHAM	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-397-9180	***Country:***	
Source Type:	Implementer	***Zip:***	92840-3434
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	9771 IMPERIAL AVE
Name:	LORI DUNHAM	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-397-9180	***Country:***	
Source Type:	Implementer	***Zip:***	92840-3434

12	*1 of2*	*ENE*	*0.12 / 649.42*	*74.16 / 1*	***Vung Tau Auto Repair*** ***13331 Brookhurst St Ste C Garden Grove, Ca 92843-7000*** ***Garden Grove CA 92843-7000***	***HW ORANGE***

Establishment ID: FA0067316

12	*2 of2*	*ENE*	*0.12 / 649.42*	*74.16 / 1*	***Quoc Auto Repair*** ***13331 Brookhurst St Ste A Garden Grove, Ca 92843-7000*** ***Garden Grove CA 92843-7000***	***HW ORANGE***

Establishment ID: FA0055612

13	*1 of1*	*NE*	*0.14 / 722.41*	*75.62 / 2*	***JANNIEN NGUYEN*** ***9942 CENTRAL AVE, APT F*** ***GARDEN GROVE CA 92844***	***RCRA NON GEN***

Handler ID:	CAC003271573
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No

Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20240503	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	D
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240918
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	JANNIEN NGUYEN

Location Street No:
Location Street1: 9942 CENTRAL AVE, APT F
Location Street2:
Location City: GARDEN GROVE
Location State: CA
Location Zip: 92844
Location County Code: CA059
Location County Name: ORANGE
Location Country: US
Contact Name: JANNIEN NGUYEN
Contact Street No:
Contact Street1: 9942 CENTRAL AVE, APT F
Contact Street2:
Contact City: GARDEN GROVE
Contact State: CA
Contact Zip: 92844
Contact Country:
Contact Phone And Ext: 714-376-7492
Contact Fax:
Contact Email Address: ELIZABETHS@PWSEI.COM
Contact Title:
Owner Name:
Owner Type:
Owner Seq:
Operator Name:
Operator Type:
Operator Seq:
Public Notes:

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20240202
Handler Name: JANNIEN NGUYEN
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20240503
Handler Name: JANNIEN NGUYEN
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: JANNIEN NGUYEN
Dt Became Current:
Dt Ended Current:
Phone: 714-376-7492
Source Type: Implementer
Street No:
Street1: 9942 CENTRAL AVE, APT F
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Owner/Operator Ind: Current Owner
Type: Other
Name: JANNIEN NGUYEN
Dt Became Current:
Dt Ended Current:
Phone: 714-376-7492
Source Type: Implementer
Street No:
Street1: 9942 CENTRAL AVE, APT F
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Historical Handler Details

Receive Dt:	20240202
Generator Code Description:	Not a Generator, Verified
Handler Name:	JANNIEN NGUYEN

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
14	1 of2	E	0.15 / 775.47	74.45 / 1	BIG O TIRES 13388 BROOKHURST ST GARDEN GROVE CA 92841	RCRA SQG

Handler ID:	CAD981668973
Generator Status:	SQG
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	***NAIC 1:***	
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	19861212	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:	O	***Location Latitude:***	33.768306
In Handler Univ:	Y	***Location Longitude:***	-117.954892
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	SQG	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	CA
Accessibility:		***State District:***	4
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:			
State Waste Generator:			
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		

Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20020627
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	BIG O TIRES
Location Street No:	
Location Street1:	13388 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92841
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ENVIRONMENTAL MANAGER
Contact Street No:	
Contact Street1:	13388 BROOKHURST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92663
Contact Country:	US
Contact Phone And Ext:	714-546-9961
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	SECURITY CAL INC
Owner Type:	P
Owner Seq:	1
Operator Name:	NOT REQUIRED
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19861212
Handler Name:	BIG O TIRES
Fed Waste Generator:	2
Generator Code Description:	Small Quantity Generator
Source Type:	Notification

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	NOT REQUIRED	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	
Source Type:	Notification	***Zip:***	99999

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	SECURITY CAL INC	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	
Source Type:	Notification	***Zip:***	99999

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
14	2 of2	E	0.15 / 775.47	74.45 / 1	HAS INC DBA ZUBYS BRAKES TIRES AND WHEELS 13388 BROOKHURST ST GARDEN GROVE CA 92843-3153	RCRA NON GEN

Handler ID:	CAL000313023
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20061027	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.768306
In Handler Univ:	Y	***Location Longitude:***	-117.954892
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		

Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	HAS INC DBA ZUBYS BRAKES TIRES AND WHEELS
Location Street No:	
Location Street1:	13388 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843-3153
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	PETER SOLAKIAN/PRES.
Contact Street No:	
Contact Street1:	13388 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-636-8835
Contact Fax:	714-636-8912
Contact Email Address:	ANIEJERSEY@GMAIL.COM
Contact Title:	
Owner Name:	HAS INC
Owner Type:	O
Owner Seq:	1
Operator Name:	PETER SOLAKIAN/PRES.
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20061027
Handler Name:	HAS INC DBA ZUBYS BRAKES TIRES AND WHEELS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	13388 BROOKHURST ST
Name:	PETER SOLAKIAN/PRES.	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-636-8835	***Country:***	
Source Type:	Implementer	***Zip:***	92843
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	13388 BROOKHURST ST
Name:	HAS INC	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-636-8835	***Country:***	
Source Type:	Implementer	***Zip:***	92843-3153

15	***1 of4***	***ESE***	***0.15 / 782.79***	***71.28 / -2***	***MOBIL #18-G03E*** ***13521 BROOKHURST ST # 18-G03E*** ***GARDEN GROVE CA 92843***	***DELISTED TNK***

Delisted Storage Tanks

Facility ID:	2129	***County:***	Orange
Latitude:	33.76657	***Original Source:***	UST
Longitude:	-117.95514	***Record Date:***	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

15	***2 of4***	***ESE***	***0.15 / 782.79***	***71.28 / -2***	***MOBIL #18-GOE*** ***13521 BROOKHURST*** ***GARDEN GROVE CA 92643***	***LUST***

Global ID:	T0605901769	***Case Type (DL):***	LUST Cleanup Site
Site Facility Type:	LUST CLEANUP SITE	***Oil Field (SRCH):***	
Site Fac Type (SRCH):	LUST CLEANUP SITE	***Oil Field Oper (SRCH):***	
Status:		***Census Tract (SRCH):***	6059088901
Status (SRCH):	COMPLETED - CASE CLOSED	***Latitude (DL):***	33.7664374
Status (DL):	Completed - Case Closed	***Longitude (DL):***	-117.9551106
Status Date (DL):	3/7/1995	***RWQCB Region (DL):***	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		
Site Facility Name (SRCH):	MOBIL #18-GOE		
Address (SRCH):	13521 BROOKHURST		
City (SRCH):	GARDEN GROVE		
Zip (SRCH):	92643		
County (SRCH):	ORANGE		
Street No (DL):	13521		
Street Name (DL):	BROOKHURST		
City (DL):	GARDEN GROVE		

Zip (DL):	92643
County (DL):	Orange
State (DL):	CA
Business Name (DL):	MOBIL #18-GOE
Site Facility Name:	MOBIL #18-GOE
Address :	13521 BROOKHURST
City :	GARDEN GROVE
Zip :	92643
County :	ORANGE
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	083002491T
Local Case No:	94UT037
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Soil
Begin Date:	7/21/1994
How Discovered:	Tank Closure
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	
Discharge Source:	
EPA Region:	9
Leak Reported Dt:	1994-07-21 00:00:00
Military DoD Site:	No
No Further Action Dt:	1995-03-07 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	56-60%
Calenviroscreen 4 Score:	55-60%
A2022 Assembly District:	70
Claim No:	
Claim Status:	
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	3/7/1995
Status:	Open - Case Begin Date
Status Date:	7/21/1994

GeoTracker Search - Regulatory Profile

Site Facility Name:	MOBIL #18-GOE
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	13521 BROOKHURST
City:	GARDEN GROVE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Zip: 92643
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605901769
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 3/7/1995
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605901769&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: SOIL
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 94UT037
SANTA ANA RWQCB (REGION 8) - CASE #: 083002491T
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 3/7/1995

Status: Open - Case Begin Date
Date : 7/21/1994

GeoTracker Search - Regulatory Activities

Action Type: Leak Action
Action: Leak Reported
Action Date: 7/21/1994
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 7/21/1994
Received Issue Date:
Doc Link:
Title Description Comments:

15	3 of4	ESE	0.15 / 782.79	71.28 / -2	Mobil #18-Goe 13521 Brookhurst St Garden Grove Ca 92643 CA	LOP ORANGE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Case ID: 94UT037

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 3/7/1995
File Location: Local Agency

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
15	4 of4	ESE	0.15 / 782.79	71.28 / -2	MOBIL #18-G03E 13521 BROOKHURST ST GARDEN GROVE CA	UST SWEEPS

C C: A30-000-2129
BOE: 44-000400
Comp: 2129
Status: ACTIVE
No of Tanks: 4
Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH
Phone:

D Filename: SITE12A
Page No: 123
County: ORANGE
State : CA
Zip: 92643
Latitude: 33.766349
Longitude: -117.955186
Georesult: S5HPNTSC-A

Tank Details

Tank ID: 000004
O Tank ID:
SWRCB No: 30-000-002129-000004
Removed:
Installed:
A Date:
Capac: 8000
Tank Use: M.V. FUEL

S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:
Content: REG UNLEADED
ONA:
D File Name: TANK12A

Tank Details

Tank ID: 000001
O Tank ID:
SWRCB No: 30-000-002129-000001
Removed:
Installed:
A Date:
Capac: 550
Tank Use: PETROLEUM

S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:
Content:
ONA:
D File Name: TANK12A

Tank Details

Tank ID: 000003
O Tank ID:
SWRCB No: 30-000-002129-000003
Removed:
Installed:
A Date:
Capac: 6000
Tank Use: M.V. FUEL

S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:
Content: REG UNLEADED
ONA:
D File Name: TANK12A

Tank Details

Tank ID: 000005
O Tank ID:
SWRCB No: 30-000-002129-000005
Removed:
Installed:

S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

A Date:		**Content:**	REG UNLEADED
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

16	1 of12	ESE	0.15 / 811.75	72.89 / -1	**BP WEST COAST PRODUCTS LLC** **NO 0629** **13482 BROOKHURST ST** **GARDEN GROVE CA 92643**	RCRA SQG

Handler ID: CAR000174276
Generator Status: SQG
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	N	**NAIC 1:**	44711
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20060606	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:	P	**Location Latitude:**	33.767089
In Handler Univ:	Y	**Location Longitude:**	-117.954867
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	SQG	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------

Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20060620
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	BP WEST COAST PRODUCTS LLC NO 0629
Location Street No:	
Location Street1:	13482 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92643
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	WASTE SPECIALIST
Contact Street No:	
Contact Street1:	PO BOX 80249
Contact Street2:	
Contact City:	RANCHO SANTA MARGARITA
Contact State:	CA
Contact Zip:	92688
Contact Country:	US
Contact Phone And Ext:	714-670-3958
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	BP WEST COAST PRODUCTS LLC
Owner Type:	P
Owner Seq:	2
Operator Name:	BP WEST COAST PRODUCTS LLC
Operator Type:	P
Operator Seq:	1
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20060606
Handler Name:	BP WEST COAST PRODUCTS LLC NO 0629
Fed Waste Generator:	2
Generator Code Description:	Small Quantity Generator
Source Type:	Notification

Waste Code Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Waste Code: D001
Waste Code Desc: IGNITABLE WASTE

Waste Code: D018
Waste Code Desc: BENZENE

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: BP WEST COAST PRODUCTS LLC
Dt Became Current: 19501231
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1:
Street2:
City:
State:
Country: US
Zip:

Owner/Operator Ind: Current Operator
Type: Private
Name: BP WEST COAST PRODUCTS LLC
Dt Became Current: 19501231
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street1:
Street2:
City:
State:
Country: US
Zip:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	2 of12	ESE	0.15 / 811.75	72.89 / -1	Gammo Corporation 13482 Brookhurst St Garden Grove, Ca 92843-3119 Garden Grove CA	UST ORANGE

FA No: FA0052965
SR No:
Notes:
Data Source: Permitted Underground Storage Tank (UST) Facilities Listing

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	3 of12	ESE	0.15 / 811.75	72.89 / -1	ARCO #629 13482 BROOKHURST GARDEN GROVE CA 92844	LUST

Global ID: T0605901913
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 11/17/2005
Cleanup Status: COMPLETED - CASE CLOSED
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088702
Latitude (DL): 33.7677034
Longitude (DL): -117.9548174
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)
Site Facility Name (SRCH): ARCO #629
Address (SRCH): 13482 BROOKHURST
City (SRCH): GARDEN GROVE
Zip (SRCH): 92844
County (SRCH): ORANGE
Street No (DL): 13482
Street Name (DL): BROOKHURST
City (DL): GARDEN GROVE
Zip (DL): 92844
County (DL): Orange
State (DL): CA
Business Name (DL): ARCO #629
Site Facility Name: ARCO #629
Address : 13482 BROOKHURST
City : GARDEN GROVE
Zip : 92844
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: ORANGE COUNTY LOP
Case Worker:
Local Agency:
RB Case No: 083002773T
Local Case No: 95UT062
File Location: Local Agency Warehouse
Potential COC: Gasoline
Potential Media of Concern: Other Groundwater (uses other than drinking water)
Begin Date: 9/28/1995
How Discovered: Tank Closure
How Discovered Description:
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name: Coastal Plain Of Orange County (8-001)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: * Historical Geocode - Exact Address Match
Discharge Cause:
Discharge Source: Tank
EPA Region: 9
Leak Reported Dt: 1995-09-28 00:00:00
Military DoD Site: No
No Further Action Dt: 2005-11-17 00:00:00
Qty Rlsd Gallons: 0
Facility Project Sub Type:
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 60-65%
A2022 Assembly District: 70
Claim No: 15304
Claim Status: Ineligible
A2022 Congressional District: 45
A2022 Senate District: 36
Site History:

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker
Contact Name: JESSICA LAW
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: jessica.law@waterboards.ca.gov
Phone No: 9517824381

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 11/17/2005

Status: Open - Site Assessment
Status Date: 7/25/2000

Status: Open - Site Assessment
Status Date: 1/16/1996

Status: Open - Site Assessment
Status Date: 10/5/1995

Status: Open - Case Begin Date
Status Date: 9/28/1995

GeoTracker Search - Regulatory Profile

Site Facility Name:	ARCO #629
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	13482 BROOKHURST
City:	GARDEN GROVE
Zip:	92844
County:	ORANGE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605901913
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 11/17/2005
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605901913&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location:	LOCAL AGENCY WAREHOUSE
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin:	Coastal Plain Of Orange County (8-001)
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:	
Future Land Use:	
Cleanup Oversight Agencies:	ORANGE COUNTY LOP (LEAD) - CASE #: 95UT062 SANTA ANA RWQCB (REGION 8) - CASE #: 083002773T CASE MANAGER: JESSICA LAW
CUF Claim No:	15304
CUF Priority Assig:	D
CUF Amount Paid:	$0
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:	

No site history available

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	11/17/2005
Status:	Open - Site Assessment
Date :	7/25/2000
Status:	Open - Site Assessment
Date :	1/16/1996
Status:	Open - Site Assessment
Date :	10/5/1995
Status:	Open - Case Begin Date
Date :	9/28/1995

GeoTracker Search - Regulatory Activities

Action Type:	Other Regulatory Actions
Action:	Closure/No Further Action Letter
Action Date:	11/16/2005

Received Issue Date: 11/16/2005
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901913&enforcement_id=5958429&temptable=ENFORCEMENT
Title Description Comments:

ISSUED CLOSURE LETTER.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 1/8/2004
Received Issue Date: 1/8/2004
Doc Link:
Title Description Comments:

ISSUED DEPTH-DISCRETE MONITORING WELL INSTALLATION WORKPLAN APPROVAL LETTER.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 12/15/2003
Received Issue Date: 12/15/2003
Doc Link:
Title Description Comments:

ISSUED REQUEST FOR DEPTH-DISCRETE MONITORING WELL INSTALLATION WORKPLAN.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/3/2003
Received Issue Date: 9/3/2003
Doc Link:
Title Description Comments:

ISSUED ADDITIONAL ASSESSMENT WORKPLAN APPROVAL LETTER.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 7/23/2003
Received Issue Date: 7/23/2003
Doc Link:
Title Description Comments:

ISSUED REQUEST FOR ASSESSMENT WORKLPAN WITHIN 30 DAYS.

Action Type: Leak Action
Action: Leak Discovery
Action Date: 10/5/1995
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Began
Action Date: 10/5/1995
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 9/28/1995
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Site Maps

Submitted: 9/15/2005
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/2866779923/T0605901913.pdf

Submitted: 2/5/2002
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/6108747184/T0605901913.pdf

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 4/10/2006*
Type: REPORTS - OTHER ***Submitted:***
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: WELL DESTRUCTION REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8135587394/T0605901913.PDF

Document Type: Site Documents ***Document Date:*** 1/13/2006
Type: ***Submitted:***
Submitted By: (REGULATOR)
Title: REMEDIAL ACTION COMPLETION CERTIFICATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/site_documents/2353718400/95UT062%2Epdf

Document Type: Site Documents ***Document Date:*** 1/13/2006
Type: ***Submitted:***
Submitted By: (REGULATOR)
Title: CASE CLOSURE SUUMARY **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/site_documents/1810444474/95UT062%2Epdf

Document Type: Monitoring Reports ***Document Date:*** 12/21/2005*
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: 4TH QUARTER 2005 MONITORING REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9443194329/T0605901913.PDF

Document Type: Site Documents ***Document Date:*** 11/16/2005
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: (REGULATOR), PAMELA YBARRA (REGULATOR)
Title: ISSUED CLOSURE LETTER.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901913&enforcement_id=5958429

Document Type: Monitoring Reports ***Document Date:*** 10/3/2005
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: 3RD QUARTER 2005 MONITORING REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3985364615/T0605901913.PDF

Document Type: Monitoring Reports ***Document Date:*** 9/9/2005
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: 3RD QUARTER 2005 MONITORING REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7380963981/T0605901913.PDF

Document Type: Monitoring Reports ***Document Date:*** 6/9/2005
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: SECOND QUARTER 2005 QMR **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9047256290/T0605901913.PDF

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Document Type: Site Documents **Document Date:** 4/20/2005
Type: REPORTS - OTHER **Submitted:**
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: SOIL SAMPLING REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6452756583/T0605901913.PDF

Document Type: Monitoring Reports **Document Date:** 4/5/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: DELTA ENVIRONMENTAL (CONTRACTOR)
Title: FIRST QUARTER 2005 QMR **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8149457633/T0605901913.PDF

16	4 of12	ESE	0.15 / 811.75	72.89 / -1	LIAQUAT ALI JUMANI 13482 BROOKHURST ST GARDEN GROVE CA 92643	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002e4f6.pdf

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16	5 of12	ESE	0.15 / 811.75	72.89 / -1	GAMMO CORP 13482 BROOKHURST ST GARDEN GROVE CA 92843	UST

Facility ID: FA0052965 **CERS ID:** 10512283
Site Facility Type: PERMITTED UNDERGROUND STORAGE TANK (UST)
Note: Information related to facilities can be searched on Geo Tracker Website: https://geotracker.waterboards.ca.gov/search

Permitted UST Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: 3
Tank Status: Confirmed/Updated Information
Tank Type: Double Wall
Tank Alarms: No
Tank Ball Float: No
Tank Operator Name: GAMMO CORP
Tank Operator Mail Address: 13482 BROOKHURST ST
Tank Operator Mail City: GARDEN GROVE
Tank Operator Mail State: CA
Tank Operator Mail Zip: 92843
Tank Owner Name: GAMMO CORP
Tank Owner Mailing Address: 13482 BROOKHURST ST
Tank Owner Mailing City: GARDEN GROVE
Tank Owner Mailing State: CA
Tank Owner Mailing Zip: 92843
Tank Capacity Gallons: 10000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No

Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Premium Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 1/1/2000 12:00:00 AM
Tank No of Compart: 1
Tank Pc Constructn: Fiberglass
Tank Spill Bucket: Yes
Tribal Lands: No

Permitted UST Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: 2

Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Regular Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 1/1/2000 12:00:00 AM

Tank Status:	Renewal Permit	**Tank No of Compart:**	1
Tank Type:	Double Wall	**Tank Pc Constructn:**	Fiberglass
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No
Tank Operator Name:	GAMMO CORP		
Tank Operator Mail Address:	13482 BROOKHURST ST		
Tank Operator Mail City:	GARDEN GROVE		
Tank Operator Mail State:	CA		
Tank Operator Mail Zip:	92843		
Tank Owner Name:	GAMMO CORP		
Tank Owner Mailing Address:	13482 BROOKHURST ST		
Tank Owner Mailing City:	GARDEN GROVE		
Tank Owner Mailing State:	CA		
Tank Owner Mailing Zip:	92843		
Tank Capacity Gallons:	10000		
Tank Piping Construction:	Double Walled		
Tank Piping Type:	Pressure		
Tank Pw Piping Construction:	Fiberglass		
Tank Sacrificial Anode:	No		

Permitted UST Tank Details

Epa Region:	9	**Tank Closure Date:**	
No. of Closed UST:	0	**Tank Configuration:**	Stand Alone Tank
No. of Inuse UST:		**Tank Contents:**	Regular Unleaded
No. of Oos UST:	0	**Tank Cp Impr Curr:**	No
Owner Type:	Non-Government	**Tank Cp Shutoff:**	Yes
Tank ID No.:	1	**Tank Installatn Dt:**	1/1/2000 12:00:00 AM
Tank Status:	Renewal Permit	**Tank No of Compart:**	1
Tank Type:	Double Wall	**Tank Pc Constructn:**	Fiberglass
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No
Tank Operator Name:	GAMMO CORP		
Tank Operator Mail Address:	13482 BROOKHURST ST		
Tank Operator Mail City:	GARDEN GROVE		
Tank Operator Mail State:	CA		
Tank Operator Mail Zip:	92843		
Tank Owner Name:	GAMMO CORP		
Tank Owner Mailing Address:	13482 BROOKHURST ST		
Tank Owner Mailing City:	GARDEN GROVE		
Tank Owner Mailing State:	CA		
Tank Owner Mailing Zip:	92843		
Tank Capacity Gallons:	10000		
Tank Piping Construction:	Double Walled		
Tank Piping Type:	Pressure		
Tank Pw Piping Construction:	Fiberglass		
Tank Sacrificial Anode:	No		

Permitted UST Tank Details

Epa Region:	9	**Tank Closure Date:**	
No. of Closed UST:	0	**Tank Configuration:**	Stand Alone Tank
No. of Inuse UST:		**Tank Contents:**	Diesel
No. of Oos UST:	0	**Tank Cp Impr Curr:**	No
Owner Type:	Non-Government	**Tank Cp Shutoff:**	Yes
Tank ID No.:	4	**Tank Installatn Dt:**	1/1/2000 12:00:00 AM
Tank Status:	Renewal Permit	**Tank No of Compart:**	1
Tank Type:	Double Wall	**Tank Pc Constructn:**	Fiberglass
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No
Tank Operator Name:	GAMMO CORP		
Tank Operator Mail Address:	13482 BROOKHURST ST		
Tank Operator Mail City:	GARDEN GROVE		
Tank Operator Mail State:	CA		
Tank Operator Mail Zip:	92843		
Tank Owner Name:	GAMMO CORP		
Tank Owner Mailing Address:	13482 BROOKHURST ST		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank Owner Mailing City: GARDEN GROVE
Tank Owner Mailing State: CA
Tank Owner Mailing Zip: 92843
Tank Capacity Gallons: 10000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No

Permitted UST Site Details

CERS ID: 10512283
Facility ID: FA0052965
Permitting Agency: Orange County Environmental Health
Senate District: 36
Congress District: 45
CalEnviroScrn 4 Pct: 60-65%
Latitude: 33.76712
Longitude: -117.9544
County: Orange

16	6 of12	ESE	0.15 / 811.75	72.89 / -1	GAMMO C30P30ATION 13482 BROOKHURST ST GARDEN GROVE CA 92843	EMISSIONS

2015 Toxic Data

Facility ID: 157786
Facility SIC Code: 5541
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

16	7 of12	ESE	0.15 / 811.75	72.89 / -1	Arco #629 13482 Brookhurst St Garden Grove Ca 92843-3119 CA	LOP ORANGE

Case ID: 95UT062

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 11/17/2005
File Location: Warehouse

16	8 of12	ESE	0.15 / 811.75	72.89 / -1	GAMMO CORP 13482 BROOKHURST ST GARDEN GROVE CA 92843	CERS TANK

Site ID: 393660
Latitude: 33.767120
Longitude: -117.954399

Regulated Programs

EI ID: 10512283
EI Description: Underground Storage Tank

Violations

Violation Date: 12/22/2014 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)
Violation Notes:

Returned to compliance on 12/22/2014. The diesel turbine sump 208 sensor failed and was replaced this date.

Violation Description:

Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activates an audible/visual alarm when a leak is detected.

Violations

Violation Date: 05/19/2015 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)
Violation Notes:

Returned to compliance on 05/28/2015. Please submit a current statement identifying the designated UST operator for the facility to an approved electronic reporting database within 30 days.

Violation Description:

Failure to submit statement of UST compliance and/or Designated Operator certification.

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Notes:

Returned to compliance on 12/28/2018. OBSERVATION: 87 AUX STP VR208 sensor failed testing. CORRECTIVE ACTION: Sensor was replaced with another VR208 which was tested and passed; issue corrected on site.

Violation Description:

Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.

Violations

Violation Date: 12/03/2024 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2
Violation Notes:

Returned to compliance on 12/03/2024. Premium spill container failed initial testing.

Violation Description:

"Failure to meet one or more of the following requirements:

Install or maintain a liquid-tight spill container.

Have a minimum capacity of five gallons.

Have a functional drain valve or other method for the removal of liquid from the spill container.

Be resistant to galvanic corrosion.

Perform a tightness test at installation, every 12 months thereafter, or within 30 days after a repair to the spill container.

Tested using applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer.

Tested by a certified UST service technician.

Maintain records of spill containment testing for 36 months.

"

Violations

Violation Date: 12/22/2014 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 12/22/2014. The facility has one drum of waste fuel contaminated absorbent/ filters that had an incomplete hazardous waste label. The label was completed this date and the violation was abated

Violation Description:

Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 12/20/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Notes:

Returned to compliance on 03/11/2020. Designated UST Operator visual inspections have not been completed at least once every 30 days and signed/dated by the owner/operator within 48 hours of receiving the report. The following inspections were conducted past the 30 day time frame: - 7/17/19 - 9/22/19 - 11/25/19 Complete the January Designated UST Operator visual inspection report within 30 days of the December inspection report and provide a copy to this Agency within 30 days.

Violation Description:

For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements:
Be performed by an ICC certified DO.
Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.
Inspect for the presence of liquid/debris in spill containers.
Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly.
Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit.
Check that all testing and maintenance has been completed and documented.
Verify that all facility employees have been trained in accordance with 23 CCR 2715(c).
For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Notes:

Returned to compliance on 10/21/2019. OBSERVATION: ATG with audible/visual and ball floats were not tested during the monitoring cert. CORRECTIVE ACTION: Have these components observed and tested and submit results to this Agency within 30 days.

Violation Description:

Failure to comply with one or more of the following overfill prevention equipment requirements:
Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or
Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or

Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or
Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018.

For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter.

For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter.

Inspected within 30 days after a repair to the overfill prevention equipment.

Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer.

Inspected by a certified UST service technician.

Maintain records of overfill prevention equipment inspection for 36 months.

Violations

Violation Date: 12/03/2024 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Facility's hazardous materials inventory, last submitted to CERS on 01/02/2024, is inaccurate. Submittal did not include reportable propane that was observed onsite at time of inspection.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 12/08/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Notes:

Returned to compliance on 12/10/2020. Site map does not list the correct fuel product tanks on site. Please change the fuel tank listed as "midgrade" to "diesel". Submit corrections to this Agency via CERS at http://cers.calepa.ca.gov/ within 30 days.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date: 12/16/2022 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Notes:

Returned to compliance on 02/10/2023. Designated operator monthly inspections have the incorrect secondary containment test date. DO is incorrectly referencing the retest date of 4/10/2020.

Violation Description:

For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements:
Be performed by an ICC certified DO.
Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.
Inspect for the presence of liquid/debris in spill containers.
Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly.

Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit.
Check that all testing and maintenance has been completed and documented.
Verify that all facility employees have been trained in accordance with 23 CCR 2715(c).
For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violations

Violation Date: 08/16/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Notes:

Returned to compliance on 04/23/2020. OBSERVATION: Facility does not have a Permit to Operate UST system issued by this Agency. CORRECTIVE ACTION: Address all open violations within 30 days to receive a Permit to Operate.

Violation Description:

Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.

Violations

Violation Date: 12/29/2021 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Notes:

Returned to compliance on 12/20/2022. The Overfill prevention at site does not meet state code and must be repaired and the monitoring plan on CERS for each tank must be corrected afted repairs are made.

Violation Description:

Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.

Violations

Violation Date: 12/20/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(2)
Violation Notes:

Returned to compliance on 01/13/2020. Owner/Operator failed to maintain monitoring records for release detection (e.g., alarm logs) and/or retain records of appropriate follow-up actions (e.g. maintenance records). Facility did not retain the maintenance record for the fuel alarm that occurred at UDC 9-10 on 6/11/2019. Please provide documentation for response to fuel alarm from 6/11/2019 to this Agency within 30 days.

Violation Description:

Failure to maintain monitoring records for release detection and/or maintain records of appropriate follow-up actions.

Violations

Violation Date: 03/09/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2638(d) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2638(d)
Violation Notes:

Returned to compliance on 03/11/2020. Facility has not submitted Monitoring System Certification and Spill Bucket test results dated 12/20/2019 to this Agency within 30 days of testing. Submit a copy of test results to this Agency immediately.

Violation Description:

Failure to submit the "Monitoring System Certification Form" to the UPA within 30 days of completion of the test.

Violations

Violation Date: 12/20/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Notes:

Returned to compliance on 05/06/2020. Facility does not have a Permit to Operate UST system issued by this Agency. Address all open violations within 30 days to receive a Permit to Operate.

Violation Description:

Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.

Violations

Violation Date: 12/08/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Notes:

Returned to compliance on 01/07/2021. Facility did not comply with the following requirements: - Fuel alarm on 8/21/20 for 91 STP was not listed on the 9/16/20 DO report. - DO reports dated 6/17/20 & 8/18/20 were not conducted within 30 days of the previous report. - The Owner/Operator has not signed the following DO reports within 72 hours of receipt from DO (48 hours for reports completed prior to October): - 7/17/20, 8/18/20, 9/16/20, 10/16/20, 11/16/20 - The required testing dates listed on all 2020 DO reports are incorrect. The following testing dates should be corrected and listed as: - Monitoring System Certification: 12/20/2019 - Secondary Containment: 12/20/2019 Provide corrected copies of reports containing incorrect testing dates, missing fuel alarms, and provide a copy of the December DO report demonstrating that it has been conducted within the required time frame and has been signed by the owner/operator within 72 hours of receipt. Corrections must be [Truncated]

Violation Description:

For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements:
Be performed by an ICC certified DO.
Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.
Inspect for the presence of liquid/debris in spill containers.
Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly.
Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit.
Check that all testing and maintenance has been completed and documented.
Verify that all facility employees have been trained in accordance with 23 CCR 2715(c).
For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Notes:

Returned to compliance on 01/13/2020. OBSERVATION: UST submittal through the California Environmental Reporting System (CERS) requires corrections. CORRECTIVE ACTION: Please see regulator comments on CERS and make appropriate changes to the UST submittal and submit within 30 days.

Violation Description:

Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health

Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)
Violation Notes:

Returned to compliance on 12/05/2019. OBSERVATION: Plot Plan indicates site has a mid-grade tank. Confirmed on site that tank in question is a diesel tank. CORRECTIVE ACTION: Make corrections to the Plot Plan to reflect this and submit to this Agency via California Environmental Reporting System within 30 days.

Violation Description:

Failure to submit or maintain a current facility plot plan.

Violations

Violation Date: 12/20/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Notes:

Returned to compliance on 12/20/2019. UST submittal through the California Environmental Reporting System (CERS) requires corrections. Please see regulator comments on CERS and make appropriate changes to the UST submittal. Re-submit within 30 days.

Violation Description:

Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violations

Violation Date: 12/22/2014 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: Un-Specified
Violation Notes:

Returned to compliance on 05/28/2015. The facility has not submitted the tank facility CUPA forms, financial assurance, CFO statement,, and owner statement of DO. The forms must be submitted on CERS or E submit .

Violation Description:

UST Program - Administration/Documentation - For use of Local Ordinance only

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Notes:

Returned to compliance on 04/23/2020. Secondary containment has not been properly maintained as evidenced by failed test results dated 12/20/2019 for the Product Piping Sump, Fill Sump, and UDC 3/4. Repair the secondary containment, re-test, and re-submit passing test results to this Agency within 30 days.

Violation Description:

Failure to maintain secondary containment (e.g., failure of secondary containment testing).

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)
Violation Notes:

Returned to compliance on 01/29/2019. OBSERVATION: Response Plan must be signed. CORRECTIVE ACTION: Please re-submit the Leak

Response Plan with owner signature through CERS within 30 days.

Violation Description:

Failure to have an approved UST Response Plan.

Violations

Violation Date: 05/19/2015 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Notes:

Returned to compliance on 05/28/2015. Please submit a current Certification of Financial Responsibility, with supporting documents, to an approved electronic reporting database within 30 days.

Violation Description:

Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violations

Violation Date: 12/28/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Notes:

Returned to compliance on 06/11/2019. OBSERVATION: 87 Main PLLD failed testing. CORRECTIVE ACTION: Make necessary repairs and retest and submit results to this Agency within 30 days.

Violation Description:

Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Evaluations

Eval Date: 01/13/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received a copy of the work order documentation for the fuel alarm that occurred at UDC 9-10 on 6/11/2019 at this facility. Violation I122 has been corrected. The following violations remain outstanding and must be corrected immediately: - I481: Failure to obtain a valid permit to operate a UST. - I106: Failure to conduct the designated UST operator visual inspection at least once every 30 days. Please submit all documents to this Agency within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed CERS submittal and it was not accepted. Reviewed and not accepted The submittal must include the date installed on the Tank information page for each tank. Include and updated financial responsibility form and updated Statement of DO form; Note: data in [EVAL Notes] field for some

records is truncated from the source.

Eval Date: 12/20/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness annual monitoring certification and spill bucket test and conduct UST inspection. Tester: Byron Cruz, Clean Air Testing. Tester certifications (VR, ICC, VMI) were verified. Tanks: - 87 main (10,000 gal) - 87 aux (10,000 gal) - 91 (10,000 gal) - Diesel (10,000 gal) Monitoring Panel: Veeder Root TLS-350 Annulars: - All tanks have VR407 Fill/STP/UDC sumps + Vent Sump - VR208 All liquid detection sensors were tested on site. Positive shutdown, fail safe and sensor out were verified. LLD: - All STPs have VR PLLD All LLDs were tested on site. Facility has a submittal in CERS. The following documents were available for review on site: - Monitoring Plan + Tank Pages - Response Plan - Certificate of Financial Responsibility w/ CFO Letter - DO Agreement - Statement of Understanding and Compliance - DO Training - DO Monthly Reports - Overfill Prevention Equipment Test last conducted on 4/9/19, must be conducted every [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/23/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received the following re-test results dated 4/10/2020 in CERS and results indicate that the previously failed components have PASSED: - Overfill Prevention: - Product Piping Sump (87 Master, 87 Siphon, 91, Diesel) - Fill Sump (87 Master, 87 Siphon, 91, Diesel) - UDC 3/4 The following violations have been corrected: - I382: Failure to maintain secondary containment. - I481: Failure to obtain a valid permit to operate from the CUPA. There are no remaining violations for this facility as of this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/05/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for routine UST inspection, monitoring system certification and spill bucket testing. The facility has four double-walled tanks (87, 87, 91, Diesel) monitored by a Veeder Root TLS-350 system. The monitor is operational for audible and visual alarms. Positive shutdown and fail safe programming were verified for pressurized piping. Flapper valves are used for overfill prevention. The following sensors are installed and were determined to be operational: Tank annular- 407 Turbine sumps- 208 Fill sumps- 208 UDCs- 208 Line leak detectors: PLLD/electronic Testing was conducted by Luis Rivera of Universal Nozzle. Technician certifications (VR, ICC, VMI) were verified. Please submit the test reports to this Agency within 30 days. The following documents are available for review: permit to operate, leak response plan, monitoring plan, test reports, DO monthly reports, and DO annual employee training records. Secondary containment testing was last conducted on 12/20/2022. Overfill p; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/16/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS submittal 10512283 was not accepted. A site plan must be submitted on CERS and the CO2 must be removed from disclosure 120 cubic feet reported and if less than 1000 cubic feet it is not a reportable quantity; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection

Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Annual monitor certification being performed by Steve Loera. ICC , VMI, and Veederoot Certification were up to date. Testing passed this date; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by the manager, Joseph hamoush. The facility has an active EPA ID # CAL000338171 Manifests from Able Environmental reviewed at site. The facility has one drum for waste fuel contaminated debris with about 20 pounds of waste absorbent. The facility has one empty drum for fuel contaminated liquids Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. The facility has not completed an HMBP plan and a plan must be submitted on CERS or E Submit Hazardous waste containers must be labeled and stored closed. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/15/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed HMBEP submission package on CERS, DENIED. Request for resubmittal within 30 days; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to inspect tank sumps, dispenser containment (UDC) sumps, and review required documentation during the annual monitoring system certification testing, leak detector testing, and spill bucket testing. Met with station manager,Joseph hamoush , obtained consent inspect , take photographs , and to review documentation. Annual monitor certification being performed by David Lopez . ICC , VMI, and Veederoot Certification were up to date On site to observe and visually verify upon arrival tank sumps and UDC sumps are dry and sensors are located at the lowest point in the sumps. Also verified the secondary containment pipes to be open to the turbine sumps. Site has four underground storage tanks. Three for gasoline and one fore diesel.Piping observed in sumps appears to double-wall fiberglass, and 6 dispenser with UDC sumps. The turbine/piping sumps ,fill sumps, and UDCs are monitored with Veeder-Root 208 sensors Leak detection is monitored with [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/29/2021
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin on site for annual UST Facility inspection and to witness monitor Certification testing Met with station manager Salam Gammo, , obtained consent inspect , take photographs , and to review documentation. Annual monitor certification being performed by Luis Rivera. ICC , VMI, and Veederoot Certification were up to date Upon arrival tank sumps , UDC sumps and vent sump were inspected and were dry and sensors were located at the lowest point in the sumps. Also verified the secondary containment pipes to be open to the turbine sumps. Site has four underground storage tanks. Three for gasoline and one for diesel. Piping observed in sumps appears to double-wall fiberglass, and 6 dispenser with UDC sumps. The turbine/piping sumps ,fill sumps, and UDCs are monitored with Veeder-Root 208 sensors Leak detection is monitored with Vaporless line leak detectors. The fill and vapor spill buckets were filled with water for the spill bucket test. The following documents [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

reviewed file . monitor cert and SB989 scheduled 12-12-16; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/18/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

UST submittal has been DECLINED: Tank Pages: The tank primary containment should be fiberglass for all tanks, not steel. Plot Plan Map: Map should also depict piping layout from tank to dispensers and vent risers. This facility has a vent sump right below the vent risers next to the car wash. Add this to the map and no in the monitoring plan. Specify sensor in UDCs (VR208) on the legend. Make submittal corrections are resubmit within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/05/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin reviewed CERS submittal 10512283 Violations I583, I616, and TR05 have been abated Facility UST permit can be issued ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Salam Gammo. The facility has an active EPA ID # CAL000338171 Manifests from Able Environmental reviewed at site. The facility has one drum for waste fuel contaminated debris. The facility has one empty drum for fuel contaminated liquids Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/16/2015
Violations Found: No

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Salam Gammo. The facility has an active EPA ID # CAL000338171 Manifests from Able Environmental reviewed at site. The facility has one drum for waste fuel contaminated debris with about 20 pounds of waste absorbent. The facility has one empty drum for fuel contaminated liquids Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Hazardous waste containers must be labeled and stored closed. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/12/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and not accepted by M Sutphin For the oxygen state no for explosive, for propane state no for explosive and oxidizer. please submit a new site plan the old plan did not sync and is no longer on the hazmat business plan. Please note for diesel and gasoline state no for gas under pressure; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/03/2024
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine monitoring system certification inspection. The facility has the following double-walled (DW) tanks: - Regular (2 x 10,000-gal.) - Premium (10,000-gal.) - Diesel (10,000-gal.) The UST system is monitored by a Veeder Root (VR) TLS-350. The monitor was operational for audible and visual alarms. Overfill prevention is provided by fill tube shut-off valves for all tanks. The UST system is monitored as follows: - Tank interstitials: VR-407 - STP sumps, fill sumps, U; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/08/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received overfill prevention certification testing results dated 7-6-21. System passed testing four USTs tested . audible / visual high level alarm set at 90%.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/08/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

NOV issued for operating without a permit, due to non-compliance. NOV mailed October 1, 2015.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/28/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Facility has submitted a signed Leak Response Plan to CERS and submitted the re-test results for the 87 line leak detector. The following violations have been closed: -I005: Signed Leak Response Plan submitted to CERS. -I198: 87 LLD tested and passed on 6/11/19. The following violations remain outstanding: -I582: Operating Permit Application and Tank Pages submitted to CERS requires corrections. -I101: Ball floats are reported on CERS and must be tested. Update Tank Pages or test ball floats to abate violation. -I161: Plot Plan requires updates. Please see regulator comments on CERS. Submit documentation to this Agency within 30 days to abate the open violations.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/21/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has reviewed the following documents: - Overfill Prevention Equipment Inspection Report dated 4/9/19 Tanks utilize ATG w/ audible/visual alarm. The following violation has been closed: - I101: Overfill equipment has been inspected. The following remain outstanding: - I161: Plot plan requires updates. Submit map to CERS. - I582: UST submittal still requires corrections. Submit to CERS. - I481: Permit to Operate to be issued once compliance is achieved. Please submit all required documents to close out the remaining outstanding violations. Contact me at acabudol@ochca.com or 714-625-2702 if you have questions.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to inspect tank sumps, dispenser containment (UDC) sumps, and review required documentation during the annual monitoring system certification testing, leak detector testing, and spill bucket testing. SB989 testing was also performed while I was at site. Met with station owner Salam Gammo, obtained consent inspect , take photographs , and to review documentation. Annual monitor certification being performed by Steve Loera. ICC , VMI, and Veederoot Certification were up to date On site to observe and visually verify upon arrival tank sumps and UDC sumps are dry and sensors are located at the lowest point in the sumps. Also verified the secondary containment pipes to be open to the turbine sumps. Site has four underground storage tanks. Three for gasoline and one for diesel. Piping observed in sumps appears to double-wall fiberglass, and 6 dispenser with UDC sumps. The turbine/piping sumps ,fill sumps, and UDCs are monitored with Veeder-Root 208 [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/03/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Consent to inspect the facility was granted by Joseph Hamouche (Manager). Observed the facility and its hazardous waste storage area. The facility was not observed to be storing any hazardous waste at the time of inspection. No hazardous waste was observed in the facility dumpster or enclosure area. Emergency response information was available on site. Hazardous waste manifests were available for review. The facility has not had a hazar; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/29/2021
Violations Found: No

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Salam Gammo. The facility has an active EPA ID # CAL000338171 Manifests from Able Environmental reviewed at site. The facility has one drum for waste fuel contaminated debris. The facility has one empty drum for fuel contaminated liquids Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/09/2020
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This is an off site follow up inspection to review the outstanding UST violations for this facility. The following class II violations were cited on previous inspection reports and remain outstanding: - I481: Facility operating without a Permit from this Agency. Correct all outstanding violations immediately to be issued a Permit. - I106: DO monthly inspection reports dated 7/17/19, 9/22/19, and 11/25/19 were not conducted within 30 days of each other as required. Submit a copy of the December - February DO reports to this Agency immediately. Please submit all required documentation to this Agency immediately. Failure to comply with Underground Storage Tank laws and regulations will result in enforcement actions.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/05/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Change status to receive a UST permit, per Sutphin.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/29/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a routine hazardous waste inspection. Consent to inspect and take any necessary photos was given by Joseph Hamouche, Manager. Walked throughout the facility. Observed hazardous waste storage areas. Containers were closed and properly labeled. Manifests were available and reviewed. Employees are reported to be trained. Emergency plan is posted in back office. No hazardous waste or universal waste observed in the

dumpster/enclosure area. No hazardous waste violations were observed this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/19/2015
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS Violation (I213) was cited on a previous inspection report and remains outstanding. Please submit UST permitting documents to an approved electronic database immediately. UST documents must be submitted via the e-Submit Portal at https://www.esubmit.ocgov.com/home/ or through the California Electronic Reporting System (CERS). If there are questions regarding this report or compliance issues, please contact your district inspector at msutphin@ochca.com Thank you.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/10/2023
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received the following documents: - Copy of January designated operator inspection report with correct secondary containment test date - Overfill prevention (flapper) test report dated 12/20/2022 for final inspection of SR0149357 Violations 20300013 and 2030035 have been corrected.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/12/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted by M Sutphin UST installation date is 1-1-2000; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/05/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

UST submittal on CERS has been reviewed. The following violations have been closed: - I161: Facility has a current plot plan. The following remain outstanding: - I582: UST submittal on CERS still requires corrections. - I481: Permit to Operate to be issued once compliance is achieved. Please re-submit UST submittal to CERS immediately to close out the remaining violations. Refer to regulator comments on CERS for guidance.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Joseph Hamouche, Manager.

Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Gasoline (30,000 gallons) - Diesel (10,000 gallons) - Carbon Dioxide (42 gallons) REQUIREMENT FOR ELECTRONIC SUBMITTAL OF HMBEP DOCUMENTS: This report serves as notice that the facility must submit the following documents electronically within 30 days of this report: - Hazardous Materials Inventory - Site Map The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds of 55 gallons for liquids, 500 pounds for solids, & 200 cubic feet for gases. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/13/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

The following UST documents have been received in CERS on 1/6/2020 and ACCEPTED: - UST Facility Operating Permit Application - UST Monitoring Site Plan Violation I582 has been corrected. Please note, there are pending corrections to other documents related to your CERS submittal that require your attention at http://cers.calepa.ca.gov/. The following violations remain outstanding and must be corrected immediately: - I481: Failure to obtain a valid permit to operate a UST. - I122: Failure to maintain monitoring records for release detection and/or maintain records of appropriate follow-up actions. - I106: Failure to conduct the designated UST operator visual inspection at least once every 30 days. Please submit all documents to this Agency within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/16/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness annual monitoring certification, spill bucket testing, and conduct UST inspection. Tester: - Luis Rivera of Universal Nozzle. Tester certifications (VR, ICC, VMI) were verified. Tanks: - 87 main (10,000 gal) - 87 aux (10,000 gal) - 91 (10,000 gal) - Diesel (10,000 gal) Monitoring Panel: Veeder Root TLS-350 Annulars: - VR-407 Fill/STP/UDC Sumps + Vent Sump - VR-208 All liquid detection sensors were tested on site. Positive shutdown, fail safe and sensor out were verified. LLD: - VR PLLD Facility has a submittal in CERS. The following documents were available for review on site: - Permit to Operate - Monitoring Plan + Tank Pages - Plot Plan Map - Leak Response Plan - CFR + CFO Letter - Statement of Understanding and Compliance - DO Agreement - DO Training - DO Monthly Reports - Alarm Logs - Maintenance Records - Monitoring System Certification test results dated 12/20/19 - Secondary Containment test [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/16/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to inspect tank sumps, dispenser containment (UDC) sumps, and review required documentation during the annual monitoring system certification testing, leak detector testing, and spill bucket testing. Met with station owner Salam Gammo, , obtained consent inspect , take photographs , and to review documentation. Annual monitor certification being performed by David Lopez . ICC , VMI, and Veederoot Certification were up to date On site to observe and visually verify upon arrival tank sumps and UDC sumps are dry and sensors are located at the lowest point in the sumps. Also verified the secondary containment pipes to be open to the turbine sumps. Site has four underground storage tanks. Three for gasoline and

one fore diesel.Piping observed in sumps appears to double-wall fiberglass, and 6 dispenser with UDC sumps. The turbine/piping sumps ,fill sumps, and UDCs are monitored with Veeder-Root 208 sensors Leak detection is monitored with Vaporless [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/10/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

This Agency has received the following documentation submitted to CERS on 12/10/2020 which has been reviewed and ACCEPTED: - Hazardous Materials Inventory - Site Map Violation I632 has been corrected. There are no remaining hazardous materials violations for this facility. REMINDER: Please re-certify your HMBEP annually between January 1st – March 1st at http://cers.calepa.ca.gov/.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/14/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received the following test reports dated 12/8/2020: - Monitoring System Certification - Spill Containers - Line Leak Detectors All components were tested and PASSED.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/21/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Recieved monitor certification test results and SB989 test results for testing witnessed by M Sutphin on 12-12-16. The testing passed that date. ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/28/2018
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness annual monitoring certification and spill bucket test and conduct UST inspection. The site has the following tanks: - 87 main (10,000 gal) - 87 aux (10,000 gal) - 91 (10,000 gal) - Diesel (10,000 gal) The UST system is monitored via Veeder Root TLS-350 panel. Annulars: - All tanks have VR407 Fill/STP/UDC sumps + Vent Sump - VR208 All liquid detection sensors tested; 87 aux STP 208 sensor failed - replaced with another VR208 and tested - passed. Positive shutdown, fail safe and sensor out were verified. LLD: - All STPs have VR PLLD All LLDs were tested and passed with the exception of the 87 main LLD which failed. Testing was conducted by Jimmy Quintanilla with JQ Engineering. Technician certs (ICC, VR and VMI) were verified. Facility has submitted on CERS. The following documents were available for review: - Permit to Operate (needs to be updated to reflect diesel tank) - Certificate of Financial Responsibility [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/06/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST

Eval Source: CERS
Eval Notes:

Reviewed file for 12-12-17 scheduled monitor certification per review of file FA0023947 the 4 new UST were installed 10-12-1995 on plan 95PC78; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/07/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received the following documentation demonstrating that violation I106 has been corrected: - DO report from 9/16/20 listing 91 STP fuel alarm from 8/21/20 and corrective actions. - DO reports corrected for January 2020 - December 2020. - DO letter acknowledging requirement for visual inspection at least every 30 days. There are no remaining UST violations for this facility. Please conduct DO visual inspections at least once every 30 days, document all fuel alarms, ensure owner/operator has received DO inspection reports within 48 hours, and signed and dated by owner/operator within 72 hours of receipt per 23 CCR 16 2716(a)-(e).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/22/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

CERS submittal reviewed and accepted . Updated CFR dated 1-1-21 2021 overfill cert test submitted; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/22/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Change UST status to not get a permit, per Sutphin.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/16/2019
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has not received documentation to address the following open violations: -I161: Plot Plan submitted to CERS requires corrections. -I582: Tank Pages submitted to CERS requires corrections. -I101: Conduct overfill prevention equipment inspection and submit report to this Agency within 30 days. In addition to the aforementioned open violations, the following additional violation has been issued: - I481: Facility is operating UST system without a Permit to Operate from this Agency. Submit documentation to close out the aforementioned violations within 30 days to receive a Permit to Operate from this Agency. Contact me at acabudol@ochca.com or 714-625-2702 if you have questions.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/11/2020
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health

Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received a copy of the following documentation for this facility: - Monitoring System Certification test report dated 12/20/2019. - All components tested and PASSED. - Spill Bucket test report dated 12/20/2019. - All components tested and PASSED. - Secondary Containment test report dated 12/20/2019: - Product Piping Sump (87 Master, 87 Siphon, 91, Diesel) - FAILED. - Fill Sump (87 Master, 87 Siphon, 91, Diesel) - FAILED. - UDC 3/4 - FAILED. - All other components PASSED. - DO Reports (corrected): - 12/19/2019 - 1/28/2020 - 2/17/2020 - Received letter from owner with justification for DO inspections exceeding 30 day time frame. The following violations have been corrected: - Failure to conduct the designated UST operator visual inspection at least once every 30 days. - Failure to submit Annual Monitoring System Certification test results [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/28/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed UST CERS submittal. Facility does not list fill tube shut off valves on UST tank information pages on CERS . Inspection set up for 12-29-21 to confirm; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/29/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Salam Gammo. The facility has an active EPA ID # CAL000338171 Manifests from Able Environmental reviewed at site. The facility has one drum for waste fuel contaminated debris. The facility has one empty drum for fuel contaminated liquids Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/18/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

CERS submittal reviewed and accepted . CERS tank ID lists Audible visual alarm for Overfill prevention. Recently the SWRCB issued LG 150-3, which includes clarification on existing overfill prevention requirements related to the overfill alarm. This affects sites with more than one UST that utilize an ATG system with overfill alarm to meet the requirements. The clarification provided in LG 150-3 includes the following "Systems that only can activate external alarms when the first UST overfill condition occurs must be noted as failing the inspection and additional actions must be taken to ensure each UST has a functional overfill prevention independent of the other USTs at the facility (i.e. installing a separate alarm unit or other appropriate OPE equipment for each tank). Please ensure that your tank system meets overfill prevention requirements.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/06/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval Notes:

Reviewed CERS UST info needs updated DO Statement , Financial , and tank install date and Xerxes primary tank should be listed as fiberglass; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/21/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Eval Date: 12/03/2024
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous materials business plan (HMBP) inspection. Consent to inspect the facility was granted by Joseph Hamouche (Manager). Observed the facility, perimeter, and hazardous materials storage areas. The following materials were present at disclosable quantities: - Carbon dioxide (1 x 40-gal. container) - Diesel (1 x 10,000-gal. UST) - Gasoline (3 x 10,000-gal. in USTs; 30,000-gal. total) - Propane (21 x 5-gal. containers; 105-gal. total) Declined HMBP components s; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/13/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for routine UST inspection, monitoring system certification and spill bucket testing. The facility has four double-walled tanks (87, 87, 91, Diesel) monitored by a Veeder Root TLS-350 system. The monitor is operational for audible and visual alarms. Positive shutdown and fail safe programming were verified for pressurized piping. In-tank probes with external alarms are used for overfill prevention. Facility is in the process of installing flapper valves (SR0149357). The following senso; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERSINFO FOR UST INSTALLATION DATE IS 10-12-95. 4 USTS AT SITE ARE xERXES DOUBLE WALLED FIBERGLASS TANKS; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: JOSEPH HAMOUCHE
Entity Title: OWNER
Address:
City:
State:
Country:
Zip Code:

Phone:

Affil Type Desc: Operator
Entity Name: GAMMO CORPORATION
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 534-2530

Affil Type Desc: Document Preparer
Entity Name: JOSEPH HAMOUCHE
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: UST Permit Applicant
Entity Name: SALAM GAMMO
Entity Title: OWNER
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 534-2530

Affil Type Desc: UST Tank Operator
Entity Name: GAMMO CORP
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 534-2530

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country:
Zip Code: 92843
Phone:

Affil Type Desc: Parent Corporation
Entity Name: GAMMO CORP
Entity Title:
Address:
City:
State:
Country:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Zip Code:
Phone:

Affil Type Desc: UST Property Owner Name
Entity Name: SALAM GAMMO
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 534-2530

Affil Type Desc: UST Tank Owner
Entity Name: GAMMO CORP
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 534-2530

Affil Type Desc: Environmental Contact
Entity Name: JOSEPH HAMOUCHE
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country:
Zip Code: 92843
Phone:

Affil Type Desc: Legal Owner
Entity Name: GAMMO CORPORATION
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 534-2530

Affil Type Desc: Property Owner
Entity Name: SALAM GAMMO
Entity Title:
Address: 13482 BROOKHURST ST
City: GARDEN GROVE
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 534-2530

Coordinates

Env Int Type Code: HMBP
Program ID: 10512283
Latitude: 33.767120
Longitude: -117.954400
Coord Name:
Ref Point Type Desc: Center of a facility or station.

16	9 of12	ESE	0.15 / 811.75	72.89 / -1	LIAQUAT ALI JUMANI 13482 BROOKHURST ST. GARDEN GROVE CA	HIST TANK

Owner Name: ARCO PETROLEUM PRODUCTS CO.
Owner Street: 515 SOUTH FLOWER STREET
Owner City: LOS ANGELES
Owner State: CA
No of Containers: 4
County: ORANGE
Facility State: CA
Facility Zip: 92643

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Owner Zip:	90071					

16	10 of12	ESE	0.15 / 811.75	72.89 / -1	GAMMO CORPORATION 13482 BROOKHURST ST GARDEN GROVE CA 92843	EMISSIONS

2016 Toxic Data

Facility ID:	157786	**TS:**	
Facility SIC Code:	5541	**HRA:**	
CERR CODE:		**CH Index:**	
COID:	ORA	**AH Index:**	
CO:	30	**Air Basin:**	SC
DISN:	SOUTH COAST AQMD	**District:**	SC
CHAPIS:			

2017 Toxic Data

Facility ID:	157786	**COID:**	ORA
Facility SIC Code:	5541	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2018 Toxic Data

Facility ID:	157786	**COID:**	ORA
Facility SIC Code:	5541	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2019 Toxic Data

CO:	30	**DISN:**	SOUTH COAST AQMD
Air Basin:	SC	**CHAPIS:**	
Faccility ID:	157786	**CERR Code:**	
District:	SC	**TS:**	
Facility SIC Code:	5541	**Health Risk Asmt:**	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2020 Toxic Data

CO:	30	**DISN:**	SOUTH COAST AQMD
Air Basin:	SC	**CHAPIS:**	
Facility ID:	157786	**CHERR Code:**	
District:	SC	**TS:**	
Facility SIC Code:	5541	**Health Risk Asmt:**	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			

Non-Cancer Acute Haz Ind:

2021 Toxic Data

Co:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	157786	***Cerr Code:***	
District:	SC	***TS:***	
Facility SIC Code:	5541	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

16	***11 of12***	***ESE***	***0.15 / 811.75***	***72.89 / -1***	***GAMMO CORPORATION 13482 BROOKHURST ST GARDEN GROVE CA 92843-3119***	***RCRA NON GEN***

Handler ID:	CAL000338171
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	44719
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20081124	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.767089
In Handler Univ:	Y	***Location Longitude:***	-117.954867
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		

As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	GAMMO CORPORATION
Location Street No:	
Location Street1:	13482 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843-3119
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	SALAM GAMMO
Contact Street No:	
Contact Street1:	13482 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-863-7488
Contact Fax:	000-000-0000
Contact Email Address:	JUSTINPARKCPA@GMAIL.COM
Contact Title:	
Owner Name:	GAMMO CORPORATION
Owner Type:	O
Owner Seq:	1
Operator Name:	SALAM GAMMO
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20081124
Handler Name: GAMMO CORPORATION
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	13482 BROOKHURST ST
Name:	SALAM GAMMO	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-863-7488	**Country:**	
Source Type:	Implementer	**Zip:**	92843

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	13482 BROOKHURST ST
Name:	GAMMO CORPORATION	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-863-7488	**Country:**	
Source Type:	Implementer	**Zip:**	92843-3119

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	12 of12	ESE	0.15 / 811.75	72.89 / -1	ARCO #629 13482 BROOKHURST ST GARDEN GROVE CA	UST SWEEPS

C C:	A30-000-4348	**D Filename:**	SITE12A
BOE:		**Page No:**	123
Comp:	4348	**County:**	ORANGE
Status:	ACTIVE	**State :**	CA
No of Tanks:	4	**Zip:**	92643
Jurisdict:	ORANGE COUNTY	**Latitude:**	33.767116
Agency:	ENVIRONMENTAL HEALTH	**Longitude:**	-117.954882
Phone:		**Georesult:**	S5HPNTSC-A

Tank Details

Tank ID:	000002	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-004348-000002	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000003	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-004348-000003	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank ID:	000001	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-004348-000001	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000004	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-004348-000004	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

17	1 of7	ESE	0.16 / 829.33	71.63 / -2	**EXXON #7-0833** **13502 BROOKHURST ST # 7-0833** **GARDEN GROVE CA 92843**	**DELISTED TNK**

Delisted Storage Tanks

Facility ID:	2122	**County:**	Orange
Latitude:	33.76667	**Original Source:**	UST
Longitude:	-117.95494	**Record Date:**	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

17	2 of7	ESE	0.16 / 829.33	71.63 / -2	**EXXON #7-0833** **13502 BROOKHURST** **GARDEN GROVE CA 92643**	**LUST**

Global ID:	T0605970421	**Case Type (DL):**	LUST Cleanup Site
Site Facility Type:	LUST CLEANUP SITE	**Oil Field (SRCH):**	
Site Fac Type (SRCH):	LUST CLEANUP SITE	**Oil Field Oper (SRCH):**	
Status:		**Census Tract (SRCH):**	6059088902
Status (SRCH):	COMPLETED - CASE CLOSED	**Latitude (DL):**	33.766726
Status (DL):	Completed - Case Closed	**Longitude (DL):**	-117.954899
Status Date (DL):	2/7/1996	**RWQCB Region (DL):**	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		
Site Facility Name (SRCH):	EXXON #7-0833		
Address (SRCH):	13502 BROOKHURST		
City (SRCH):	GARDEN GROVE		
Zip (SRCH):	92643		
County (SRCH):	ORANGE		
Street No (DL):	13502		
Street Name (DL):	BROOKHURST		
City (DL):	GARDEN GROVE		
Zip (DL):	92643		
County (DL):	Orange		
State (DL):	CA		
Business Name (DL):	EXXON #7-0833		
Site Facility Name:	EXXON #7-0833		
Address :	13502 BROOKHURST		
City :	GARDEN GROVE		
Zip :	92643		
County :	ORANGE		
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search		

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	
Local Case No:	92UT061
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Other Groundwater (uses other than drinking water)
Begin Date:	4/20/1992
How Discovered:	Tank Closure
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	
Discharge Source:	
EPA Region:	9
Leak Reported Dt:	1992-04-20 00:00:00
Military DoD Site:	No
No Further Action Dt:	1996-02-07 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	71-75%
Calenviroscreen 4 Score:	75-80%
A2022 Assembly District:	70
Claim No:	14455
Claim Status:	Active
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker
Contact Name:	JESSICA LAW
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	jessica.law@waterboards.ca.gov
Phone No:	9517824381

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	2/7/1996
Status:	Open - Case Begin Date
Status Date:	4/20/1992

GeoTracker Search - Regulatory Profile

Site Facility Name:	EXXON #7-0833
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	13502 BROOKHURST
City:	GARDEN GROVE
Zip:	92643

County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605970421
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 2/7/1996
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605970421&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 92UT061
SANTA ANA RWQCB (REGION 8)
CASE MANAGER: JESSICA LAW
CUF Claim No: 14455
CUF Priority Assig: D
CUF Amount Paid: $117,613
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 2/7/1996

Status: Open - Case Begin Date
Date : 4/20/1992

GeoTracker Search - Regulatory Activities

Action Type: Leak Action
Action: Leak Discovery
Action Date: 4/20/1992
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 4/20/1992
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Type: STATUS / PROGRESS REPORTS
Submitted By: LORI BRASHERS (AUTH_RP)
Document Date: 4/30/1996*
Submitted:

Title: 1Q 1996 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7715171515/T0605970421.PDF

Document Type: Site Documents **Document Date:** 3/1/1996*
Type: WELL DESTRUCTION REPORT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: WELL ABANDONMENT LETTER REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3475891351/T0605970421.PDF

Document Type: Site Documents **Document Date:** 2/7/1996*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S REMEDIAL ACTION COMPLETION CERTIFICATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5141153156/T0605970421.PDF

Document Type: Site Documents **Document Date:** 1/2/1996*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 4Q 1995 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8048361420/T0605970421.PDF

Document Type: Site Documents **Document Date:** 11/17/1995*
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: NOTIFICATION OF AS/SVE 90 DAY SHUTDOWN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7230908334/T0605970421.PDF

Document Type: Site Documents **Document Date:** 10/15/1995*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 3Q 1995 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2174835443/T0605970421.PDF

Document Type: Site Documents **Document Date:** 9/15/1995*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY APPROVAL OF PROTOCOL FOR GROUNDWATER MONITORING DURING OPERATION OF REMEDIATION SYSTEM **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8334054768/T0605970421.PDF

Document Type: Site Documents **Document Date:** 8/7/1995*
Type: WELL INSTALLATION REPORT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: LETTER REPORT DOCUMENTING INSTALLATION OF 10 AS/SVE WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9009086310/T0605970421.PDF

Document Type: Site Documents **Document Date:** 8/7/1995*
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: PROTOCOL FOR GROUNDWATER MONITORING DURING OPERATION OF REMEDIATION SYSTEM **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1994659662/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/24/1995*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 2Q 1995 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6237098395/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/20/1995*
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: WELL CONSTRUCTION DIAGRAMS (COVER LETTER ONLY) **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4007656991/T0605970421.PDF

Document Type: Site Documents **Document Date:** 4/19/1995*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 1Q 1995 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7301428437/T0605970421.PDF

Document Type: Site Documents **Document Date:** 1/24/1995*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 4Q 1994 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6151679694/T0605970421.PDF

Document Type: Site Documents **Document Date:** 10/24/1994*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 3Q 1994 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5244964838/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/18/1994*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 2Q 1994 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3550146698/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/13/1994*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S CONDITIONAL APPROVAL OF CORRECTIVE ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9281753778/T0605970421.PDF

Document Type: Site Documents **Document Date:** 6/30/1994*
Type: CAP/RAP - OTHER REPORT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: CORRECTIVE ACTION PLAN REMOVAL OF HYDROCARBONS FROM SOIL AND GROUNDWATER **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6582989633/T0605970421.PDF

Document Type: Site Documents **Document Date:** 6/1/1994*
Type: SITE INVESTIGATION **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: ADDITIONAL SUBSURFACE INVESTIGATION AND GROUNDWATER MONITORING REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2129544198/T0605970421.PDF

Document Type: Site Documents **Document Date:** 4/21/1994*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 1Q 1994 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6074597299/T0605970421.PDF

Document Type: Site Documents **Document Date:** 1/26/1994*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 4Q 1993 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8453384637/T0605970421.PDF

Document Type: Site Documents **Document Date:** 11/15/1993*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S APPROVAL OF REMEDIAL ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3118982136/T0605970421.PDF

Document Type: Site Documents **Document Date:** 11/8/1993*
Type: CAP/RAP - OTHER REPORT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: REMEDIAL ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.

Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9608459711/T0605970421.PDF

Document Type: Site Documents **Document Date:** 10/21/1993*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 3Q 1993 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9616287469/T0605970421.PDF

Document Type: Site Documents **Document Date:** 8/31/1993*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY REQUEST FOR WORKPLAN FOR REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7327707111/T0605970421.PDF

Document Type: Site Documents **Document Date:** 8/24/1993*
Type: SITE INVESTIGATION **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: ADDITIONAL SITE INVESTIGATION REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6434744477/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/31/1993*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 2Q 1993 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4859070062/T0605970421.PDF

Document Type: Site Documents **Document Date:** 4/27/1993*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 1Q 1993 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1804605305/T0605970421.PDF

Document Type: Site Documents **Document Date:** 4/2/1993*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S ACTION PLAN APPROVAL LETTER WITH CONSIDERATIONS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6173407196/T0605970421.PDF

Document Type: Site Documents **Document Date:** 3/24/1993*
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: WORKPLAN FOR ADDITIONAL ENVIRONMENTAL INVESTIGATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6416739344/T0605970421.PDF

Document Type: Site Documents **Document Date:** 2/3/1993*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 4Q 1992 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1618887543/T0605970421.PDF

Document Type: Site Documents **Document Date:** 11/10/1992*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 3Q 1992 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8542245686/T0605970421.PDF

Document Type: Site Documents **Document Date:** 10/30/1992*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S REQUEST FOR WORK PLAN FOR ADDITIONAL SITE ASSESSMENT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2676733613/T0605970421.PDF

Document Type: Site Documents **Document Date:** 10/5/1992*
Type: TANK REMOVAL REPORT / UST SAMPLING **Submitted:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

REPORT

Submitted By: LORI BRASHERS (AUTH_RP)
Title: TANK EXCAVATION ASSESSMENT REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2561759650/T0605970421.PDF

Document Type: Site Documents **Document Date:** 7/31/1992*
Type: STATUS / PROGRESS REPORTS **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: 2Q 1992 QUARTERLY REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1223556756/T0605970421.PDF

Document Type: Site Documents **Document Date:** 5/18/1992*
Type: CORRESPONDENCE **Submitted:**
Submitted By: LORI BRASHERS (AUTH_RP)
Title: AGENCY'S REQUEST FOR WORK PLAN OF SITE ASSESSMENT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1721884369/T0605970421.PDF

17	3 of7	ESE	0.16 / 829.33	71.63 / -2	**EXXON SERVICE STATION** **13502 BROOKHURST** **GARDEN GROVE CA 92640**	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002e8b3.pdf

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17	4 of7	ESE	0.16 / 829.33	71.63 / -2	**Exxon #7-0833** **13502 Brookhurst St Garden Grove Ca 92643** **CA**	LOP ORANGE

Case ID: 92UT061

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 2/7/1996
File Location: Local Agency

17	5 of7	ESE	0.16 / 829.33	71.63 / -2	**EXXON SERVICE STATION** **13502 BROOKHURST** **GARDEN GROVE CA**	HIST TANK

Owner Name: EXXON COMPANY U.S.A.
Owner Street: 16945 NORTHCHASE BLVD.
Owner City: HOUSTON
Owner State: TX
Owner Zip: 77210
No of Containers: 4
County: ORANGE
Facility State: CA
Facility Zip: 92640

17	6 of7	ESE	0.16 / 829.33	71.63 / -2	**EXXON #7-0833** **13502 BROOKHURST ST** **GARDEN GROVE CA**	UST SWEEPS

C C: A30-000-2122
BOE: 44-000285
Comp: 2122
Status: ACTIVE
No of Tanks: 4
Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH
Phone:
D Filename: SITE12A
Page No: 123
County: ORANGE
State : CA
Zip: 92643
Latitude: 33.76666
Longitude: -117.954884
Georesult: S5HPNTSC-A

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank Details

Tank ID:	000004	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-002122-000004	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	8000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000003	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-002122-000003	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	8000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000001	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-002122-000001	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	LEADED
Capac:	8000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000005	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-002122-000005	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	
Capac:	1000	***ONA:***	
Tank Use:	PETROLEUM	***D File Name:***	TANK12A

17	***7 of7***	***ESE***	***0.16 / 829.33***	***71.63 / -2***	***Exxon #7-0833 13502 Brookhurst St Garden Grove Ca 92643 CA***	***LOP ORANGE***

Case ID: 92UT125

Details

Current Status:	Closed
Type of Closure:	Invalidated
Closed Date:	1/1/1992
File Location:	Local Agency

18	***1 of1***	***WNW***	***0.16 / 842.99***	***71.52 / -2***	***9705 IMPERIAL AVE 9705 IMPERIAL AVE***	***RCRA NON GEN***

Handler ID: CAC003239797
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20230629	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N

EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241212
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	9705 IMPERIAL AVE
Location Street No:	
Location Street1:	9705 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	MINH NGUYEN
Contact Street No:	
Contact Street1:	9705 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-562-4040
Contact Fax:	
Contact Email Address:	ELIZABETHS@PWSEI.COM
Contact Title:	
Owner Name:	MINH NGUYEN
Owner Type:	O
Owner Seq:	1
Operator Name:	MINH NGUYEN
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20230629
Handler Name:	9705 IMPERIAL AVE
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	9705 IMPERIAL AVE
Name:	MINH NGUYEN	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone:	714-562-4040	**Country:**	
Source Type:	Implementer	**Zip:**	92844
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	9705 IMPERIAL AVE
Name:	MINH NGUYEN	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-562-4040	**Country:**	
Source Type:	Implementer	**Zip:**	92844

19	1 of1	ENE	0.17 / 880.94	75.05 / 1	GABRIEL RASCOL 10021 RUSSELL AVE GARDEN GROVE CA 92843	RCRA NON GEN

Handler ID: CAC003121243
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210524	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---

Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20210601
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	GABRIEL RASCOL
Location Street No:	
Location Street1:	10021 RUSSELL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	GABRIEL RASCOL
Contact Street No:	
Contact Street1:	10021 RUSSELL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-588-1769
Contact Fax:	
Contact Email Address:	CARTERMOISE97@YAHOO.COM
Contact Title:	
Owner Name:	GABRIEL RASCOL
Owner Type:	O
Owner Seq:	1
Operator Name:	GABRIEL RASCOL
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210524

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Handler Name: GABRIEL RASCOL
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	10021 RUSSELL AVE
Name:	GABRIEL RASCOL	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-588-1769	**Country:**	
Source Type:	Implementer	**Zip:**	92843

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	10021 RUSSELL AVE
Name:	GABRIEL RASCOL	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-588-1769	**Country:**	
Source Type:	Implementer	**Zip:**	92843

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
20	1 of3	ESE	0.18 / 939.28	73.23 / 0	SEXTONS AUTOMOTIVE 10041 TRASK AVE GARDEN GROVE CA 92843	RCRA SQG

Handler ID: CAD982052995
Generator Status: SQG
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	19871016	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:	O	**Location Latitude:**	33.766837
In Handler Univ:	Y	**Location Longitude:**	-117.954161
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	SQG	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	CA
Accessibility:		**State District:**	4

Region:	09
Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	
State Waste Generator:	
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20020627
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	SEXTONS AUTOMOTIVE
Location Street No:	
Location Street1:	10041 TRASK AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ENVIRONMENTAL MANAGER
Contact Street No:	
Contact Street1:	10041 TRASK AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92643
Contact Country:	US
Contact Phone And Ext:	714-534-2560
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	CARPENTER & SPRINGER
Owner Type:	P
Owner Seq:	1

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Operator Name: NOT REQUIRED
Operator Type: P
Operator Seq: 2
Public Notes:

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 19871016
Handler Name: SEXTONS AUTOMOTIVE
Fed Waste Generator: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: CARPENTER & SPRINGER
Dt Became Current:
Dt Ended Current:
Phone: 415-555-1212
Source Type: Notification
Street No:
Street1: NOT REQUIRED
Street2:
City: NOT REQUIRED
State: ME
Country:
Zip: 99999

Owner/Operator Ind: Current Operator
Type: Private
Name: NOT REQUIRED
Dt Became Current:
Dt Ended Current:
Phone: 415-555-1212
Source Type: Notification
Street No:
Street1: NOT REQUIRED
Street2:
City: NOT REQUIRED
State: ME
Country:
Zip: 99999

20	2 of3	ESE	0.18 / 939.28	73.23 / 0	SEXTONS AUTOMOTIVE 10041 TRASK AVE GARDEN GROVE CA 92843	DELISTED TNK

Delisted Storage Tanks

Facility ID: 3140
Latitude: 33.76682
Longitude: -117.95435
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

20	3 of3	ESE	0.18 / 939.28	73.23 / 0	SEXTONS AUTOMOTIVE 10041 TRASK AVE GARDEN GROVE CA	UST SWEEPS

C C: A30-000-3140
BOE: 44-016010
Comp: 3140
Status: ACTIVE
No of Tanks: 1
Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH
Phone:
D Filename: SITE12A
Page No: 133
County: ORANGE
State : CA
Zip: 92643
Latitude: 33.766905
Longitude: -117.95425
Georesult: S5HPNTSC-A

Tank Details

Tank ID: 000002
O Tank ID:
SWRCB No: 30-000-003140-000002
S Contain:
Stg: P
Storage :

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Removed:		**Storag Type:**	PRODUCT		
Installed:		**P Contain:**			
A Date:		**Content:**			
Capac:	550	**ONA:**			
Tank Use:	PETROLEUM	**D File Name:**	TANK12A		

21	1 of7	NE	0.18 / 944.26	76.08 / 2	KARAMAT STATION 13231 BROOKHURST ST GARDEN GROVE CA 92843	DELISTED TNK

Delisted Storage Tanks

Facility ID:	4349	**County:**	Orange
Latitude:	33.7720542	**Original Source:**	UST
Longitude:	-117.9540969	**Record Date:**	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

21	2 of7	NE	0.18 / 944.26	76.08 / 2	ANDYS UNOCAL 13231 BROOKHURST GARDEN GROVE CA 92844	LUST

Global ID:	T0605900976	**Case Type (DL):**	LUST Cleanup Site
Site Facility Type:	LUST CLEANUP SITE	**Oil Field (SRCH):**	
Site Fac Type (SRCH):	LUST CLEANUP SITE	**Oil Field Oper (SRCH):**	
Status:		**Census Tract (SRCH):**	6059088702
Status (SRCH):	COMPLETED - CASE CLOSED	**Latitude (DL):**	33.7707273
Status (DL):	Completed - Case Closed	**Longitude (DL):**	-117.9551414
Status Date (DL):	6/26/2014	**RWQCB Region (DL):**	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		

Site Facility Name (SRCH):	ANDYS UNOCAL
Address (SRCH):	13231 BROOKHURST
City (SRCH):	GARDEN GROVE
Zip (SRCH):	92844
County (SRCH):	ORANGE
Street No (DL):	13231
Street Name (DL):	BROOKHURST
City (DL):	GARDEN GROVE
Zip (DL):	92844
County (DL):	Orange
State (DL):	CA
Business Name (DL):	ANDYS UNOCAL
Site Facility Name:	ANDYS UNOCAL
Address :	13231 BROOKHURST
City :	GARDEN GROVE
Zip :	92844
County :	ORANGE
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	083001258T
Local Case No:	89UT095
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Aquifer used for drinking water supply
Begin Date:	5/14/1989
How Discovered:	* SA
How Discovered Description:	
Stop Method:	Close and Remove Tank

Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	* Historical Geocode - Exact Address Match
Discharge Cause:	
Discharge Source:	Piping
EPA Region:	9
Leak Reported Dt:	1989-05-18 00:00:00
Military DoD Site:	No
No Further Action Dt:	2014-06-26 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	51-55%
Calenviroscreen 4 Score:	60-65%
A2022 Assembly District:	70
Claim No:	2776
Claim Status:	Active
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone No:	9517823238

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	6/26/2014
Status:	Open - Eligible for Closure
Status Date:	1/30/2012
Status:	Open - Remediation
Status Date:	1/9/2004
Status:	Open - Remediation
Status Date:	5/5/1997
Status:	Open - Site Assessment
Status Date:	6/11/1991
Status:	Open - Site Assessment
Status Date:	5/15/1989
Status:	Open - Site Assessment
Status Date:	5/14/1989
Status:	Open - Case Begin Date
Status Date:	5/14/1989

GeoTracker Search - Regulatory Profile

Site Facility Name:	ANDYS UNOCAL

Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	13231 BROOKHURST
City:	GARDEN GROVE
Zip:	92844
County:	ORANGE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605900976
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 6/26/2014
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605900976&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	AQUIFER USED FOR DRINKING WATER SUPPLY
File Location:	LOCAL AGENCY
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin:	Coastal Plain Of Orange County (8-001)
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:	
Future Land Use:	
Cleanup Oversight Agencies:	ORANGE COUNTY LOP (LEAD) - CASE #: 89UT095 SANTA ANA RWQCB (REGION 8) - CASE #: 083001258T CASE MANAGER: MIGUEL OVIEDO
CUF Claim No:	2776
CUF Priority Assig:	B
CUF Amount Paid:	$1,457,687
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	# OF WELLS MONITORED - QUARTERLY : 5, SEMI-ANNUALLY : 3 REASONS FOR QUARTERLY OR MONTHLY OR OTHER GROUNDWATER MONITORING: Well Being Sampled During Remedial Action for Progress Assessment
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:	

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	6/26/2014
Status:	Open - Eligible for Closure
Date :	1/30/2012
Status:	Open - Remediation
Date :	1/9/2004
Status:	Open - Remediation
Date :	5/5/1997
Status:	Open - Site Assessment
Date :	6/11/1991
Status:	Open - Site Assessment
Date :	5/15/1989
Status:	Open - Site Assessment
Date :	5/14/1989
Status:	Open - Case Begin Date

Date : 5/14/1989

GeoTracker Search - Cleanup Action Report

Action Type: PUMP & TREAT (P&T) GROUNDWATER
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

Action Type: SOIL VAPOR EXTRACTION (SVE)
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

Action Type: EXCAVATION
Begin Date: 7/18/1989
End Date: 4/3/1996
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Letter to RP
Action Date: 6/26/2014
Received Issue Date: 6/26/2014
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6209871&temptable=ENFORCEMENT
Title Description Comments:

Claim 2776 Closure/No Further Action Letter **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: State Water Board - Closure Order
Action Date: 9/16/2013
Received Issue Date: 9/16/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6175982&temptable=ENFORCEMENT
Title Description Comments:

Claim 2776 Final Order State Water Board Case Closure **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Letter to RP
Action Date: 6/27/2013
Received Issue Date: 6/27/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6165659&temptable=ENFORCEMENT
Title Description Comments:

Claim 2776 Public Notice State Water Board Case Closure **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 6/27/2013
Received Issue Date: 6/27/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6165656&temptable=ENFORCEMENT

Title Description Comments:

Claim 2776 Fund Manager Case Closure RSR/FM Determination/FM Closure Recommendation **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: File review
Action Date: 10/18/2012
Received Issue Date: 10/18/2012
Doc Link:
Title Description Comments:

CASE FILE REVIEW **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 12/19/2011
Received Issue Date: 12/19/2011
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6393619&temptable=ENFORCEMENT
Title Description Comments:

3rd 5-Year Review **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2011
Received Issue Date: 9/12/2011
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6098327&temptable=ENFORCEMENT
Title Description Comments:

CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: File review
Action Date: 6/13/2011
Received Issue Date: 6/13/2011
Doc Link:
Title Description Comments:

FILE REVIEW **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Site Visit / Inspection / Sampling
Action Date: 5/5/2011
Received Issue Date: 5/5/2011
Doc Link:
Title Description Comments:

SITE VISIT **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 6/2/2010
Received Issue Date: 6/2/2010
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6391323&temptable=ENFORCEMENT
Title Description Comments:

Preliminary 5-Year Review **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter

Action Date: 7/14/2009
Received Issue Date: 7/14/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6021060&temptable=ENFORCEMENT
Title Description Comments:

QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 2/25/2009
Received Issue Date: 2/25/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6004306&temptable=ENFORCEMENT
Title Description Comments:

CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2007
Received Issue Date: 9/12/2007
Doc Link:
Title Description Comments:

2ND QTR 2007 **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/28/2006
Received Issue Date: 9/28/2006
Doc Link:
Title Description Comments:

ISSUED RESPONSE TO CAP ADDENDUM DIRECTED TO INSTALL ADDITIONAL VE WELL **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 4/14/2006
Received Issue Date: 4/14/2006
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING ALTERNATIVE CAP.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/28/2005
Received Issue Date: 9/28/2005
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING CORRECTION OF TABLE 3 FOR RW-1 BENZENE CONCENTRATION.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 6/8/2005
Received Issue Date: 6/8/2005
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions

Action: Staff Letter
Action Date: 9/10/2004
Received Issue Date: 9/10/2004
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT EDF COPIES OF GW MONITORING REPORTS BE SUBMITTED TO GEOTRACKER.

Action Type: Cleanup Action
Action: Pump & Treat (P&T) Groundwater
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Cleanup Action
Action: Soil Vapor Extraction (SVE)
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 3/13/2003
Received Issue Date: 3/13/2003
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT THE GROUNDWATER PUMP AND TREAT SYSTEM BE RESTARTED.

Action Type: Cleanup Action
Action: Excavation
Action Date: 7/18/1989
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 6/12/1989
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Began
Action Date: 5/18/1989
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 5/18/1989
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Site Maps

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR7 (PR7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2797028541/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR9 (PR9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1629456520/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR4 (PR4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7430129945/T0605900976.PDF

Submitted: 1/3/2012*
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/2438669860/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR2 (PR2)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6195649147/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR10 (PR10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6459675610/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR1 (PR1)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7678940773/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR5 (PR5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9402555108/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR8 (PR8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5372029125/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR6 (PR6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7112075746/T0605900976.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR3 (PR3)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/4450276196/T0605900976.PDF

Submitted: 9/20/2009
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/4400063633/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: SW16 (SW16)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6467725455/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: SW17 (SW17)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7468407750/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: VEW9 (VEW9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/4867357552/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: SW18 (SW18)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3354439854/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: SW14 (SW14)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9241051793/T0605900976.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: SW15 (SW15)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1617712736/T0605900976.PDF

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW11)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6185459971/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (VEW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2100601017/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8734205484/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1717360556/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/2589492619/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW12)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6037199258/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW13)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5893218815/T0605900976.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8461140513/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (VEW7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7894534051/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP

Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/7202161490/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW2)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8418623208/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1982790887/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (VEW6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5825932383/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW3A)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6610410928/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2460146844/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW3B)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8384290397/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8003477334/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW6A)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2938780069/T0605900976.pdf

Submitted: 5/23/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW6B)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9907393515/T0605900976.pdf

Submitted: 11/10/2005
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/8922620475/T0605900976.pdf

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 6/26/2014
Type: CLEAN UP FUND - LETTER TO RP ***Submitted:***
Submitted By: JESSICA AMAYA (REGULATOR)
Title: CLAIM 2776 CLOSURE/NO FURTHER ACTION LETTER **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6209871

Document Type: Site Documents ***Document Date:*** 4/8/2014
Type: WELL DESTRUCTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: WELL ABANDONMENT REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3610261440/T0605900976.PDF

Document Type: Site Documents ***Document Date:*** 9/16/2013

Type: STATE WATER BOARD - CLOSURE ORDER **Submitted:**
Submitted By: (REGULATOR)
Title: CLAIM 2776 FINAL ORDER STATE WATER BOARD CASE CLOSURE **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6175982

Document Type: Site Documents **Document Date:** 6/27/2013
Type: CLEAN UP FUND - LETTER TO RP **Submitted:**
Submitted By: (REGULATOR)
Title: CLAIM 2776 PUBLIC NOTICE STATE WATER BOARD CASE CLOSURE **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6165659

Document Type: Site Documents **Document Date:** 6/27/2013
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) **Submitted:**
Submitted By: (REGULATOR)
Title: CLAIM 2776 FUND MANAGER CASE CLOSURE RSR/FM DETERMINATION/FM CLOSURE RECOMMENDATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6165656

Document Type: Site Documents **Document Date:** 4/24/2012*
Type: REQUEST FOR CLOSURE **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SITE CONCEPTUAL MODEL AND REQUEST FOR NO FURTHER ACTION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9193211376/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 1/16/2012
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FOURTH QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7908522844/T0605900976.PDF

Document Type: Site Documents **Document Date:** 12/30/2011
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: DRILLING AND SAMPLING OF POST-REMEDIATION CONFIRMATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7867765069/T0605900976.PDF

Document Type: Site Documents **Document Date:** 12/19/2011
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) **Submitted:**
Submitted By: (REGULATOR)
Title: 3RD 5-YEAR REVIEW **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6393619

Document Type: Monitoring Reports **Document Date:** 9/23/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2985885560/T0605900976.PDF

Document Type: Site Documents **Document Date:** 9/12/2011
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6098327

Document Type: Site Documents **Document Date:** 8/24/2011
Type: SITE INVESTIGATION WORKPLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN DRILLING AND SAMPLING OF POST REMEDIATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.

Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7396451592/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 8/4/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8958158135/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 5/25/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9404972851/T0605900976.PDF

Document Type: Site Documents **Document Date:** 5/23/2011
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6679803431/T0605900976.PDF

Document Type: Site Documents **Document Date:** 3/15/2011
Type: OPERATION AND MAINTENANCE PLAN/MONITORING REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1656168639/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 2/28/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION - FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4024545252/T0605900976.PDF

Document Type: Site Documents **Document Date:** 1/18/2011
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIESTHIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3199952125/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 12/30/2010
Type: MONITORING REPORT - OTHER **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7947278618/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 12/21/2010*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3636655449/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 10/27/2010*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9001078307/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 7/17/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL REMEDIATION SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6455693066/T0605900976.PDF

Document Type: Site Documents **Document Date:** 6/15/2010
Type: OTHER WORKPLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN - VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7923319518/T0605900976.PDF

Document Type: Site Documents **Document Date:** 6/2/2010
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) **Submitted:**
Submitted By: (REGULATOR)
Title: PRELIMINARY 5-YEAR REVIEW **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6391323

Document Type: Site Documents **Document Date:** 5/25/2010
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6340253472/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 5/14/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2778420984/T0605900976.PDF

Document Type: Site Documents **Document Date:** 2/18/2010
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES - FOURTH QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6934075772/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 1/11/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3047013640/T0605900976.PDF

Document Type: Site Documents **Document Date:** 12/21/2009
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4275384366/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 9/24/2009*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2424874722/T0605900976.PDF

Document Type: Site Documents **Document Date:** 8/10/2009
Type: WELL INSTALLATION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.

Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5944952726/T0605900976.PDF

Document Type: Site Documents **Document Date:** 8/6/2009
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGE REMEDIATION ACTIVITIES SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9561593472/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 8/6/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8304541349/T0605900976.PDF

Document Type: Site Documents **Document Date:** 7/14/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6021060

Document Type: Monitoring Reports **Document Date:** 6/24/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS AND GROUNDWATER REMEDIATION FIRST QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4564330160/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 3/10/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDAITION ACTIVITIES FOURTH QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9740206062/T0605900976.PDF

Document Type: Site Documents **Document Date:** 2/25/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900976&enforcement_id=6004306

Document Type: Monitoring Reports **Document Date:** 2/17/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITROING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2811403572/T0605900976.PDF

Document Type: Site Documents **Document Date:** 1/30/2009
Type: CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN - ADDENDUM **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: ADDENDUM TO CORRECTIVE ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6785095691/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 11/20/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4708542346/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 10/15/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)

Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7741570889/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 10/6/2008
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2434722721/T0605900976.PDF

Document Type: Site Documents ***Document Date:*** 8/8/2008
Type: REMEDIAL PROGRESS REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1471514642/T0605900976.PDF

Document Type: Site Documents ***Document Date:*** 7/14/2008
Type: REMEDIAL PROGRESS REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGINH REMEDIATION ACTIVITIES FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8190464854/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 6/6/2008
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7905561149/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 3/11/2008
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2835453867/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 2/26/2008
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2157336175/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 1/21/2008
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1083463907/T0605900976.PDF

Document Type: Site Documents ***Document Date:*** 11/14/2007
Type: REPORTS - INVESTIGATION RPT. ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7872012078/T0605900976.PDF

Document Type: Monitoring Reports ***Document Date:*** 11/5/2007
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.

Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2463305413/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 8/30/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9299822747/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 7/31/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9614759683/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 6/6/2007*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: THIRD QUARTER 2006, GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4581648111/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 6/1/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING ANS STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2427915811/T0605900976.PDF

Document Type: Site Documents **Document Date:** 5/23/2007
Type: REPORTS - INVESTIGATION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2969129800/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 2/8/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION, FOURTH QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4688764810/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 9/11/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7755597770/T0605900976.PDF

Document Type: Site Documents **Document Date:** 7/21/2006*
Type: WORKPLANS - REMEDIAL ACTION PLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: ADDENDUM TO CORRECTIVE ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7331662833/T0605900976.PDF

Document Type: Site Documents **Document Date:** 7/3/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION, AIR SPARGING AND GROUNDWATER TREATMENT SYSTEM PERFORMANCE - FIRST QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9230649650/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 4/27/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5131728947/T0605900976.PDF

Document Type: Site Documents **Document Date:** 4/21/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: NPDES MONITORING REPORT - MARCH 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4740949332/T0605900976.PDF

Document Type: Site Documents **Document Date:** 4/11/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION, AIR SPARGING AND GROUNDWATER TREATMENT SYSTEM PERFORMANCE - FOURTH QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7524844110/T0605900976.PDF

Document Type: Site Documents **Document Date:** 3/31/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: NPDES MONITORING REPORT - FEBRUARY 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4364491105/T0605900976.PDF

Document Type: Site Documents **Document Date:** 2/28/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: NPDES MONITORING REPORT - JANUARY 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3238921940/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 1/27/2006
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION FOURTH QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2485534489/T0605900976.PDF

Document Type: Site Documents **Document Date:** 1/25/2006*
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: NPDES MONITORING REPORT - DECEMBER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2327527701/T0605900976.PDF

Document Type: Site Documents **Document Date:** 1/5/2006
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION, AIR SPARGING AND GROUNDWATER TREATMENT SYSTEM PERFORMANCE - THIRD QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9880628287/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 11/10/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9758130729/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 11/10/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION THIRD QUARTER 2005 **Note: Many records provided by the department have a truncated [Title]

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8361905753/T0605900976.PDF

Document Type: Monitoring Reports **Document Date:** 11/10/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION FIRST QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6267852604/T0605900976.PDF

Document Type: Site Documents **Document Date:** 10/6/2005
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION, AIR SPARGING AND GROUNDWATER TREATMENT SYSTEM PERFORMANCE - SECOND QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7869718253/T0605900976.PDF

Document Type: Site Documents **Document Date:** 9/21/2005
Type: REPORTS - REMEDIAL ACTION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: NPDES MONITORING REPORT - AUGUST 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4509549796/T0605900976.PDF

21	3 of7	NE	0.18 / 944.26	76.08 / 2	A SAADAI UNION 76 13231 BROOKHURST ST. GARDEN GROVE CA 92643	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002e488.pdf

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21	4 of7	NE	0.18 / 944.26	76.08 / 2	Andys Unocal 13231 Brookhurst St Garden Grove Ca 92843-1009 CA	LOP ORANGE

Case ID: 89UT095

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 5/26/2014
File Location: Local Agency

21	5 of7	NE	0.18 / 944.26	76.08 / 2	A. SAADI UNION 76 13231 BROOKHURST ST. GARDEN GROVE CA	HIST TANK

Owner Name: ABOLFAZL SAADAI
Owner Street: 13231 BROOKHURST ST.
Owner City: GARDEN GROVE
Owner State: CA
Owner Zip: 92643
No of Containers: 3
County: ORANGE
Facility State: CA
Facility Zip: 92643

21	6 of7	NE	0.18 / 944.26	76.08 / 2	FKA Andy's Unocal 13231 Brookhurst Ave., Garden Grove, CA 92643 CA	UST CLOSURE

Claim Case No: Claim No. 2776
ID: 2776

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Deadline to Recv Comments: 2013/08/28
Prop UST Case Closure Type: Closure of Underground Storage Tank (UST) Cases - Closure Denials and Approved Orders

Documents

Doc Type: Final Closure Summary
Documents Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/7862303018/2776%20Review%20Summary.pdf

Doc Type: Notice
Documents Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/9569813370/2776%20Public%20Notice.pdf

Doc Type: Exec Draft Order
Documents Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6603347599/2776%20Draft%20Order.pdf

Closur Denial Approved Orders

Doc Title: WQO 2013-0085-UST (09/16/2013)
Denial Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/2417849481/2776%20wqo%202013-0085.pdf

Closure Letter Signed

Letter Title: Uniform Closure Letter (06/19/2014)
Letter Link: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/4241154551/2776%20NFA%20FINAL.pdf

Main Info Details

Site Name: FKA Andy's Unocal
Site Address: 13231 Brookhurst Ave., Garden Grove, CA 92643

21	7 of7	NE	0.18 / 944.26	76.08 / 2	VN AUTO 13231 BROOKHURST ST GARDEN GROVE CA 92843	RCRA NON GEN

Handler ID: CAP000186775
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	***NAIC 1:***	44112
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20071210	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:	P	***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	N
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20071210
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	VN AUTO
Location Street No:	
Location Street1:	13231 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ED D RANDS
Contact Street No:	

Contact Street1:	2817 A LAFAYETTE AVE
Contact Street2:	
Contact City:	NEWPORT BEACH
Contact State:	CA
Contact Zip:	92663
Contact Country:	US
Contact Phone And Ext:	949-723-1645
Contact Fax:	
Contact Email Address:	EDRANDS@FREYINC.COM
Contact Title:	
Owner Name:	DON THIO
Owner Type:	P
Owner Seq:	1
Operator Name:	VN AUTO
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20070828
Handler Name:	VN AUTO
Fed Waste Generator:	1
Generator Code Description:	Large Quantity Generator
Source Type:	Temporary

Waste Code Details

Waste Code:	D002
Waste Code Desc:	CORROSIVE WASTE

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20071210
Handler Name:	VN AUTO
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Notification

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	11478 WHITTIER AVE
Name:	DON THIO	***Street2:***	
Dt Became Current:	19950101	***City:***	LOMA LINDA
Dt Ended Current:		***State:***	CA
Phone:		***Country:***	US
Source Type:	Notification	***Zip:***	92354

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	11478 WHITTIER AVE
Name:	DON THIO	***Street2:***	
Dt Became Current:	19950101	***City:***	LOMA LINDA
Dt Ended Current:		***State:***	CA
Phone:		***Country:***	US
Source Type:	Temporary	***Zip:***	92354

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	
Name:	VN AUTO	***Street2:***	
Dt Became Current:	19950101	***City:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Dt Ended Current:		**State:**	
Phone:		**Country:**	
Source Type:	Temporary	**Zip:**	
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street1:**	
Name:	VN AUTO	**Street2:**	
Dt Became Current:	19950101	**City:**	
Dt Ended Current:		**State:**	
Phone:		**Country:**	
Source Type:	Notification	**Zip:**	

Historical Handler Details

Receive Dt:	20070828
Generator Code Description:	Large Quantity Generator
Handler Name:	VN AUTO

22	1 of2	NE	0.18 / 960.03	76.08 / 2	**DON THIO** **13231 S BROOKHURST ST** **GARDEN GROVE CA**	**UST SWEEPS**

C C:	A30-000-13410	**D Filename:**	SITE12A
BOE:		**Page No:**	123
Comp:	13410	**County:**	ORANGE
Status:	ACTIVE	**State :**	CA
No of Tanks:	4	**Zip:**	92644
Jurisdict:	ORANGE COUNTY	**Latitude:**	0
Agency:	ENVIRONMENTAL HEALTH	**Longitude:**	0
Phone:		**Georesult:**	N

Tank Details

Tank ID:	000004	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-013410-000004	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	DIESEL
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000002	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-013410-000002	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	REG UNLEADED
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

Tank Details

Tank ID:	000001	**S Contain:**	
O Tank ID:		**Stg:**	P
SWRCB No:	30-000-013410-000001	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	
Capac:	550	**ONA:**	
Tank Use:	PETROLEUM	**D File Name:**	TANK12A

Tank Details

Tank ID:	000003	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-013410-000003	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	10000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	2 of2	NE	0.18 / 960.03	76.08 / 2	KARAMAT STATION 13231 S BROOKHURST ST GARDEN GROVE CA	UST SWEEPS

C C:	A30-000-4349	***D Filename:***	SITE12A
BOE:	44-016176	***Page No:***	123
Comp:	4349	***County:***	ORANGE
Status:	ACTIVE	***State :***	CA
No of Tanks:	4	***Zip:***	92644
Jurisdict:	ORANGE COUNTY	***Latitude:***	0
Agency:	ENVIRONMENTAL HEALTH	***Longitude:***	0
Phone:		***Georesult:***	N

Tank Details

Tank ID:	000001	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004349-000001	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	
Capac:	550	***ONA:***	
Tank Use:	PETROLEUM	***D File Name:***	TANK12A

Tank Details

Tank ID:	000004	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004349-000004	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	10000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000003	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004349-000003	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	10000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000005	***S Contain:***	
O Tank ID:		***Stg:***	P

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

SWRCB No:	30-000-004349-000005	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:		**Content:**	DIESEL
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK12A

23	1 of1	WNW	0.19 / 984.44	72.50 / -1	DANG DANG 9672 IMPERIAL AVENUE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003205204
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20221121	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N

Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20221121
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	DANG DANG
Location Street No:	
Location Street1:	9672 IMPERIAL AVENUE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	DANG DANG
Contact Street No:	
Contact Street1:	9672 IMPERIAL AVENUE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-308-0927
Contact Fax:	
Contact Email Address:	KARLA@SUPERIORENV.COM
Contact Title:	
Owner Name:	DANG DANG
Owner Type:	O
Owner Seq:	1
Operator Name:	DANG DANG
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20221121
Handler Name:	DANG DANG
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	9672 IMPERIAL AVENUE
Name:	DANG DANG	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-308-0927	***Country:***	
Source Type:	Implementer	***Zip:***	92844

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	9672 IMPERIAL AVENUE
Name:	DANG DANG	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-308-0927	***Country:***	
Source Type:	Implementer	***Zip:***	92844

24	*1 of2*	*ENE*	*0.19 / 986.51*	*76.29 / 3*	***MARIE CALLENDARS*** ***13252 BROOKHURST STREET*** ***GARDEN GROVE CA 92843***	***RCRA NON GEN***

Handler ID:	CAC003164178
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20220301	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		

Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20220301
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MARIE CALLENDARS
Location Street No:	
Location Street1:	13252 BROOKHURST STREET
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	DAVE QUIMBY
Contact Street No:	
Contact Street1:	1320 N MANZANITA STREET
Contact Street2:	
Contact City:	ORANGE
Contact State:	CA
Contact Zip:	92867
Contact Country:	
Contact Phone And Ext:	714-633-7844
Contact Fax:	
Contact Email Address:	DQUIMBY@RODRIGOS.COM
Contact Title:	
Owner Name:	ROD FRASER ENTERPRISES, INC
Owner Type:	O
Owner Seq:	1
Operator Name:	DAVE QUIMBY
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20220301
Handler Name:	MARIE CALLENDARS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	1320 N MANZANITA STREET
Name:	ROD FRASER ENTERPRISES, INC	***Street2:***	
Dt Became Current:		***City:***	ORANGE
Dt Ended Current:		***State:***	CA
Phone:	714-633-7844	***Country:***	
Source Type:	Implementer	***Zip:***	92867

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1320 N MANZANITA STREET
Name:	DAVE QUIMBY	***Street2:***	
Dt Became Current:		***City:***	ORANGE
Dt Ended Current:		***State:***	CA
Phone:	714-633-7844	***Country:***	
Source Type:	Implementer	***Zip:***	92867

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
24	2 of2	ENE	0.19 / 986.51	76.29 / 3	13252 BROOKHURST ST 13252 BROOKHURST ST GARDEN GROVE CA 92843	RCRA NON GEN

Handler ID:	CAC003246861
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Non Notifier:		**NAIC 3:**	
Receive Date:	20230814	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241212
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	13252 BROOKHURST ST
Location Street No:	
Location Street1:	13252 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	JEREMY BECK
Contact Street No:	
Contact Street1:	13252 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA

Contact Zip: 92843
Contact Country:
Contact Phone And Ext: 949-991-4500
Contact Fax:
Contact Email Address: LISA@5MCONTRACTING.ORG
Contact Title:
Owner Name: MELIA HOMES
Owner Type: O
Owner Seq: 1
Operator Name: JEREMY BECK
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20230814
Handler Name: 13252 BROOKHURST ST
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: JEREMY BECK
Dt Became Current:
Dt Ended Current:
Phone: 949-991-4500
Source Type: Implementer
Street No:
Street1: 13252 BROOKHURST ST
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92843

Owner/Operator Ind: Current Owner
Type: Other
Name: MELIA HOMES
Dt Became Current:
Dt Ended Current:
Phone: 949-991-4500
Source Type: Implementer
Street No:
Street1: 9660 IRVINE CENTER DR
Street2:
City: IRVINE
State: CA
Country:
Zip: 92843

25	1 of1	WNW	0.19 / 1,015.19	72.69 / -1	9671 IMPERIAL AVE 9671 IMPERIAL AVE GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003108729
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No

Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210305	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241211
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	9671 IMPERIAL AVE
Location Street No:	
Location Street1:	9671 IMPERIAL AVE

Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	HERNANDEZ SHELLIE LIVING TRUST
Contact Street No:	
Contact Street1:	9671 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-329-2717
Contact Fax:	
Contact Email Address:	SHELLEB54@GMAIL.COM
Contact Title:	
Owner Name:	HERNANDEZ SHELLIE LIVING TRUST
Owner Type:	O
Owner Seq:	1
Operator Name:	HERNANDEZ SHELLIE LIVING TRUST
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20210305
Handler Name:	9671 IMPERIAL AVE
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	9671 IMPERIAL AVE
Name:	HERNANDEZ SHELLIE LIVING TRUST	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-329-2717	***Country:***	
Source Type:	Implementer	***Zip:***	92844
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	9671 IMPERIAL AVE
Name:	HERNANDEZ SHELLIE LIVING TRUST	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-329-2717	***Country:***	
Source Type:	Implementer	***Zip:***	92844

26	***1 of2***	***WNW***	***0.21 / 1,106.38***	***72.51 / -1***	***MEAALII LOLOGO 9642 IMPERIAL AVE GARDEN GROVE CA 92844***	***RCRA NON GEN***

Handler ID:	CAC003257686
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	2	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20240918	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	
In Handler Univ:	N	***Location Longitude:***	
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	D		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		

Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240918
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MEAALII LOLOGO
Location Street No:	
Location Street1:	9642 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	MEAALII LOLOGO
Contact Street No:	
Contact Street1:	9642 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-381-8058
Contact Fax:	
Contact Email Address:	MAC.S.LOLOGO@GMAIL.COM
Contact Title:	
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20231023
Handler Name:	MEAALII LOLOGO
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Hazardous Waste Handler Details

Seq No:	2
Receive Date:	20240918
Handler Name:	MEAALII LOLOGO
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	9642 IMPERIAL AVE
Name:	MEAALII LOLOGO	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone:	714-381-8058	**Country:**	
Source Type:	Implementer	**Zip:**	92844
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	9642 IMPERIAL AVE
Name:	MEAALII LOLOGO	**Street2:**	
Dt Became Current:		**City:**	GARDEN GROVE
Dt Ended Current:		**State:**	CA
Phone:	714-381-8058	**Country:**	
Source Type:	Implementer	**Zip:**	92844

Historical Handler Details

Receive Dt:	20231023
Generator Code Description:	Not a Generator, Verified
Handler Name:	MEAALII LOLOGO

26	2 of2	WNW	0.21 / 1,106.38	72.51 / -1	**MEAALII LOLOGO** **9642 IMPERIAL AVE** **GARDEN GROVE CA 92844**	**RCRA NON GEN**

Handler ID:	CAC003257533
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20240918	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	D		
Short Term Generator:	N		
Uni Waste:	N		

Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240918
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MEAALII LOLOGO
Location Street No:	
Location Street1:	9642 IMPERIAL AVE
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	MEAALII LOLOGO
Contact Street No:	
Contact Street1:	9642 IMPERIAL AVE
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-381-8058
Contact Fax:	
Contact Email Address:	MAC.S.LOLOGO@GMAIL.COM
Contact Title:	
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20231020
Handler Name: MEAALII LOLOGO
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20240918
Handler Name: MEAALII LOLOGO
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: MEAALII LOLOGO
Dt Became Current:
Dt Ended Current:
Phone: 714-381-8058
Source Type: Implementer
Street No:
Street1: 9642 IMPERIAL AVE
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Owner/Operator Ind: Current Operator
Type: Other
Name: MEAALII LOLOGO
Dt Became Current:
Dt Ended Current:
Phone: 714-381-8058
Source Type: Implementer
Street No:
Street1: 9642 IMPERIAL AVE
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Historical Handler Details

Receive Dt: 20231020
Generator Code Description: Not a Generator, Verified
Handler Name: MEAALII LOLOGO

27	1 of4	NE	0.21 / 1,110.53	74.00 / 0	BOWERS COMPANIES 13222 BROOKHURST ST GARDEN GROVE CA 92840	RCRA NON GEN

Handler ID: CAD028230811
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Used Oil Transpor: No
Used Oil Trans Fac: No

Transporter:	Yes	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	**NAIC 1:**	
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	19860407	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:	O	**Location Latitude:**	33.770826
In Handler Univ:	Y	**Location Longitude:**	-117.954914
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	CA
Accessibility:		**State District:**	4
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	HQ
State Waste Generator:	N
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal WrkId:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20020627
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	BOWERS COMPANIES
Location Street No:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Location Street1:	13222 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92840
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ENVIRONMENTAL MANAGER
Contact Street No:	
Contact Street1:	13222 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92640
Contact Country:	US
Contact Phone And Ext:	213-591-0501
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	ROBERT BOWERS
Owner Type:	P
Owner Seq:	1
Operator Name:	NOT REQUIRED
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19860407
Handler Name:	BOWERS COMPANIES
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Notification

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Private	**Street1:**	NOT REQUIRED
Name:	ROBERT BOWERS	**Street2:**	
Dt Became Current:		**City:**	NOT REQUIRED
Dt Ended Current:		**State:**	ME
Phone:	415-555-1212	**Country:**	
Source Type:	Notification	**Zip:**	99999
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street1:**	NOT REQUIRED
Name:	NOT REQUIRED	**Street2:**	
Dt Became Current:		**City:**	NOT REQUIRED
Dt Ended Current:		**State:**	ME
Phone:	415-555-1212	**Country:**	
Source Type:	Notification	**Zip:**	99999

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
27	2 of4	NE	0.21 / 1,110.53	74.00 / 0	BOWERS CO 13222 BROOKHURST ST GARDEN GROVE CA 92843	DELISTED TNK

Delisted Storage Tanks

Facility ID:	10117	**County:**	Orange
Latitude:	33.7721264	**Original Source:**	UST

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Longitude: -117.953266 **Record Date:** 30-JAN-2017
Permitting Agency: ORANGE COUNTY

---

27 | **3 of4** | **NE** | **0.21 / 1,110.53** | **74.00 / 0** | **BOWERS CO**
13222 BROOKHURST
GARDEN GROVE CA 92844 | **LUST**

Global ID: T0605900855
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 3/27/2013
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): BOWERS CO
Address (SRCH): 13222 BROOKHURST
City (SRCH): GARDEN GROVE
Zip (SRCH): 92844
County (SRCH): ORANGE
Street No (DL): 13222
Street Name (DL): BROOKHURST
City (DL): GARDEN GROVE
Zip (DL): 92844
County (DL): Orange
State (DL): CA
Business Name (DL): BOWERS CO
Site Facility Name: BOWERS CO
Address : 13222 BROOKHURST
City : GARDEN GROVE
Zip : 92844
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088702
Latitude (DL): 33.7707223
Longitude (DL): -117.9548774
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: ORANGE COUNTY LOP
Case Worker:
Local Agency:
RB Case No: 083001081T
Local Case No: 88UT176
File Location: Local Agency
Potential COC: Gasoline
Potential Media of Concern: Aquifer used for drinking water supply
Begin Date: 9/23/1988
How Discovered: Tank Closure
How Discovered Description:
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name: Coastal Plain Of Orange County (8-001)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: * Historical Geocode - Exact Address Match
Discharge Cause:
Discharge Source: Tank
EPA Region: 9
Leak Reported Dt: 1989-01-12 00:00:00
Military DoD Site: No
No Further Action Dt: 2013-03-27 00:00:00
Qty Rlsd Gallons: 0
Facility Project Sub Type:
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 60-65%
A2022 Assembly District: 70

Claim No: 2680
Claim Status: Active
A2022 Congressional District: 45
A2022 Senate District: 36
Site History:

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party. CASE CLOSED PURSUANT TO STATE WATER RESOURCES CONTROL BOARD ORDER.

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone No: 9517823238

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 3/27/2013

Status: Open - Eligible for Closure
Status Date: 3/26/2013

Status: Completed - Case Closed
Status Date: 4/19/2012

Status: Completed - Case Closed
Status Date: 4/12/2012

Status: Open - Remediation
Status Date: 1/9/2004

Status: Open - Remediation
Status Date: 5/5/1997

Status: Open - Site Assessment
Status Date: 6/30/1995

Status: Open - Site Assessment
Status Date: 6/17/1991

Status: Open - Site Assessment
Status Date: 9/23/1988

Status: Open - Case Begin Date
Status Date: 9/23/1988

GeoTracker Search - Regulatory Profile

Site Facility Name: BOWERS CO
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 13222 BROOKHURST
City: GARDEN GROVE
Zip: 92844
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605900855
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 3/27/2013
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605900855&tabname=regulatoryhistory

Potential COC:	GASOLINE
Potential Media of Concern:	AQUIFER USED FOR DRINKING WATER SUPPLY
File Location:	LOCAL AGENCY
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin:	Coastal Plain Of Orange County (8-001)
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:	
Future Land Use:	
Cleanup Oversight Agencies:	ORANGE COUNTY LOP (LEAD) - CASE #: 88UT176 SANTA ANA RWQCB (REGION 8) - CASE #: 083001081T CASE MANAGER: MIGUEL OVIEDO
CUF Claim No:	2680
CUF Priority Assig:	C
CUF Amount Paid:	$1,302,652
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	# OF WELLS MONITORED - QUARTERLY : 2, SEMI-ANNUALLY : 2 REASONS FOR QUARTERLY OR MONTHLY OR OTHER GROUNDWATER MONITORING: Well Being Sampled During Remedial Action for Progress Assessment
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:	

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

CASE CLOSED PURSUANT TO STATE WATER RESOURCES CONTROL BOARD ORDER.

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	3/27/2013
Status:	Open - Eligible for Closure
Date :	3/26/2013
Status:	Completed - Case Closed
Date :	4/19/2012
Status:	Completed - Case Closed
Date :	4/12/2012
Status:	Open - Remediation
Date :	1/9/2004
Status:	Open - Remediation
Date :	5/5/1997
Status:	Open - Site Assessment
Date :	6/30/1995
Status:	Open - Site Assessment
Date :	6/17/1991
Status:	Open - Site Assessment
Date :	9/23/1988
Status:	Open - Case Begin Date
Date :	9/23/1988

GeoTracker Search - Cleanup Action Report

Action Type: PUMP & TREAT (P&T) GROUNDWATER
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

Action Type: SOIL VAPOR EXTRACTION (SVE)
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 4/19/2012
Received Issue Date: 4/19/2012
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6389755&temptable=ENFORCEMENT
Title Description Comments:

State Board Well Destruction Letter **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 4/17/2012
Received Issue Date: 4/17/2012
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6394123&temptable=ENFORCEMENT
Title Description Comments:

State Board NFA Letter **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 4/12/2012
Received Issue Date: 4/12/2012
Doc Link:
Title Description Comments:

State Board Well Destruction Letter **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 12/19/2011
Received Issue Date: 12/19/2011
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6393561&temptable=ENFORCEMENT
Title Description Comments:

3rd 5-Year Review **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2011
Received Issue Date: 9/12/2011
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6098325&temptable=ENFORCEMENT
Title Description Comments:

CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 6/13/2011
Received Issue Date: 6/13/2011
Doc Link:
Title Description Comments:

FILE REVIEW **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Site Visit / Inspection / Sampling
Action Date: 5/5/2011
Received Issue Date: 5/5/2011
Doc Link:
Title Description Comments:

SITE VISIT **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)
Action Date: 6/2/2010
Received Issue Date: 6/2/2010
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6391322&temptable=ENFORCEMENT
Title Description Comments:

Preliminary 5-Year Review **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 7/14/2009
Received Issue Date: 7/14/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6021059&temptable=ENFORCEMENT
Title Description Comments:

QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 2/25/2009
Received Issue Date: 2/25/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6004305&temptable=ENFORCEMENT
Title Description Comments:

CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2007
Received Issue Date: 9/12/2007
Doc Link:
Title Description Comments:

2ND QTR 2007 **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 4/14/2006
Received Issue Date: 4/14/2006

Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING ALTERNATIVE CAP.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/10/2004
Received Issue Date: 9/10/2004
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT THE EDF COPIES OF THE GROUNDWATER MONITORING REPORTS BE SUBMITED TO GEOTRACKER.

Action Type: Cleanup Action
Action: Soil Vapor Extraction (SVE)
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Cleanup Action
Action: Pump & Treat (P&T) Groundwater
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 3/17/2003
Received Issue Date: 3/17/2003
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT THE PUMP AND TREAT SYSTEM BE RESTARTED.

Action Type: Leak Action
Action: Leak Reported
Action Date: 1/12/1989
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Began
Action Date: 9/23/1988
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 9/23/1988
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Enforcement - Other
Action: UNK
Action Date:
Received Issue Date:

Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6119021&temptable=ENFORCEMENT

Title Description Comments:

GeoTracker Search - Site Maps

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR10 (PR10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9219358086/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR3 (PR3)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9653538525/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/1687026917/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR2 (PR2)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6610791802/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR4 (PR4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5845047950/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR5 (PR5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6421826958/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR7 (PR7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/4681213319/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR6 (PR6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2437056779/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR8 (PR8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7857537806/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR9 (PR9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2433872997/T0605900855.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR1 (PR1)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1806716203/T0605900855.PDF

Submitted: 9/20/2009
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/4511178433/T0605900855.PDF

Submitted: 11/14/2007

Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/4322645425/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1303053140/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW11)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3379333972/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (VEW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5721439957/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5140518009/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW13)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1222536981/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2137464761/T0605900855.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW12)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1902892172/T0605900855.pdf

Submitted: 11/10/2005
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/2383910953/T0605900855.pdf

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:***
Type: UNKNOWN ***Submitted:***
Submitted By: (REGULATOR)
Title: UNKNOWN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6119021

Document Type: Site Documents ***Document Date:*** 4/4/2013*
Type: WELL DESTRUCTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: WELL ABANDONMENT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7183713793/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 4/24/2012*
Type: REQUEST FOR CLOSURE ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SITE CONCEPTUAL MODEL AND REQUEST FOR NO FURTHER ACTION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1593747735/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 4/19/2012
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) ***Submitted:***

Submitted By: JAMES YOUNG (REGULATOR)
Title: STATE BOARD WELL DESTRUCTION LETTER **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6389755

Document Type: Site Documents **Document Date:** 4/17/2012
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) **Submitted:**
Submitted By: (REGULATOR)
Title: STATE BOARD NFA LETTER **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6394123

Document Type: Monitoring Reports **Document Date:** 1/16/2012
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9199170708/T0605900855.PDF

Document Type: Site Documents **Document Date:** 12/30/2011
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: DRILLING AND SAMPLING OF POST-REMEDIATION CONFIRMATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5878488123/T0605900855.PDF

Document Type: Site Documents **Document Date:** 12/19/2011
Type: CLEAN UP FUND - CASE CLOSURE REVIEW SUMMARY REPORT (RSR) **Submitted:**
Submitted By: (REGULATOR)
Title: 3RD 5-YEAR REVIEW **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6393561

Document Type: Monitoring Reports **Document Date:** 9/23/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8134678661/T0605900855.PDF

Document Type: Site Documents **Document Date:** 9/12/2011
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6098325

Document Type: Site Documents **Document Date:** 8/24/2011
Type: SITE INVESTIGATION WORKPLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN DRILLING AND SAMPLING OF POST REMEDIATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3356037914/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 8/4/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1478499650/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 5/25/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.

Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2916584789/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 5/23/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1010619401/T0605900855.PDF

Document Type: Site Documents **Document Date:** 3/15/2011
Type: OPERATION AND MAINTENANCE PLAN/MONITORING REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5758813321/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 2/28/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION - FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8670399487/T0605900855.PDF

Document Type: Site Documents **Document Date:** 1/18/2011
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIESTHIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4541932106/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 12/30/2010
Type: MONITORING REPORT - OTHER **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2338007628/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 12/21/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1203873634/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 9/21/2010*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6677262306/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 7/17/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL REMEDIATION SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6837796807/T0605900855.PDF

Document Type: Site Documents **Document Date:** 6/15/2010
Type: OTHER WORKPLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN - VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3820085823/T0605900855.PDF

Document Type: Site Documents **Document Date:** 6/2/2010
Type: CLEAN UP FUND - CASE CLOSURE **Submitted:**

REVIEW SUMMARY REPORT (RSR)
Submitted By: (REGULATOR)
Title: PRELIMINARY 5-YEAR REVIEW **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6391322

Document Type: Site Documents ***Document Date:*** 5/25/2010
Type: INTERIM REMEDIAL ACTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3038191854/T0605900855.PDF

Document Type: Monitoring Reports ***Document Date:*** 5/14/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2381192803/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 2/18/2010
Type: REMEDIAL PROGRESS REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES - FOURTH QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2015331447/T0605900855.PDF

Document Type: Monitoring Reports ***Document Date:*** 1/11/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1418749153/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 12/21/2009
Type: INTERIM REMEDIAL ACTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3595643401/T0605900855.PDF

Document Type: Monitoring Reports ***Document Date:*** 9/24/2009*
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6111120939/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 8/10/2009
Type: WELL INSTALLATION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8064980924/T0605900855.PDF

Document Type: Monitoring Reports ***Document Date:*** 8/6/2009
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5152642667/T0605900855.PDF

Document Type: Site Documents ***Document Date:*** 8/6/2009
Type: INTERIM REMEDIAL ACTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGE REMEDIATION ACTIVITIES SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4843874275/T0605900855.PDF

Document Type: Site Documents **Document Date:** 7/14/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6021059

Document Type: Monitoring Reports **Document Date:** 6/24/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1911597013/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 3/10/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7018505275/T0605900855.PDF

Document Type: Site Documents **Document Date:** 2/25/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900855&enforcement_id=6004305

Document Type: Monitoring Reports **Document Date:** 2/17/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITROING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7993122935/T0605900855.PDF

Document Type: Site Documents **Document Date:** 1/30/2009
Type: CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN - ADDENDUM **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: ADDENDUM TO CORRECTIVE ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4207190275/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 11/20/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8020782947/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 10/15/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8490701138/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 10/6/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5796858847/T0605900855.PDF

Document Type: Site Documents **Document Date:** 8/8/2008
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)

Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5646168589/T0605900855.PDF

Document Type: Site Documents **Document Date:** 7/14/2008
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGINH REMEDIATION ACTIVITIES FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1528533041/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 6/6/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7270689249/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 3/11/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9787602305/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 2/26/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5867720663/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 1/21/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6551180779/T0605900855.PDF

Document Type: Site Documents **Document Date:** 11/14/2007
Type: REPORTS - INVESTIGATION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5161314249/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 11/5/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4303378045/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 8/30/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6438062906/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 7/31/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8310091912/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 6/6/2007*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: THIRD QUARTER 2006, GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2087417423/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 6/1/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2460952579/T0605900855.PDF

Document Type: Site Documents **Document Date:** 5/23/2007
Type: REPORTS - INVESTIGATION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4510099649/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 2/8/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION, FOURTH QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7425459146/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 9/11/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1420821964/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 4/27/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4189161002/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 1/27/2006
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION FOURTH QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6316663444/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 11/21/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9805371940/T0605900855.PDF

Document Type: Monitoring Reports **Document Date:** 11/21/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION FIRST QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2994750797/T0605900855.PDF

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Document Type: Monitoring Reports
Document Date: 11/21/2005
Type: MONITORING REPORT - QUARTERLY
Submitted:
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION THIRD QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6858426749/T0605900855.PDF

27	4 of4	NE	0.21 / 1,110.53	74.00 / 0	Bowers Co 13222 Brookhurst St Garden Grove Ca 92843-1010 CA	LOP ORANGE

Case ID: 88UT176

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 4/19/2012
File Location: Local Agency

28	1 of1	WNW	0.21 / 1,133.87	72.58 / -1	ANA FIGUEROA 9651 IMPERIAL AVE. GARDEN GROVE CA 92844	RCRA NON GEN

Handler ID: CAC003077198
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20200730	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	

Accessibility:	**State District:**
Region:	09
Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200814
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	ANA FIGUEROA
Location Street No:	
Location Street1:	9651 IMPERIAL AVE.
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ANA FIGUEROA
Contact Street No:	
Contact Street1:	9651 IMPERIAL AVE.
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92844
Contact Country:	
Contact Phone And Ext:	714-688-1023
Contact Fax:	
Contact Email Address:	KARLA@SUPERIORENV.COM
Contact Title:	
Owner Name:	ANA FIGUEROA
Owner Type:	O

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner Seq: 1
Operator Name: ANA FIGUEROA
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20200730
Handler Name: ANA FIGUEROA
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: ANA FIGUEROA
Dt Became Current:
Dt Ended Current:
Phone: 714-688-1023
Source Type: Implementer
Street No:
Street1: 9651 IMPERIAL AVE.
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Owner/Operator Ind: Current Owner
Type: Other
Name: ANA FIGUEROA
Dt Became Current:
Dt Ended Current:
Phone: 714-688-1023
Source Type: Implementer
Street No:
Street1: 9651 IMPERIAL AVE.
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92844

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	1 of4	NE	0.22 / 1,140.42	74.17 / 1	MY FAVORITE CLEANERS 13197 BROOKHURST ST GARDEN GROVE CA	DRYCLEANERS

EPA ID: CAL000015627
Create Date: 11/14/1989
Facility Act Ind: Yes
Inact Date:
Reason: SIC/NAICS
Region Code: 4
DD Latitude: 33.77117
DD Longitude: -117.95513
Facility County Code: (30) ORANGE
Mail Name:
Owner Name: HAN SEONG HEE
Owner Street 1: 13197 BROOKHURST ST
Owner Street 2:
Owner City: GARDEN GROVE
Owner State: CA
Owner Zip: 928430000
Owner Phone: 7145373400
Owner Fax: 0
Contact Name: HAN SEONG HEE
Contact Street 1: 13197 BROOKHURST ST
Contact Street 2:
Contact City: GARDEN GROVE
Contact State: CA
Contact Zip: 92843
Contact Phone: 7145373400
Contact Fax: 0

NAICS Details

NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	2 of4	NE	0.22 / 1,140.42	74.17 / 1	MY FAVORITE CLEANERS, SEONG HE 13197 BROOKHURST ST.	EMISSIONS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					GARDEN GROVE CA 92640	

1987 Criteria Data

Facility ID:	19731	**CERR Code:**	
Facility SIC Code:	7216	**TOGT:**	0
CO:	30	**ROGT:**	0
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	ORA	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

1987 Toxic Data

Facility ID:	19731	**COID:**	ORA
Facility SIC Code:	7216	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

1990 Criteria Data

Facility ID:	19731	**CERR Code:**	
Facility SIC Code:	7216	**TOGT:**	0
CO:	30	**ROGT:**	0
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	ORA	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

1990 Toxic Data

Facility ID:	19731	**COID:**	ORA
Facility SIC Code:	7216	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

29	***3 of4***	***NE***	***0.22 / 1,140.42***	***74.17 / 1***	***MY FAVORITE CLEANERS*** ***13197 BROOKHURST ST*** ***GARDEN GROVE CA 92843-1009***	***RCRA NON GEN***

Handler ID:	CAL000015627
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records

associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	81232
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	19891114	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.771161
In Handler Univ:	Y	***Location Longitude:***	-117.955174
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20180905		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		

Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MY FAVORITE CLEANERS
Location Street No:	
Location Street1:	13197 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843-1009
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	HAN SEONG HEE
Contact Street No:	
Contact Street1:	13197 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-537-3400
Contact Fax:	000-000-0000
Contact Email Address:	ROSEBAKH@GMAIL.COM
Contact Title:	
Owner Name:	HAN SEONG HEE
Owner Type:	O
Owner Seq:	1
Operator Name:	HAN SEONG HEE
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19891114
Handler Name:	MY FAVORITE CLEANERS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	13197 BROOKHURST ST
Name:	HAN SEONG HEE	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-537-3400	***Country:***	
Source Type:	Implementer	***Zip:***	92843
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	13197 BROOKHURST ST
Name:	HAN SEONG HEE	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-537-3400	***Country:***	
Source Type:	Implementer	***Zip:***	92843-0000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	4 of4	NE	0.22 / 1,140.42	74.17 / 1	MY FAVORITE CLEANERS 13197 BROOKHURST ST GARDEN GROVE CA 92843	FED DRYCLEANERS

FRS Facility ID: 110070442968
NPDES IDs:
NAICS Codes: 81232
SIC Codes:
Latitude: 33.771161
Longitude: -117.955174

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	1 of14	NE	0.23 / 1,217.53	74.91 / 1	PRONTO MARKETING 312 13202 BROOKHURST ST GARDEN GROVE CA 92843	DELISTED TNK

Delisted Storage Tanks

Facility ID: 4347
Latitude: 33.772442
Longitude: -117.9531987
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	2 of14	NE	0.23 / 1,217.53	74.91 / 1	Garden Grove Shell 13202 Brookhurst St Garden Grove, Ca 92843-1010 Garden Grove CA	UST ORANGE

FA No: FA0057500
SR No:
Notes:
Data Source: Permitted Underground Storage Tank (UST) Facilities Listing

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	3 of14	NE	0.23 / 1,217.53	74.91 / 1	JET GAS STATION 13202 BROOKHURST GARDEN GROVE CA 92843	LUST

Global ID: T0605900794
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 4/18/2014
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): JET GAS STATION
Address (SRCH): 13202 BROOKHURST
City (SRCH): GARDEN GROVE
Zip (SRCH): 92843
County (SRCH): ORANGE
Street No (DL): 13202
Street Name (DL): BROOKHURST
City (DL): GARDEN GROVE
Zip (DL): 92843
County (DL): Orange
State (DL): CA
Business Name (DL): JET GAS STATION
Site Facility Name: JET GAS STATION
Address : 13202 BROOKHURST
City : GARDEN GROVE
Zip : 92843
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites &
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088702
Latitude (DL): 33.7710063
Longitude (DL): -117.9548864
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	083001004T
Local Case No:	88UT135
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Other Groundwater (uses other than drinking water)
Begin Date:	7/5/1988
How Discovered:	* SA
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	* Historical Geocode - Exact Address Match
Discharge Cause:	
Discharge Source:	Tank
EPA Region:	9
Leak Reported Dt:	1988-07-28 00:00:00
Military DoD Site:	No
No Further Action Dt:	2014-04-18 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	51-55%
Calenviroscreen 4 Score:	60-65%
A2022 Assembly District:	70
Claim No:	1459
Claim Status:	Ineligible
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone No:	9517823238

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	4/18/2014
Status:	Open - Eligible for Closure
Status Date:	1/30/2012
Status:	Open - Remediation
Status Date:	1/9/2004
Status:	Open - Remediation

Status Date: 5/5/1997

Status: Open - Site Assessment
Status Date: 6/11/1991

Status: Open - Site Assessment
Status Date: 5/15/1989

Status: Open - Site Assessment
Status Date: 5/14/1989

Status: Open - Case Begin Date
Status Date: 7/5/1988

GeoTracker Search - Regulatory Profile

Site Facility Name: JET GAS STATION
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 13202 BROOKHURST
City: GARDEN GROVE
Zip: 92843
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605900794
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 4/18/2014
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605900794&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 88UT135
SANTA ANA RWQCB (REGION 8) - CASE #: 083001004T
CASE MANAGER: MIGUEL OVIEDO
CUF Claim No: 1459
CUF Priority Assig: D
CUF Amount Paid: $0
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency: # OF WELLS MONITORED - QUARTERLY : 5, SEMI-ANNUALLY : 6

REASONS FOR QUARTERLY OR MONTHLY OR OTHER GROUNDWATER MONITORING:
Well Being Sampled During Remedial Action for Progress Assessment
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 4/18/2014

Status: Open - Eligible for Closure

Date : 1/30/2012

Status: Open - Remediation
Date : 1/9/2004

Status: Open - Remediation
Date : 5/5/1997

Status: Open - Site Assessment
Date : 6/11/1991

Status: Open - Site Assessment
Date : 5/15/1989

Status: Open - Site Assessment
Date : 5/14/1989

Status: Open - Case Begin Date
Date : 7/5/1988

GeoTracker Search - Cleanup Action Report

Action Type: SOIL VAPOR EXTRACTION (SVE)
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

Action Type: PUMP & TREAT (P&T) GROUNDWATER
Begin Date: 1/9/2004
End Date: 9/9/9999
Phase:
Contaminant Mass Removed:
Description:

Action Type: EXCAVATION
Begin Date: 12/30/1998
End Date: 5/15/2000
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Historic Files
Action Date: 5/6/2024
Received Issue Date: 5/6/2024
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6579186&temptable=ENFORCEMENT
Title Description Comments:

Historic Files **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter
Action Date: 4/18/2014
Received Issue Date: 4/18/2014
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6200367&temptable=ENFORCEMENT
Title Description Comments:

Remedial Action Completion Certification **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: LOP Case Closure Summary to RB
Action Date: 4/18/2014
Received Issue Date: 4/18/2014
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6200365&temptable=ENFORCEMENT
Title Description Comments:

CCS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Notices
Action: Notification - Preclosure
Action Date: 2/10/2014
Received Issue Date: 2/10/2014
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6192055&temptable=ENFORCEMENT
Title Description Comments:

WELL ABANDONMENT LETTER **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Notices
Action: Letter - Notice
Action Date: 12/9/2013
Received Issue Date: 12/9/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185346&temptable=ENFORCEMENT
Title Description Comments:

DRAFT CASE CLOSURE SUMMARY TO RESPONSIBLE PARTY AND LANDOWNERS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Notices
Action: Notification - Public Participation Document
Action Date: 12/9/2013
Received Issue Date: 12/9/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185343&temptable=ENFORCEMENT
Title Description Comments:

DRAFT CASE CLOSURE SUMMARY **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Notices
Action: Notification - Public Notice of Case Closure
Action Date: 12/9/2013
Received Issue Date: 12/9/2013
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185345&temptable=ENFORCEMENT
Title Description Comments:

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: File review
Action Date: 7/9/2013
Received Issue Date: 7/9/2013
Doc Link:
Title Description Comments:

REVIEW AND RECEIVE GEOTRACKER UPLOADS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: File review
Action Date: 10/18/2012

Received Issue Date: 10/18/2012
Doc Link:
Title Description Comments:

CASE FILE REVIEW **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2011
Received Issue Date: 9/12/2011
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6098323&temptable=ENFORCEMENT
Title Description Comments:

CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: File review
Action Date: 6/13/2011
Received Issue Date: 6/13/2011
Doc Link:
Title Description Comments:

FILE REVIEW **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Site Visit / Inspection / Sampling
Action Date: 5/5/2011
Received Issue Date: 5/5/2011
Doc Link:
Title Description Comments:

SITE VISIT **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 7/14/2009
Received Issue Date: 7/14/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6021058&temptable=ENFORCEMENT
Title Description Comments:

QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 2/25/2009
Received Issue Date: 2/25/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6004303&temptable=ENFORCEMENT
Title Description Comments:

CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/12/2007
Received Issue Date: 9/12/2007
Doc Link:
Title Description Comments:

2ND QTR 2007 RPT **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 4/14/2006
Received Issue Date: 4/14/2006
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING AN ALTERNATIVE CAP.

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 9/10/2004
Received Issue Date: 9/10/2004
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT THE EDF COPIES OF GW MONITORING REPORTS BE SUBMITTED TO GEOTRACKER.

Action Type: Cleanup Action
Action: Soil Vapor Extraction (SVE)
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Cleanup Action
Action: Pump & Treat (P&T) Groundwater
Action Date: 1/9/2004
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 3/17/2003
Received Issue Date: 3/17/2003
Doc Link:
Title Description Comments:

ISSUED LETTER REQUESTING THAT THE PUMP AND TREAT SYSTEM BE RESTARTED.

Action Type: Cleanup Action
Action: Excavation
Action Date: 12/30/1998
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 7/28/1988
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 7/5/1988
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Began
Action Date: 7/5/1988
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Site Maps

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR9 (PR9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9930556535/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR8 (PR8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3661682069/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR3 (PR3)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2694028496/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR4 (PR4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6296656310/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/6348630547/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR5 (PR5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8197112977/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR6 (PR6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7363978087/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR1 (PR1)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3723967790/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR2 (PR2)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2305936455/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR10 (PR10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5194874584/T0605900794.PDF

Submitted: 1/3/2012
Submitted By: JOE FREY (AUTH_RP)
Title: PR7 (PR7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/9335484325/T0605900794.PDF

Submitted: 9/20/2009
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP

Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/8517813444/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: V4 (V4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2884024381/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: A4 (A4)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5379257678/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: A5 (A5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1228934049/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: V5 (V5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1032278776/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: A6 (A6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1544378995/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: A7 (A7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1556764900/T0605900794.PDF

Submitted: 8/19/2009
Submitted By: JOE FREY (AUTH_RP)
Title: A8 (A8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8751748204/T0605900794.PDF

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW11)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1667195200/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW10)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/2561340153/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/1981692254/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3428728997/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW12)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8705581486/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (VEW8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5528335392/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)

Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/7719009220/T0605900794.pdf

Submitted: 11/14/2007
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_BORE (SW13)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/3976576089/T0605900794.pdf

Submitted: 11/10/2005
Submitted By: JOE FREY (AUTH_RP)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/2045120060/T0605900794.pdf

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 5/6/2024
Type: HISTORIC FILES ***Submitted:***
Submitted By: LENA SHAW (REGULATOR)
Title: HISTORIC FILES **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6579186

Document Type: Site Documents ***Document Date:*** 4/18/2014
Type: LOP CASE CLOSURE SUMMARY TO RB ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CCS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6200365

Document Type: Site Documents ***Document Date:*** 4/18/2014
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: REMEDIAL ACTION COMPLETION CERTIFICATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6200367

Document Type: Site Documents ***Document Date:*** 4/8/2014
Type: WELL DESTRUCTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: WELL ABANDONMENT REPORT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2744987249/T0605900794.PDF

Document Type: Site Documents ***Document Date:*** 2/10/2014
Type: NOTIFICATION - PRECLOSURE ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: WELL ABANDONMENT LETTER **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6192055

Document Type: Site Documents ***Document Date:*** 12/9/2013
Type: NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: DRAFT CASE CLOSURE SUMMARY **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185343

Document Type: Site Documents ***Document Date:*** 12/9/2013
Type: NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185345

Document Type: Site Documents ***Document Date:*** 12/9/2013
Type: LETTER - NOTICE ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: DRAFT CASE CLOSURE SUMMARY TO RESPONSIBLE PARTY AND LANDOWNERS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6185346

Document Type: Site Documents **Document Date:** 4/24/2012
Type: REQUEST FOR CLOSURE **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SITE CONCEPTUAL MODEL AND REQUEST FOR NO FURTHER ACTION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2903126537/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 1/16/2012
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FOURTH QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9694350481/T0605900794.PDF

Document Type: Site Documents **Document Date:** 12/30/2011
Type: OTHER REPORT / DOCUMENT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: DRILLING AND SAMPLING OF POST-REMEDIATION CONFIRMATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2820067644/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 9/23/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8449111878/T0605900794.PDF

Document Type: Site Documents **Document Date:** 9/12/2011
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CONFIRMATION BORING WORK PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6098323

Document Type: Site Documents **Document Date:** 8/24/2011
Type: SITE INVESTIGATION WORKPLAN **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN DRILLING AND SAMPLING OF POST REMEDIATION SOIL BORINGS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9099140942/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 8/4/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: POST REMEDIATION GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6877210259/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 5/25/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8675034880/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 5/23/2011
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FIRST QUARTER 2011 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4458266496/T0605900794.PDF

Document Type: Site Documents **Document Date:** 3/15/2011
Type: OPERATION AND MAINTENANCE **Submitted:**

PLAN/MONITORING REPORT
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1583932459/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 2/28/2011
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING AND SAMPLING & STATUS OF SOIL AND GROUNDWATER REMEDIATION - FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2003537774/T0605900794.PDF

Document Type: Site Documents ***Document Date:*** 1/18/2011
Type: INTERIM REMEDIAL ACTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIESTHIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2195573210/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 12/30/2010
Type: MONITORING REPORT - OTHER ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9996576964/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 12/21/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1150224089/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 9/21/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4722245216/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 8/17/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL REMEDIATION SECOND QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3379075407/T0605900794.PDF

Document Type: Site Documents ***Document Date:*** 6/15/2010
Type: OTHER WORKPLAN ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: WORKPLAN - VAPOR EXTRACTION REBOUND TESTING **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6672250330/T0605900794.PDF

Document Type: Site Documents ***Document Date:*** 5/25/2010
Type: INTERIM REMEDIAL ACTION REPORT ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6720040857/T0605900794.PDF

Document Type: Monitoring Reports ***Document Date:*** 5/14/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2010 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1183752775/T0605900794.PDF

Document Type: Site Documents **Document Date:** 2/18/2010
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES - FOURTH QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2024758875/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 1/11/2010
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7150704920/T0605900794.PDF

Document Type: Site Documents **Document Date:** 12/21/2009
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1103082120/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 9/24/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2009264290/T0605900794.PDF

Document Type: Site Documents **Document Date:** 8/10/2009
Type: WELL INSTALLATION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2724336922/T0605900794.PDF

Document Type: Site Documents **Document Date:** 8/6/2009
Type: INTERIM REMEDIAL ACTION REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGE REMEDIATION ACTIVITIES SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8384878873/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 8/6/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5341454625/T0605900794.PDF

Document Type: Site Documents **Document Date:** 7/14/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: QUARTERLY GROUNDWATER MONITORING REQUIREMENTS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6021058

Document Type: Monitoring Reports **Document Date:** 6/24/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2009 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4882601082/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 3/10/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)

Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7208893299/T0605900794.PDF

Document Type: Site Documents **Document Date:** 2/25/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: CAP ADDENDUM **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605900794&enforcement_id=6004303

Document Type: Monitoring Reports **Document Date:** 2/17/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITROING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8235491096/T0605900794.PDF

Document Type: Site Documents **Document Date:** 1/30/2009
Type: CORRECTIVE ACTION PLAN / REMEDIAL ACTION PLAN - ADDENDUM **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: ADDENDUM TO CORRECTIVE ACTION PLAN **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2347031116/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 11/20/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4350113391/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 10/15/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3702057361/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 10/6/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4024311900/T0605900794.PDF

Document Type: Site Documents **Document Date:** 8/8/2008
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5849060535/T0605900794.PDF

Document Type: Site Documents **Document Date:** 7/14/2008
Type: REMEDIAL PROGRESS REPORT **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGINH REMEDIATION ACTIVITIES FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3265980601/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 6/6/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2008 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8440321207/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 3/11/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5758695304/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 2/26/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES FOURTH QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9118177652/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 1/21/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4288313150/T0605900794.PDF

Document Type: Site Documents **Document Date:** 11/14/2007
Type: REPORTS - INVESTIGATION RPT. **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL OFF-SITE REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6273226678/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 11/5/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION THIRD QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8627363443/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 8/30/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: SOIL VAPOR EXTRACTION AND AIR SPARGING REMEDIATION ACTIVITIES SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3155308365/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 7/31/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION SECOND QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4130480706/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 6/6/2007*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: THIRD QUARTER 2006, GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1615298211/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 6/1/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF SOIL AND GROUNDWATER REMEDIATION FIRST QUARTER 2007 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1484052360/T0605900794.PDF

Document Type: Site Documents **Document Date:** 5/23/2007
Type: REPORTS - INVESTIGATION RPT. **Submitted:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Submitted By: JOE FREY (AUTH_RP)
Title: INSTALLATION OF ADDITIONAL REMEDIAL WELLS **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9171131968/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 2/8/2007
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION, FOURTH QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3529940545/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 9/11/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONIRORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2006 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3556486368/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 4/27/2006*
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4028838932/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 1/27/2006
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION FOURTH QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2053104996/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 11/21/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION THIRD QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2878492593/T0605900794.PDF

Document Type: Monitoring Reports **Document Date:** 11/21/2005
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: JOE FREY (AUTH_RP)
Title: GROUNDWATER MONITORING WELL MONITORING AND SAMPLING AND STATUS OF GROUNDWATER REMEDIATION SECOND QUARTER 2005 **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1854566276/T0605900794.PDF

30	4 of14	NE	0.23 / 1,217.53	74.91 / 1	JET 13202 BROOKHURST GARDEN GROVE CA 92643	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002ea71.pdf

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30	5 of14	NE	0.23 / 1,217.53	74.91 / 1	GARDEN GROVE SHELL 13202 Brookhurst St Garden Grove CA 92843	UST

Facility ID: FA0057500 **CERS ID:** 10571791
Site Facility Type: PERMITTED UNDERGROUND STORAGE TANK (UST)
Note: Information related to facilities can be searched on Geo Tracker Website: https://geotracker.waterboards.ca.gov/search

Permitted UST Tank Details

Epa Region:	9	***Tank Closure Date:***	
No. of Closed UST:	0	***Tank Configuration:***	One in a Compartmented Unit
No. of Inuse UST:		***Tank Contents:***	Premium Unleaded
No. of Oos UST:	0	***Tank Cp Impr Curr:***	No
Owner Type:	Non-Government	***Tank Cp Shutoff:***	Yes
Tank ID No.:	3	***Tank Installatn Dt:***	10/1/1999 12:00:00 AM
Tank Status:	Confirmed/Updated Information	***Tank No of Compart:***	2
Tank Type:	Double Wall	***Tank Pc Constructn:***	Steel
Tank Alarms:	No	***Tank Spill Bucket:***	Yes
Tank Ball Float:	No	***Tribal Lands:***	No
Tank Operator Name:	KORMEX MANAGEMENT, INC		
Tank Operator Mail Address:	13202 BROOKHURST ST		
Tank Operator Mail City:	FULLERTON		
Tank Operator Mail State:	CA		
Tank Operator Mail Zip:	92843		
Tank Owner Name:	KORMEX MANAGEMENT, INC		
Tank Owner Mailing Address:	13202 BROOKHURST ST		
Tank Owner Mailing City:	FULLERTON		
Tank Owner Mailing State:	CA		
Tank Owner Mailing Zip:	92843		
Tank Capacity Gallons:	6000		
Tank Piping Construction:	Double Walled		
Tank Piping Type:	Pressure		
Tank Pw Piping Construction:	Fiberglass		
Tank Sacrificial Anode:	No		

Permitted UST Tank Details

Epa Region:	9	***Tank Closure Date:***	
No. of Closed UST:	0	***Tank Configuration:***	Stand Alone Tank
No. of Inuse UST:		***Tank Contents:***	Regular Unleaded
No. of Oos UST:	0	***Tank Cp Impr Curr:***	No
Owner Type:	Non-Government	***Tank Cp Shutoff:***	Yes
Tank ID No.:	1	***Tank Installatn Dt:***	10/1/1999 12:00:00 AM
Tank Status:	Confirmed/Updated Information	***Tank No of Compart:***	1
Tank Type:	Double Wall	***Tank Pc Constructn:***	Steel
Tank Alarms:	No	***Tank Spill Bucket:***	Yes
Tank Ball Float:	No	***Tribal Lands:***	No
Tank Operator Name:	KORMEX MANAGEMENT, INC		
Tank Operator Mail Address:	13202 BROOKHURST ST		
Tank Operator Mail City:	FULLERTON		
Tank Operator Mail State:	CA		
Tank Operator Mail Zip:	92843		
Tank Owner Name:	KORMEX MANAGEMENT, INC		
Tank Owner Mailing Address:	13202 BROOKHURST ST		
Tank Owner Mailing City:	FULLERTON		
Tank Owner Mailing State:	CA		
Tank Owner Mailing Zip:	92843		
Tank Capacity Gallons:	12000		
Tank Piping Construction:	Double Walled		
Tank Piping Type:	Pressure		
Tank Pw Piping Construction:	Fiberglass		
Tank Sacrificial Anode:	No		

Permitted UST Tank Details

Epa Region:	9	***Tank Closure Date:***	
No. of Closed UST:	0	***Tank Configuration:***	One in a Compartmented Unit
No. of Inuse UST:		***Tank Contents:***	Diesel
No. of Oos UST:	0	***Tank Cp Impr Curr:***	No
Owner Type:	Non-Government	***Tank Cp Shutoff:***	Yes
Tank ID No.:	2	***Tank Installatn Dt:***	10/1/1999 12:00:00 AM

Tank Status:	Confirmed/Updated Information	**Tank No of Compart:**	2
Tank Type:	Double Wall	**Tank Pc Constructn:**	Steel
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No

Tank Operator Name:	KORMEX MANAGEMENT, INC
Tank Operator Mail Address:	13202 BROOKHURST ST
Tank Operator Mail City:	FULLERTON
Tank Operator Mail State:	CA
Tank Operator Mail Zip:	92843
Tank Owner Name:	KORMEX MANAGEMENT, INC
Tank Owner Mailing Address:	13202 BROOKHURST ST
Tank Owner Mailing City:	FULLERTON
Tank Owner Mailing State:	CA
Tank Owner Mailing Zip:	92843
Tank Capacity Gallons:	6000
Tank Piping Construction:	Double Walled
Tank Piping Type:	Pressure
Tank Pw Piping Construction:	Fiberglass
Tank Sacrificial Anode:	No

Permitted UST Site Details

CERS ID:	10571791	**CalEnviroScrn 4 Pct:**	60-65%
Facility ID:	FA0057500	**Latitude:**	33.77107
Permitting Agency:	Orange County Environmental Health	**Longitude:**	-117.95463
Senate District:	36	**County:**	Orange
Congress District:	45		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	6 of14	NE	0.23 / 1,217.53	74.91 / 1	Jet Gas Station 13202 Brookhurst St Garden Grove Ca 92843-1010 CA	LOP ORANGE

Case ID: 88UT135

Details

Current Status:	Closed
Type of Closure:	Closure certification issued
Closed Date:	4/18/2014
File Location:	Local Agency

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	7 of14	NE	0.23 / 1,217.53	74.91 / 1	GARDEN GROVE SHELL 13202 BROOKHURST ST GARDEN GROVE CA 92843	CERS TANK

Site ID:	366507
Latitude:	33.771080
Longitude:	-117.954628

Regulated Programs

EI ID:	10571791
EI Description:	Underground Storage Tank

Violations

Violation Date:	01/03/2020	**Violation Source:**	CERS
Violation Program:	UST	**Violation Division:**	Orange County Environmental Health

Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Notes:

Returned to compliance on 03/24/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was

originally cited on 6/27/2019. Make necessary repairs and submit passing test results to this Agency.

Violation Description:

Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violations

Violation Date: 06/15/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Notes:

Designated Operator training records are required annually the record on file were dated 3-10-17

Violation Description:

UST Program -General - Must include violation description, proper statute and regulation citation in the "comment" section.

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Have the Designated Operator conduct training with employees annually. Provide a copy of the most recent training records to this Agency.

Violation Description:

Failure to have at least one facility employee present during operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(f)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: December 2018 Designated Operator inspection report is not available for review. CORRECTIVE ACTION: Submit a copy of the December 2018 inspection report to this Agency and maintain on site within 30 days.

Violation Description:

"Failure to maintain on-site, or off-site at a readily available location if approved by the UPA, copies of Designated Operator inspection records as follows:

Designated operator monthly inspection records for inspections performed before October 1, 2018 must be kept for 12 months from the month of inspection.

For inspections performed on or after October 1, 2018, copies of the ""Designated Underground Storage Tank Operator Visual Inspection Report"" must be kept for 36 months from the month of inspection.
"

Violations

Violation Date: 06/15/2016 ***Violation Source:*** CERS

Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)
Violation Notes:

Returned to compliance on 06/15/2016. The Monitor certification testing was due by 6-10-16 but was completed 5 days late. Violation has been abated

Violation Description:

Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25292.2(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.2(a)
Violation Notes:

Returned to compliance on 12/28/2019. OBSERVATION: Certificate of Financial Responsibility last signed on 3/16/17 and is expired (valid for 1 year from signed date.) CORRECTIVE ACTION: Submit a current CFR to CERS within 30 days.

Violation Description:

Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Monitoring Plan submitted to CERS requires corrections. CORRECTIVE ACTION: Review regulator comments on CERS, make corrections and resubmit within 30 days.

Violation Description:

Failure to have an approved UST Monitoring Plan.

Violations

Violation Date: 06/10/2020 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 06/10/2020. One 55 gallon drum of Fuel/Water Mixture located in the dumpster area was observed 1/4 full without a hazardous waste label. The 55 gallon waste drum was labeled during the inspection. No further action required.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Secondary containment test results dated 7/9/18 is not available on site for review.

CORRECTIVE ACTION: Maintain 7/9/18 secondary containment test results on site within 30 days and notify this Agency when this has been done.

Violation Description:

"Failure to conduct secondary containment testing, or one or more of the following requirements:

Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter.

Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring.

Use a procedure that demonstrates the system works as well as at installation.
Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval.

Performed by a certified service technician.

Maintain records of secondary containment testing for 36 months."

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(h) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(h)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Review regulator comments in CERS and make corrections immediately.

Violation Description:

Failure to have an approved UST Monitoring Plan.

Violations

Violation Date: 06/15/2016 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2631(g), 2632(c)(2)(A) & (B) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2631(g), 2632(c)(2)(A) & (B)
Violation Notes:

Returned to compliance on 07/02/2016. The veederoot alarm lite is stuck on even though monitor certification testing indicated all leak detection components are operational. Per consultant a cold start is required to fix this. This must be corrected within 30 days and documentation submitted to this agency

Violation Description:

Failure of the double-walled interstitial space of the tank to be continuously monitored with an audible and visual alarm.

Violations

Violation Date: 06/10/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 08/30/2020. The Emergency Response Plan submitted to CERS is not complete. Please make the following corrections: - In Section A., please also select "Hazardous Waste". - In Section C., please include the Local Unified Program Agency phone number: (714) 433-6406. Re-submit a corrected Emergency Response Plan to this Agency via CERS at http://cers.calepa.ca.gov/ within 30 days and maintain an updated copy of the plan on site.

Violation Description:

Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. A copy of the Permit to Operate has been provided with this report. Please notify this Agency once the Permit has been received and a copy has been printed to keep on site.

Violation Description:

Failure to retain a copy of the permit to operate at the facility.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Notes:

Returned to compliance on 01/27/2020. OBSERVATION: There is more than a 30 day gap between the 3/14/19 and 4/22/19 Designated Operator inspection. Inspections must be done within 30 days. Moving forward, ensure every inspection is completed within 30 days. DO inspection report from July 2018 does not have a secondary containment test date indicated and inspection reports from August 2018 through June 2019 indicate a secondary containment test date of 6/16/17 which is incorrect. CORRECTIVE ACTION: Submit a copy of the July 2019 inspection (once completed) with correct secondary containment test date to this Agency within 30 days

Violation Description:

For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements:
Be performed by an ICC certified DO.
Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.
Inspect for the presence of liquid/debris in spill containers.
Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly.
Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit.
Check that all testing and maintenance has been completed and documented.
Verify that all facility employees have been trained in accordance with 23 CCR 2715(c).
For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: 91 and Diesel line leak detectors failed testing. CORRECTIVE ACTION: Make any necessary repairs/replacements, conduct retest and submit passing results to this Agency within 30 days.

Violation Description:

Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(f)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was previously cited as I127 on 6/15/2018. Submit a copy of the December 2018 Designated Operator inspection report to this Agency and maintain on site.

Violation Description:

"Failure to maintain on-site, or off-site at a readily available location if approved by the UPA, copies of Designated Operator inspection records as follows:

Designated operator monthly inspection records for inspections performed before October 1, 2018 must be kept for 12 months from the month of inspection.

For inspections performed on or after October 1, 2018, copies of the ""Designated Underground Storage Tank Operator Visual Inspection Report"" must be kept for 36 months from the month of inspection.
"

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Review regulator comments in CERS and make corrections immediately.

Violation Description:

Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violations

Violation Date: 06/15/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Notes:

The certification of financial responsibility must be submitted annually on CERS the CFR is dated 3-16-17 an updated form must be submitted

Violation Description:

Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violations

Violation Date: 06/16/2017 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)
Violation Notes:

Returned to compliance on 06/16/2017. The monitor certification testing was due by 6-15-17 but was completed on 6-16-17. Violation has been abated

Violation Description:

Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).

Violations

Violation Date: 04/08/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286

Violation Notes:

Returned to compliance on 06/27/2019. OBSERVATION: The Permit to Operate application on the California Environmental Reporting System (CERS) requires corrections. CORRECTIVE ACTION: Please refer to regulator comments on CERS and make appropriate changes to the application within 30 days.

Violation Description:

Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Tank pages submitted to CERS requires corrections. CORRECTIVE ACTION: Please review regulator comments on CERS, make necessary corrections and resubmit within 30 days.

Violation Description:

Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Unable to locate current monitoring plan on site. CORRECTIVE ACTION: Monitoring Plan must be kept and maintained on site. Obtain monitoring plan from CERS and maintain on site within 30 days.

Violation Description:

Failure to have current UST Monitoring Plan available on site.

Violations

Violation Date: 06/10/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 08/30/2020. The Facility Information section submitted is inaccurate. Please make the following corrections: - Under Business Activities, the previous owner's EPA ID # is listed. Please update the EPA ID # to the current owner's ID #: CAL000453941. - Under Owner/Operator Identification - Update the owner name to reflect the business name: Kormex Management, Inc. Re-submit corrections to this Agency via CERS at http://cers.calepa.ca.gov/ within 30 days.

Violation Description:

Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violations

Violation Date: 06/10/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Notes:

Returned to compliance on 06/10/2020. The 91 LLD failed testing. The LLD was repaired, re-tested, and passed. Violation corrected on site.

Violation Description:

Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Review regulator comments in CERS and make corrections immediately.

Violation Description:

Failure to submit or maintain a current facility plot plan.

Violations

Violation Date: 06/16/2014 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715
Violation Notes:

Returned to compliance on 07/28/2014. Copies of annual UST training records were not available for review. send this agency copies of the most recent training records

Violation Description:

The owner/operator has failed to comply with one or more of the following: to maintain a copy of the designated operator monthly inspections for the last 12 months

and/or

maintain a list of trained employees on-site or off-site at a readily available location, if approved by the CUPA.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Plot Plan submitted to CERS requires corrections. CORRECTIVE ACTION: Review regulator comments on CERS, make corrections and resubmit within 30 days.

Violation Description:

Failure to submit or maintain a current facility plot plan.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f)(1) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(1)
Violation Notes:

Returned to compliance on 06/27/2019. OBSERVATION: Diesel STP sump sensor did not shut down the diesel product when sensor was tested in

water. CORRECTIVE ACTION: Issue traced to output relay wire. Contractor corrected issue on site. No further action required.

Violation Description:

Failure of the double-walled pressurized piping to be continuously monitored with a system that activates an audible and visual alarm or stops flow at the dispenser when a leak is detected.

Violations

Violation Date: 06/15/2018 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Notes:

The diesel sump sensors did not shut down the turbines when a leak was detected and must be repaired

Violation Description:

Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.

Violations

Violation Date: 01/03/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Obtain a copy of the secondary containment test results dated 7/9/2018 and print a copy to keep on site. Notify this Agency once complete.

Violation Description:

"Failure to conduct secondary containment testing, or one or more of the following requirements:

Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter.

Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring.

Use a procedure that demonstrates the system works as well as at installation.
Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval.

Performed by a certified service technician.

Maintain records of secondary containment testing for 36 months."

Violations

Violation Date: 06/20/2018 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 06/27/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)

Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Most recent training records available on site indicate training was last conducted on 3/10/17. Training must be conducted annually for facility employees. CORRECTIVE ACTION: Have Designated Operator conduct training for employees and submit most current training records as demonstration of completing training to this Agency within 30 days.

Violation Description:

Failure to have at least one facility employee present during operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).

Violations

Violation Date: 01/03/2020
Violation Source: CERS
Violation Program: UST
Violation Division: Orange County Environmental Health
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Notes:

Returned to compliance on 01/27/2020. This violation is being elevated to a Class II Violation which is a more serious violation. The violation was originally cited on 6/27/2019. Print the current monitoring plan from CERS and maintain on site. Notify this Agency once complete.

Violation Description:

Failure to have current UST Monitoring Plan available on site.

Violations

Violation Date: 06/27/2019
Violation Source: CERS
Violation Program: UST
Violation Division: Orange County Environmental Health
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Notes:

Returned to compliance on 01/03/2020. OBSERVATION: Permit to Operate located on site expired on 6/30/17. CORRECTIVE ACTION: Current permit must be maintained on site at all times. Request current permit from this Agency for the 2017-2019 period and maintain on site within 30 days.

Violation Description:

Failure to retain a copy of the permit to operate at the facility.

Evaluations

Eval Date: 03/08/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 07/25/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin at site for a follow up inspection. Permission to enter inspect and take photographs granted by Reda Sad. I verified that the Veederoot panel was operating properly and the red warning light was no longer stuck on. Violation I95 has been abated. Facility has submitted UST documents on CERS 10571791. Facility can be permitted. .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by the manager Akram Ahmed Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Emergency Response Information was available for review. Facility did not have any hazardous waste stored at site. Per Akram any hazardous waste generated it self hauled to associated facility in 5 gallon gas cans. i informed Akram that he needs larger containers in case of a large spill; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/02/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed file and confirmed that the monitor cert is due by 6-15-17. I called station and ahmed Saad and informed him that testing must be done by 6-15-15; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/17/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

The following documentation submitted to CERS on 1/27/2020 has been reviewed and ACCEPTED: - Business Activities - Business Owner/Operator Identification - Hazardous Materials Inventory - Site Map - Emergency Contingency Plan/Training Records Violation I292 has been corrected. REMINDER: Please re-certify your HMBEP annually in the California Environmental Reporting System (CERS) between January 1st – March 1st at http: //cers.calepa.ca.gov/.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/02/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Per additional review the tank installation date for all three tanks is not noted on the tank information pages if the date is not known use 1-1-1900 as the default dat. The over fill information for the tank # 2 and 3 is not given . For tank #1 it is given . The tank overfill info must be given for all three tanks; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Mohamed Shazly Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases

were noted. The facility has not completed an HMBP plan The Facility does not currently have a hazardous waste storage drum at site but per Mohamad Shazly they are getting one. Each container and portable tank must be labeled with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at www.occupainfo.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by Patricia Abalos Facility EPA ID # CAL000453941 Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. The facility has completed an HMBP plan Hazardous waste containers must be labeled and stored closed. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at www.occupainfo.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/12/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB989 Notification (7/16/18).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/25/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received a copy of the following test results dated 6/1/2022: - Monitoring System Certification - Spill Buckets - Line Leak Detectors All components were tested and PASSED.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS submittal 10571791 reviewed and accepted by M Sutphin Emergency plan and training included in submittal Only gasoline in fuel tanks was listed in inventory.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted Mina Labib Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. The facility has not completed an HMBP plan Hazardous waste containers must be labeled and stored closed. Each container and portable tank was marked with the following information: 1. "HAZARDOUS WASTE" 2. Waste (name) 3. Hazardous property of the waste (e.g. - toxic, flammable, corrosive, etc.) 4. Physical state of the waste (liquid or solid) 5. Name and address of the business 6. The Accumulation start date For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at www.occupainfo.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/08/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received a copy of the passing monitor certification test results for testing performed 6-16-21 and witnessed by M Sutphin; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/26/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

No submittal in CERS or eSubmit, preparing for inspection; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/05/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This is an in-office inspection report to document the submittal of a leeter from the owner Mr. Walid Shafik stating that the previous owner generated this waste from the 2009 SB989 testing. He stated the testing company "Shancor" picked up the drum and removed it from the site. Violation W009 is abated today.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/21/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

CERS submittal reviewed and accepted. Information confirmed accurate during 6-16-21 on site inspection; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval Notes:

Onsite to conduct routine UST inspection and hazardous waste inspection. Consent to enter, inspect the facility and take photographs was granted by the cashier Mina Labib. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" and audible and visual alarms were demonstrated operational. The panel was noted marked with a sticker from the most recent monitoring certification (6-11-14). Dave Simon was at site to perform the annual monitor certification testing this date and the system passed. Certifications were up to date Opened UDCs were inspected this date and the UDCs were dry and Chain floats appear ok The following documents were available for review on this date: - Permit - Monitoring plan (5/14/11) - Monitoring plot plan - Response plan (5/14/11) - Designated operator monthly reports - Maintenance and spill log (see violation) - Employee training conducted by DO within the last year 7-5-14 - Financial responsibility and CFO [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/13/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification for 6-16; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by the cashier Joey Manlangit and he provided consent to inspect the facility. Facility has active EPA ID# CAL000364039. No record for disposal of any waste was observed in the compliance binder. No disposal records are noted on the DTSC we site. No hazardous waste was observed at site Keep copies of manifests ate site for review for three years. Municipal dumpster area does not appear to contain any hazardous waste. The perimeter of the facility was also inspected; no obvious signs of releases were noted. Emergency Response Information was available for review. Discussed proper management of Universal Wastes; Fluorescent tubes, e-waste, and batteries must be disposed properly, not to the municipal trash. For further information about Hazardous Waste management, please refer to the Orange County Hazardous Waste website at www.occupainfo.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/09/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/13/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin inspected site and spoke with manager Akram. I informed him that the monitor certification is due by 6-16-18 but was not scheduled yet. i inspected the Veederoot panel and verified that the certification sticker was dated 6-16-17. i inspected compliance note book and verified that SB 989 testing was due by 7-7-18. I requested that Akram notify the manager to schedule testing and notify this agency.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2016

Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Onsite to conduct routine UST inspection and hazardous waste inspection. Consent to enter, inspect the facility and take photographs was granted by the cashier Mohamad Shazly. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" but the red alarm lite was flashing. The panel was noted marked with a sticker from the most recent monitoring certification (6-10-15). Ricardo Martinez was at site to perform the annual monitor certification testing this date and the system passed. Certifications were up to date The facility has three double walled modern welding tanks. The fill sumps and turbine sumps were dry and the VR 208 sensors were properly [positioned at the low points. The 5 UDCs were inspected this date and the UDCs were dry and Chain floats appear oThe tank annuli sensors are VR 420 sensors All sensors were tested and passed The spill buckets were water tested and passed Fail safe, sensor out, and ESO passed this date The three VMI [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/04/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/31/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received passing test results for Monitor certification testing performed 6-16-17. Testing was witnessed by M Sutphin; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a routine hazardous waste inspection. Consent to inspect and take any necessary photos was given by Patricia Avalos, Cashier. Ownership changed from BR Petroleum, Inc. to Kormex Management, Inc. on 3/14/2020. Walked throughout the facility. Observed hazardous waste storage areas. Containers were properly closed. Employees are reported to be trained. Emergency plan is posted at front counter. No hazardous waste or universal waste observed in the dumpster/enclosure area.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/18/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

CERS submitta UST information reviewed and accepted.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/17/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

At site to witness the open sump inspection. permission to enter, inspect and take photographs granted by Walid Shafik the sumps were open for the three tanks at site and the sumps were verified dry, and the veederoot 208 sensors were verified at the low points. I also received and updated Certification of Financial Responsibility form at site this date; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/25/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

M Sutphin at site for hazardous materials inspection Facility has submitted HMBP on CERS 10571791 Facility has reportable quantities of gasoline in underground tanks Facility has implemented plan and employees receive training ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/28/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received Designated Operator training record for employee Walid Shafik dated 7-15-14. Violation TS12 has been abated; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/01/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

INSPECTION COMMENT: TESTER: Jimmy Kong – verified ICC & Veeder-Root, & VMI TANK: 87 (12,000 gallons) 91 6,000 gallons/split tank) Diesel (6,000 gallons/split tank) MONITORING PANEL: Veeder-Root TLS-350R LEAK SENSORS: All turbine and fill sumps are monitored by VR-208 leak sensors All tank interstitial spaces are monitored by VR-420 leak sensors LLD: Mechanical line leak detector OVERFILL: Flappers UDCs: All monitored by float and chain mechanism. Monitoring Certification was last conducted on 6/16/2021. Secondary Containment Testing was last conducted on 7/20/2021. Overfill Prevention Equipment Test was conducted on 7/20/2021. Please submit all test results within 30 days to this Agency.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/05/2024
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine monitoring certification inspection. Consent to enter and inspect was provided by Juan Garcia, Cashier. Testing was conducted by Jimmy Kong of COX UST Services. ICC, VMI, and Veeder Root certifications were verified. The facility has two double-walled tanks: - 12K gallon 87 tank - 6K gallon 91 tank* - 6K gallon Diesel tank* *compartment tank Product piping is double-walled and pressurized. The UST system is

monitored using a Veeder Root TLS-350 panel. The panel displays indicate "All Functions Normal". The monitor is operational for audible and visual alarms. Flapper valves are used for overfill prevention. The tanks are monitored as follows: Annulars: 420 STPs: 208 UDC's: Bravo with floats/chains LLDs: VMI LD2000 (87, 91), RJ FXIDV (diesel) Sensors were observed positioned to initiate alarms at the earliest point possible. All regulated sensors were tested hydrostatically and passed. Positive Shutdown and Fail Safe programming were verified. The fol; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. The inspection was conducted with Patricia Avalos, Cashier. Ownership changed from BR Petroleum, Inc. to Kormex Management, Inc. on 3/14/2020. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Gasoline, 18,000 gal - Diesel, 6,000 gal The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds of 55 gallons for liquids, 500 pounds for solids, & 200 cubic feet for gases. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change. Hazardous Materials documents can be submitted via the California Environmental Reporting System (CERS) located at http://cers.calepa.ca.gov/. [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/27/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness annual monitoring system certification and spill bucket test and to conduct a routine UST inspection. The site has the following double-walled tanks: - 87 (12,000 gal) - 91/Diesel (6,000 gal each - split tank) Product piping for all tanks is double-walled and pressurized. UST system is monitored via Veeder Root TLS-350 Panel. Annulars: - VR420 Fill/STP sumps: - VR208 UDCs: - Bravo Box w/ Float & Chain Mechanism LLDs: - 87 and 91 = VMI LD 2000 - Diesel = Red Jacket FX1DV The following were tested: - Spill buckets (hydrostatic test), spill buckets passed testing. - All liquid detection sensors (sensors submerged in liquid, positive shutdown verified) - Sensor out and fail-safe (verified) - LLDs (91 and Diesel LLD failed) Tanks utilize flapper valves for overfill prevention and were inspected/tested today. Testing was conducted by David Simon with ShanCor Testing. Technician certs (VR, ICC and VMI) were [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/01/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This is an in-office inspection report to document the submittal of the following: - DO monthly Inspection report from 2/21/13, 3/15/13, - Equipment repair log and service invoice from John Reilly from 6-24/13, 1/17/13 This is proof of compliance, therefore violations TR05 and TS11 are abated today. Thank you; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2018
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin onsite to conduct routine UST inspection and hazardous waste inspection and to witness monitor certification testing . Consent to enter, inspect the facility and take photographs was granted by the cashier Akram Ahmed. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" The panel was noted marked with a sticker from the most recent monitoring certification (6-16-17). Dave Simon was at site to perform the

annual monitor certification testing this date and the system passed. Certifications reviewed and were up to date The facility has three double walled modern welding tanks. The diesel ,91 tank is a dual compartment tank. The fill sumps and turbine sumps were dry and the VR 208 sensors were properly positioned at the low points. The 4 UDCs were inspected this date and the UDCs were dry and have Chain floats The two tank annuli sensors are VR 420 sensors The diesel sump sensors were tested and did not shut down the turbines [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/08/2019
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

The UST submittal on the California Environmental Reporting System (CERS) requires corrections. The following violation has been issued: - I582: Complete and accurate UST operating permit application has not been submitted. In addition, the following violations cited during the 6/15/18 inspection remain outstanding: - I188: Diesel sump sensors did not shut down the turbines when a leak was detected. - I583: Financial responsibility documents submitted on CERS are dated 3/16/17; documents must be current and submitted annually. - I127: Designated Operator training records show that last training was done on 3/10/17; must be conducted annually. Submit current documentation to this Agency within 30 days to abate these outstanding violations. Contact me at acabudol@ochca.com or 714-625-2702 if you have questions.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/15/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed CERS submittal 10571791.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/08/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection at Shell Gas Station, 13202 Brookhurst Blvd, Garden Grove. Consent to enter and inspect was given by Ahmed Saad, owner. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: -Gasoline, UST -Diesel, UST Business emergency plan was not maintained on-site. A copy of the HMBEP was provided to Annual employee safety training records were not available. A violation was issued for the records. The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine Hazmat facility e inspection. Permission to enter, inspect, and take photographs granted by Patricia Abalos Facility has submitted a hazmat Business Emergency plan on CERS 10571791 Facility has reported gasoline in USTs Diesel, and fuel contaminated absorbent. Facility has less than 1000 cubic feet of CO2 at site. Facility has implemented a hazmat business plan and provides employee training; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/24/2020

Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received documentation dated 7/1/2019 that the 91 & Diesel line leak detectors have been repaired, re-tested, and PASSED. Violation I198 has been corrected. There are no remaining violations for this facility as of this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/22/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for routine UST inspection, monitoring system certification and spill bucket testing. The facility has three double-walled tanks (87, 91/diesel split) monitored by a Veeder Root TLS-350 system. The monitor is operational for audible and visual alarms. Flapper valves are used for overfill prevention. The following sensors are used for monitoring: - Tank annulars- M420 - Sumps: M208 - UDCs: Bravo B2000 with floats/chains - LLD: VMI LD2000 (87, 91), RJ FXIDV (diesel) Testing was conducted by Jimmy Kong of Cox Compliance. Technician certifications (VR, ICC, VMI) were verified. Please submit the test reports to this Agency within 30 days. The following documents are available for review: permit, leak response plan, monitoring plan, test reports, maintenance records, DO monthly reports, and DO annual employee training records. Secondary containment testing was last conducted on 7/20/2021. Overfill prevention was last tested on 7/20/2021. These must be tested every 3 years. Certi; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/22/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received monitor certification test results for testing performed 6-16-21. Testing was witnessed by M Sutphin and passed; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/03/2020
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This is a follow up inspection to the on site UST inspection conducted on 6/27/2019. The UST submittal received on 12/28/2019 to the California Environmental Reporting System (CERS) has been reviewed and declined. The following violations have been corrected: - I188: Leak detection equipment properly installed, calibrated, operated and maintained. - I583: Submitted/maintained current Certificate of Financial Responsibility Please see regulator comments in CERS and re-submit all corrections to this Agency immediately at http://cers.calepa.ca.gov/.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/27/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

HMBEP declined in CERS. The following notes were included in the review: "Label the following on the site map: -Evacuation staging area -Storm drains and sewers -Emergency response equipment"; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/11/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Onsite for a routine hazardous waste inspection. Consent to enter and inspect was granted by Patricia Avalos. The facility generates the following hazardous wastes: - Used oil absorbent Observed facility, perimeter, hazardous waste storage area, and dumpster area. Hazardous waste containers were stored closed. No indication of hazardous waste spillage, runoff, or illegal disposal was observed. Emergency response plan in onsite. Employees are reported to be trained. Manifests were available for review. Facility has 6 employees. No hazardous waste violations were observed. Emailed a copy of the report to ggshell@rmshell.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/05/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Thie is an in-office inspection report to document the submittal of the results of the Annual monitoring system certification test conducted on 6-26-13 by Peyman Nasibi of Shancor. The Results indicated the following: - all sensors passed testing - all 3 leak detectors passed - All spill buckets passed a 1 hr visual hydrostatic test - Chain and Float mechanisms all passed All components of the test passed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/11/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous materials inspection. Consent to enter and inspect was granted by Patricia Avalos. Observed the following disclosable hazardous materials: - Gasoline - Diesel Documented employee training was verified. Hazardous Materials Business Plan (HMBP) submittal in CERS was verified. No hazardous materials violations were observed. Emailed a copy of this report to ggshell@rmshell.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/13/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received the following documents in CERS on 1/27/2020 and have been ACCEPTED: - UST Monitoring Plan/Tank Pages - UST Monitoring Site Plan (Plot Plan Map) - CFR + CFO Letter - Response Plan - DO Agreement - Statement of Understanding & Compliance - Owner/Operator Agreement The following violations have been corrected: - I003: Facility has an approved Monitoring Plan. - I582: Complete and accurate UST Operating Permit Application has been submitted. - I421: A current UST monitoring plan is available on site. - I161: A current facility plot plan is maintained and has been submitted. - I506: Secondary containment testing conducted per requirements & records kept for 36 months. - I276: Copies of DO inspections for last 36 months maintained, 36 months after 10/1/18. - I651: At least one employee is present during operating hours that has received DO training. - I015: Owner/Operator retained a copy of the permit to operate at the facility. The [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/01/2016
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

monitor cert due 6-10-16 no notification received; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness annual monitoring system certification, spill bucket test, and conduct a UST inspection. Ownership changed from BR Petroleum, Inc. to Kormex Management, Inc. on 3/14/2020. Tester: - Jimmy Kong, Cox Testing. Technician certifications (VR, VMI, ICC) were verified.. Tanks (DW): - 87 (12,000 gal) - 91 (6,000 gal)/Diesel (6,000 gal) - split tank Panel: - Veeder Root TLS-350 Annulars: - VR-420 Fill/STP sumps: - VR208 UDC's: - Bravo Box w/ Float & Chain Mechanism LLD's: - 87 + 91 = VMI LD2000 - Diesel = Red Jacket FX1DV Sensor out, fail safe, and positive shut down were verified. Tanks utilize flapper valves for overfill prevention. Facility has a submission in CERS. The following documentation was available for review: - Monitoring Plan/Tank Pages - Plot Plan Map - CFR + CFO Letter - Leak Response Plan - DO Agreement - DO Training - DO Report - Maintenance Records - Alarm Logs - Monitoring System [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/03/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

This Agency has received and ACCEPTED the following documentation submitted to CERS on 8/30/2020: - Business Activities - Business Owner/Operator Identification - Emergency Response Plan - Employee Training Plan Violations I368 and I736 have been corrected. There are no remaining outstanding violations for this facility.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/05/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Per review of file the monitor certification testing is due by 6-15-17; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/07/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed CERS 10571791 and it is up to date Monitor certification is due by 6-10-16. I called the Owner Ahmed Saad and left as message saying the Certificatiob is due. I inspected site this date and spoke with Mohamed Elshazly. The documentation at sitre is up to date and Monthly DO reports are in good order. .; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2014
Violations Found: Yes

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Onsite to conduct routine UST inspection and hazardous waste inspection. Consent to enter, inspect the facility and take photographs was granted by the cashier Joey Manlangit. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" and audible and visual alarms were demonstrated operational. The panel was noted marked with a sticker from the most recent monitoring certification (6-11-14). Opened UDCs were inspected this date and the UDCs were dry and Chain floats appear ok The following documents were available for review on this date: - Permit - Monitoring plan (5/14/11) - Monitoring plot plan - Response plan (5/14/11) - Designated operator monthly reports - Maintenance and spill log (see violation) - Employee training conducted by DO note that no records were observed that were less than one year old (see violation) - Financial responsibility and CFO letter 6-20-13 Note that a new form is due by 6-20-14 - Owner statement of [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin onsite to conduct routine UST inspection and hazardous waste inspection and to witness monitor certification testing . Consent to enter, inspect the facility and take photographs was granted by the cashierAkram Ahmed. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" The panel was noted marked with a sticker from the most recent monitoring certification (6-15-16). Dave Simon was at site to perform the annual monitor certification testing this date and the system passed. Certifications reviewed and were up to date The facility has three double walled modern welding tanks. The diesel ,91 tank is a dual compartment tank. The fill sumps and turbine sumps were dry and the VR 208 sensors were properly positioned at the low points. The 4 UDCs were inspected this date and the UDCs were dry and have Chain floats The two tank annuli sensors are VR 420 sensors All sensors were tested and passed The spill buckets were water tested [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/08/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed CERS 10571791 and accepted by M Sutphin Financial responsibility dated 3-16-16. Owner statement of DO dated 3-16-16 ..; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2018
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Mark Sutphin on site to conduct a routine hazardous waste inspection. Permission to enter, inspect, and take photographs granted by the manager Akram Ahmed Facility has not annually submitted on CERS. The Underground tank information on CERS must have the date of installation listed use 1-1-1900 if installation date is unknown . CHANGED FEDERAL HAZARD CATEGORIES Cal EPA recently replaced the previous five federal hazard categories with twenty-four new federal hazard categories, these categories for all of your disclosed hazardous materials are required to by updated to the new classification. Your hazardous materials inventory forms are conditionally accepted but must be updated with new categories in your next submission. Please uncheck boxes for federal hazard categories that are "(Obsolete)", and check the appropriate categories for each disclosed material. Consult your SDS (safety data sheet) for each material, and look under "Section 2 – Hazards Identification" [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/15/2017
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed CERS submittal 10571791. CFR dated 3-16-17. DO statement dated 3-16-17. Submittal approved; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/16/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Mark Sutphin onsite to conduct routine UST inspection and hazardous waste inspection and to witness monitor certification testing . Consent to enter, inspect the facility and take photographs was granted by the cashier Patricia Abalos. The Veeder-Root TLS-350 monitoring panel displayed "all functions normal" The panel was noted marked with a sticker from the most recent monitoring certification . Jimmy Kong was at site to perform the annual monitor certification testing this date and the system passed. Certifications reviewed and were up to date The facility has three double walled modern welding tanks. The diesel ,91 tank is a dual compartment tank. The fill sumps and turbine sumps were dry and the VR 208 sensors were properly positioned at the low points. The 4 UDCs were inspected this date and the UDCs were dry and have Chain floats The two tank annuli sensors are VR 420 sensors The diesel sump sensors were tested and did not shut down the turbines when a [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Legal Owner
Entity Name: KORMEX MANAGEMENT INC
Entity Title:
Address: 13202 Brookhurst St
City: Garden Grove
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 606-7484

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Parent Corporation
Entity Name: SHELL #120718
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 13202 BROOKHURST ST
City: GARDEN GROVE
State: CA

Country:
Zip Code: 92843
Phone:

Affil Type Desc: Operator
Entity Name: GARDEN GROVE SHELL
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 606-7484

Affil Type Desc: UST Tank Operator
Entity Name: KORMEX MANAGEMENT, INC
Entity Title:
Address: 13202 BROOKHURST ST
City: FULLERTON
State: CA
Country: United States
Zip Code: 92843
Phone: (714) 606-7484

Affil Type Desc: Identification Signer
Entity Name: Jimmy Kong
Entity Title: AUTHORIZED REPRESENTATIVE
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: JIMMY KONG
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: UST Property Owner Name
Entity Name: AHMED SAAD
Entity Title:
Address: 13202 BROOKHURST ST
City: FULLERTON
State: CA
Country: United States
Zip Code: 92843
Phone: (562) 682-5763

Affil Type Desc: Environmental Contact
Entity Name: JIMMY KONG
Entity Title:
Address: 418 E COMMONWEALTH AVE #7
City: FULLERTON
State: CA
Country:
Zip Code: 92832
Phone:

Affil Type Desc: UST Tank Owner
Entity Name: KORMEX MANAGEMENT, INC
Entity Title:
Address: 13202 BROOKHURST ST
City: FULLERTON

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State: CA
Country: United States
Zip Code: 92843
Phone: (714) 606-7484

Coordinates

Env Int Type Code: HMBP
Program ID: 10571791
Latitude: 33.771070
Longitude: -117.954630
Coord Name:
Ref Point Type Desc: Center of a facility or station.

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30 | 8 of14 | NE | 0.23 / 1,217.53 | 74.91 / 1 | JET
13202 BROOKHURST
GARDEN GROVE CA | HIST TANK

Owner Name: KAYO OIL COMPANY
Owner Street: 1221 E. MAIN STREET
Owner City: CHATTANOOGA
Owner State: TN
Owner Zip: 37408
No of Containers: 3
County: ORANGE
Facility State: CA
Facility Zip: 92640

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30 | 9 of14 | NE | 0.23 / 1,217.53 | 74.91 / 1 | BR PETROLEUM INC
13202 BROOKHURST
GARDEN GROVE CA 92843 | EMISSIONS

2016 Toxic Data

Facility ID: 181190
Facility SIC Code: 5172
CERR CODE:
COID: ORA
CO: 30
DISN: SOUTH COAST AQMD
CHAPIS:
TS:
HRA:
CH Index:
AH Index:
Air Basin: SC
District: SC

2017 Toxic Data

Facility ID: 181190
Facility SIC Code: 9999
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2018 Toxic Data

Facility ID: 181190
Facility SIC Code: 9999
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2019 Toxic Data

CO:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Faccility ID:	181190	***CERR Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	10 of14	NE	0.23 / 1,217.53	74.91 / 1	M & R STATION 13202 BROOKHURST GARDEN GROVE CA 92843	UST ORANGE

FA No:	FA24722
SR No:	
Notes:	
Data Source:	Removed Underground Storage Tank (UST) Facilities

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	11 of14	NE	0.23 / 1,217.53	74.91 / 1	ULTRAMAR STATION 13202 BROOKHURST GARDEN GROVE CA 92843	UST ORANGE

FA No:	FA24722
SR No:	
Notes:	
Data Source:	Removed Underground Storage Tank (UST) Facilities

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	12 of14	NE	0.23 / 1,217.53	74.91 / 1	GARDEN GROVE SHELL 13202 BROOKHURST GARDEN GROVE CA 92843	RCRA NON GEN

Handler ID:	CAL000453941
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	447190
Seq No:	1	***NAIC 2:***	

Non Notifier:		**NAIC 3:**	
Receive Date:	20200325	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:	P	**Location Latitude:**	
In Handler Univ:	N	**Location Longitude:**	
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200330
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	GARDEN GROVE SHELL
Location Street No:	13202
Location Street1:	BROOKHURST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	FREDERICK KIM
Contact Street No:	20220
Contact Street1:	LANDIG CIR
Contact Street2:	
Contact City:	YORBA LINDA
Contact State:	CA

Contact Zip:	92887
Contact Country:	US
Contact Phone And Ext:	714-606-7484
Contact Fax:	562-402-8084
Contact Email Address:	FKIM@RMSHELL.COM
Contact Title:	CFO
Owner Name:	KORMEX MANAGING & MARKETING INC
Owner Type:	P
Owner Seq:	1
Operator Name:	KORMEX MANAGING & MARKETING INC
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200325
Handler Name:	GARDEN GROVE SHELL
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	14251
Type:	Private	***Street1:***	FIRESTONE #210
Name:	KORMEX MANAGING & MARKETING INC	***Street2:***	
Dt Became Current:		***City:***	LA MIRADA
Dt Ended Current:		***State:***	CA
Phone:	562-402-8080	***Country:***	US
Source Type:	Implementer	***Zip:***	90638

Owner/Operator Ind:	Current Owner	***Street No:***	14251
Type:	Private	***Street1:***	FIRESTONE #210
Name:	KORMEX MANAGING & MARKETING INC	***Street2:***	
Dt Became Current:		***City:***	LA MIRADA
Dt Ended Current:		***State:***	CA
Phone:	562-402-8080	***Country:***	US
Source Type:	Implementer	***Zip:***	90638

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	13 of14	NE	0.23 / 1,217.53	74.91 / 1	PRONTO MARKETING 13202 BROOKHURST ST GARDEN GROVE CA	UST SWEEPS

C C:	A30-000-4347	***D Filename:***	SITE12A
BOE:	44-016175	***Page No:***	123
Comp:	4347	***County:***	ORANGE
Status:	ACTIVE	***State :***	CA
No of Tanks:	3	***Zip:***	92643
Jurisdict:	ORANGE COUNTY	***Latitude:***	33.771001
Agency:	ENVIRONMENTAL HEALTH	***Longitude:***	-117.954884
Phone:		***Georesult:***	S5HPNTSC-A

Tank Details

Tank ID:	000002	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004347-000002	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	DIESEL
Capac:	12000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank Details

Tank ID:	000003	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004347-000003	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	DIESEL
Capac:	12000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Tank Details

Tank ID:	000001	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-004347-000001	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	REG UNLEADED
Capac:	12000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

30	*14 of14*	*NE*	*0.23 / 1,217.53*	*74.91 / 1*	***KORMEX MANAGEMENT & MARKETING, INC.*** ***13202 BROOKHURST ST*** ***GARDEN GROVE CA 92843***	***EMISSIONS***

2020 Toxic Data

CO:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	192038	***CHERR Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2021 Toxic Data

Co:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	192038	***Cerr Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

31	*1 of1*	*NE*	*0.24 / 1,263.24*	*74.59 / 1*	***PACIFIC COAST OIL CO*** ***13169 J BROOKHURST ST*** ***GARDEN GROVE CA 92843***	***RCRA NON GEN***

Handler ID:	CAD981428766
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	Yes	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	***NAIC 1:***	
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	19860722	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:	O	***Location Latitude:***	33.771559
In Handler Univ:	Y	***Location Longitude:***	-117.955178
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	CA
Accessibility:		***State District:***	4
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	HQ		
State Waste Generator:	N		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		

Fa Required:	-----
Hhandler Last Change:	20020627
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	PACIFIC COAST OIL CO
Location Street No:	
Location Street1:	13169 J BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	ENVIRONMENTAL MANAGER
Contact Street No:	
Contact Street1:	13169 J BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92643
Contact Country:	US
Contact Phone And Ext:	714-539-7009
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	WILLIAM HUH
Owner Type:	P
Owner Seq:	1
Operator Name:	NOT REQUIRED
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19860722
Handler Name:	PACIFIC COAST OIL CO
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Notification

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19900419
Handler Name:	SORENSON ENGINEERING, INC.
Fed Waste Generator:	1
Generator Code Description:	Large Quantity Generator
Source Type:	Annual/Biennial Report

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	WILLIAM HUH	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Source Type:	Notification	**Zip:**	99999
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street1:**	NOT REQUIRED
Name:	NOT REQUIRED	**Street2:**	
Dt Became Current:		**City:**	NOT REQUIRED
Dt Ended Current:		**State:**	ME
Phone:	415-555-1212	**Country:**	
Source Type:	Notification	**Zip:**	99999

Historical Handler Details

Receive Dt:	19900419
Generator Code Description:	Large Quantity Generator
Handler Name:	SORENSON ENGINEERING, INC.

32	1 of1	NE	0.24 / 1,281.70	74.74 / 1	**DENTAL OFFICE LIEN HUONG** **13161 BROOKHURST ST** **GARDEN GROVE CA 92843-0000**	**RCRA NON GEN**

Handler ID:	CAL000223611
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	62121
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20010713	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.771861
In Handler Univ:	Y	**Location Longitude:**	-117.955146
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		

Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	DENTAL OFFICE LIEN HUONG
Location Street No:	
Location Street1:	13161 BROOKHURST ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843-0000
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	LIEN-HUONG D NGUYEN DDS
Contact Street No:	
Contact Street1:	13161 BROOKHURST ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-539-4140
Contact Fax:	714-539-4401
Contact Email Address:	CUNGHI1997@YAHOO.COM
Contact Title:	
Owner Name:	LIEN-HUONG D NGUYEN
Owner Type:	O
Owner Seq:	1
Operator Name:	LIEN-HUONG D NGUYEN DDS
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20010713
Handler Name: DENTAL OFFICE LIEN HUONG
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: LIEN-HUONG D NGUYEN
Dt Became Current:
Dt Ended Current:
Phone: 714-539-4140
Source Type: Implementer
Street No:
Street1: 13161 BROOKHURST ST
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92843-0000

Owner/Operator Ind: Current Operator
Type: Other
Name: LIEN-HUONG D NGUYEN DDS
Dt Became Current:
Dt Ended Current:
Phone: 714-539-4140
Source Type: Implementer
Street No:
Street1: 13161 BROOKHURST ST
Street2:
City: GARDEN GROVE
State: CA
Country:
Zip: 92843

33	1 of1	E	0.25 / 1,321.03	75.45 / 2	ARCO #629 13482 BROOKHURST ST GARDEN GROVE CA 92843	DELISTED TNK

Delisted Storage Tanks

Facility ID: 4348
Latitude: 33.768472
Longitude: -117.9528279
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

34	1 of1	N	0.28 / 1,453.83	75.58 / 2	Ejax Water Systems 9911 Larson Ave Garden Grove Ca 92844-1657 CA	LOP ORANGE

Case ID: 89UT181

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 12/14/1989
File Location: Local Agency

35	1 of1	N	0.28 / 1,454.05	75.63 / 2	EJAX WATER SYSTEMS 9911 LARSON GARDEN GROVE CA 92644	LUST

Global ID: T0605901020
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088702

Status (SRCH):	COMPLETED - CASE CLOSED	***Latitude (DL):***	33.7725089
Status (DL):	Completed - Case Closed	***Longitude (DL):***	-117.9579643
Status Date (DL):	12/14/1989	***RWQCB Region (DL):***	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		

Site Facility Name (SRCH): EJAX WATER SYSTEMS
Address (SRCH): 9911 LARSON
City (SRCH): GARDEN GROVE
Zip (SRCH): 92644
County (SRCH): ORANGE
Street No (DL): 9911
Street Name (DL): LARSON
City (DL): GARDEN GROVE
Zip (DL): 92644
County (DL): Orange
State (DL): CA
Business Name (DL): EJAX WATER SYSTEMS
Site Facility Name: EJAX WATER SYSTEMS
Address : 9911 LARSON
City : GARDEN GROVE
Zip : 92644
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: ORANGE COUNTY LOP
Case Worker:
Local Agency:
RB Case No: 083001342T
Local Case No: 89UT181
File Location: Local Agency
Potential COC: Gasoline
Potential Media of Concern: Soil
Begin Date: 8/24/1989
How Discovered: Tank Closure
How Discovered Description:
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name: Coastal Plain Of Orange County (8-001)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: Google Geocode
Discharge Cause:
Discharge Source:
EPA Region: 9
Leak Reported Dt: 1989-08-24 00:00:00
Military DoD Site: No
No Further Action Dt: 1989-12-14 00:00:00
Qty Rlsd Gallons: 0
Facility Project Sub Type:
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 60-65%
A2022 Assembly District: 70
Claim No:
Claim Status:
A2022 Congressional District: 45
A2022 Senate District: 36
Site History:

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker
Contact Name: PATRICIA HANNON

Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: patricia.hannon@waterboards.ca.gov
Phone No:

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 12/14/1989

Status: Open - Case Begin Date
Status Date: 8/24/1989

GeoTracker Search - Regulatory Profile

Site Facility Name: EJAX WATER SYSTEMS
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 9911 LARSON
City: GARDEN GROVE
Zip: 92644
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605901020
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 12/14/1989
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605901020&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: SOIL
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 89UT181
SANTA ANA RWQCB (REGION 8) - CASE #: 083001342T
CASE MANAGER: PATRICIA HANNON
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 12/14/1989

Status: Open - Case Begin Date
Date : 8/24/1989

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

GeoTracker Search - Cleanup Action Report

Action Type: EXCAVATION
Begin Date: 1/1/1965
End Date: 1/1/1965
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Historic Files
Action Date: 2/1/2024
Received Issue Date: 2/1/2024
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901020&enforcement_id=6571153&temptable=ENFORCEMENT
Title Description Comments:

Historic Files **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Leak Action
Action: Leak Reported
Action Date: 8/24/1989
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 8/24/1989
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Document Date: 2/1/2024
Type: HISTORIC FILES
Submitted:
Submitted By: LENA SHAW (REGULATOR)
Title: HISTORIC FILES **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901020&enforcement_id=6571153

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
36	1 of1	N	0.33 / 1,768.44	79.52 / 6	COUNTY WIDE CHRYSLER/JEEP 10080 GARDEN GROVE GARDEN GROVE CA 92842	LUST

Global ID: T0605918872
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 2/12/2003
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): COUNTY WIDE CHRYSLER/JEEP
Address (SRCH): 10080 GARDEN GROVE
City (SRCH): GARDEN GROVE
Zip (SRCH): 92842
County (SRCH): ORANGE
Street No (DL): 10080
Street Name (DL): GARDEN GROVE
City (DL): GARDEN GROVE
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088702
Latitude (DL): 33.773375
Longitude (DL): -117.957265
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

Zip (DL):	92842
County (DL):	Orange
State (DL):	CA
Business Name (DL):	COUNTY WIDE CHRYSLER/JEEP
Site Facility Name:	COUNTY WIDE CHRYSLER/JEEP
Address :	10080 GARDEN GROVE
City :	GARDEN GROVE
Zip :	92842
County :	ORANGE
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	
Local Case No:	99UT016
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Other Groundwater (uses other than drinking water)
Begin Date:	2/23/1999
How Discovered:	Tank Closure
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	
Discharge Source:	
EPA Region:	9
Leak Reported Dt:	1999-02-23 00:00:00
Military DoD Site:	No
No Further Action Dt:	2003-02-12 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	51-55%
Calenviroscreen 4 Score:	60-65%
A2022 Assembly District:	70
Claim No:	15872
Claim Status:	Ineligible
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker
Contact Name:	JESSICA LAW
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	jessica.law@waterboards.ca.gov
Phone No:	9517824381

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	2/12/2003

Status: Open - Case Begin Date
Status Date: 2/23/1999

GeoTracker Search - Regulatory Profile

Site Facility Name: COUNTY WIDE CHRYSLER/JEEP
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 10080 GARDEN GROVE
City: GARDEN GROVE
Zip: 92842
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605918872
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 2/12/2003
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605918872&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 99UT016
SANTA ANA RWQCB (REGION 8)
CASE MANAGER: JESSICA LAW
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 2/12/2003

Status: Open - Case Begin Date
Date : 2/23/1999

GeoTracker Search - Cleanup Action Report

Action Type: EXCAVATION
Begin Date: 1/1/1965
End Date: 1/1/1965
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter
Action Date: 2/12/2003
Received Issue Date: 2/12/2003
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605918872&enforcement_id=6194304&temptable=ENFORCEMENT
Title Description Comments:

RACC and case closure summary **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Leak Action
Action: Leak Discovery
Action Date: 2/23/1999
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 2/23/1999
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 6/4/2003
Type: ***Submitted:***
Submitted By: (REGULATOR)
Title: REMEDIAL ACTION COMPLETION CERTIFICATION **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/site_documents/8116086661/99UT016%2Epdf

Document Type: Site Documents ***Document Date:*** 3/26/2003
Type: ***Submitted:***
Submitted By: (REGULATOR)
Title: CASE CLOSURE SUMMARY **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/site_documents/2791150748/99UT016%2Epdf

Document Type: Site Documents ***Document Date:*** 2/12/2003
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: PAMELA YBARRA (REGULATOR)
Title: RACC AND CASE CLOSURE SUMMARY **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605918872&enforcement_id=6194304

37	1 of1	ESE	0.35 / 1,870.77	71.48 / -2	MARCOS LOPEZ 13632 DAWSON ST GARDEN GROVE CA 92843	RCRA TSD

Handler ID: CAC003017595
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20190531	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.764778
In Handler Univ:	Y	**Location Longitude:**	-117.952561
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20190627		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		

Contact Language:	EN
Handler Name:	MARCOS LOPEZ
Location Street No:	
Location Street1:	13632 DAWSON ST
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92843
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	MARCOS LOPEZ
Contact Street No:	
Contact Street1:	13632 DAWSON ST
Contact Street2:	
Contact City:	GARDEN GROVE
Contact State:	CA
Contact Zip:	92843
Contact Country:	
Contact Phone And Ext:	714-654-3111
Contact Fax:	
Contact Email Address:	OCABATEMENT@GMAIL.COM
Contact Title:	
Owner Name:	MARCOS LOPEZ
Owner Type:	O
Owner Seq:	1
Operator Name:	MARCOS LOPEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20190531
Handler Name:	MARCOS LOPEZ
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Tsd Activity:	Y
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	13632 DAWSON ST
Name:	MARCOS LOPEZ	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-654-3111	***Country:***	
Source Type:	Implementer	***Zip:***	92843
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	13632 DAWSON ST
Name:	MARCOS LOPEZ	***Street2:***	
Dt Became Current:		***City:***	GARDEN GROVE
Dt Ended Current:		***State:***	CA
Phone:	714-654-3111	***Country:***	
Source Type:	Implementer	***Zip:***	92843

38	*1 of1*	*N*	*0.37 / 1,959.35*	*79.17 / 6*	***County Wide Chrysler/Jeep 10080 Garden Grove Blvd Garden Grove Ca 92844-1694 CA***	***LOP ORANGE***

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Case ID: 99UT016

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 2/12/2003
File Location: Local Agency

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	1 of3	N	0.43 / 2,266.02	80.78 / 7	TOYOTA OF GARDEN GROVE 10081 GARDEN GROVE GARDEN GROVE CA 92641	LUST

Global ID: T0605901533
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 4/14/1992
Cleanup Status: COMPLETED - CASE CLOSED
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088701
Latitude (DL): 33.775424
Longitude (DL): -117.956801
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)
Site Facility Name (SRCH): TOYOTA OF GARDEN GROVE
Address (SRCH): 10081 GARDEN GROVE
City (SRCH): GARDEN GROVE
Zip (SRCH): 92641
County (SRCH): ORANGE
Street No (DL): 10081
Street Name (DL): GARDEN GROVE
City (DL): GARDEN GROVE
Zip (DL): 92641
County (DL): Orange
State (DL): CA
Business Name (DL): TOYOTA OF GARDEN GROVE
Site Facility Name: TOYOTA OF GARDEN GROVE
Address : 10081 GARDEN GROVE
City : GARDEN GROVE
Zip : 92641
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: ORANGE COUNTY LOP
Case Worker:
Local Agency:
RB Case No: 083002065T
Local Case No: 92UT026
File Location: Local Agency
Potential COC: Waste Oil / Motor / Hydraulic / Lubricating
Potential Media of Concern: Other Groundwater (uses other than drinking water)
Begin Date: 1/29/1992
How Discovered: Tank Closure
How Discovered Description:
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name: Coastal Plain Of Orange County (8-001)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: Google Map Move
Discharge Cause:
Discharge Source:
EPA Region: 9

Leak Reported Dt:	1992-01-29 00:00:00
Military DoD Site:	No
No Further Action Dt:	1992-04-14 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	61-65%
Calenviroscreen 4 Score:	45-50%
A2022 Assembly District:	70
Claim No:	
Claim Status:	
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker
Contact Name:	JESSICA LAW
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	jessica.law@waterboards.ca.gov
Phone No:	9517824381

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	4/14/1992
Status:	Open - Case Begin Date
Status Date:	1/29/1992

GeoTracker Search - Regulatory Profile

Site Facility Name:	TOYOTA OF GARDEN GROVE
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	10081 GARDEN GROVE
City:	GARDEN GROVE
Zip:	92641
County:	ORANGE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605901533
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 4/14/1992
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605901533&tabname=regulatoryhistory
Potential COC:	WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
Potential Media of Concern:	OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location:	LOCAL AGENCY
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin:	Coastal Plain Of Orange County (8-001)
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:	
Future Land Use:	
Cleanup Oversight Agencies:	ORANGE COUNTY LOP (LEAD) - CASE #: 92UT026 SANTA ANA RWQCB (REGION 8) - CASE #: 083002065T CASE MANAGER: JESSICA LAW
CUF Claim No:	
CUF Priority Assig:	
CUF Amount Paid:	
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 4/14/1992

Status: Open - Case Begin Date
Date : 1/29/1992

GeoTracker Search - Regulatory Activities

Action Type: Leak Action
Action: Leak Discovery
Action Date: 1/29/1992
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 1/29/1992
Received Issue Date:
Doc Link:
Title Description Comments:

39	2 of3	N	0.43 / 2,266.02	80.78 / 7	Toyota Of Garden Grove 10081 Garden Grove Blvd Garden Grove Ca 92844-1620 CA	LOP ORANGE

Case ID: 92UT026

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 4/14/1992
File Location: Local Agency

39	3 of3	N	0.43 / 2,266.02	80.78 / 7	GARDEN GROVE KIA 10081 GARDEN GROVE BLVD GARDEN GROVE CA 92844	C&D DEBRIS RECY

County: ORANGE

Activity Type: USED OIL COLLECTION
Phone No: (855) 807-9285

40	1 of1	NNW	0.46 / 2,417.25	76.55 / 3	HOUSE OF HYBRIDS 9825 GARDEN GROVE BLVD GARDEN GROVE CA 92844	RCRA TSD

Handler ID:	CAL000444865
Generator Status:	N
Recycler Activity?:	YES
Recycler Activity Note:	This facility has been identified as a Recycler Facility from the RCRA Handler Report Module with a 'Yes' for Recycler Activity with or without Storage.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Jan 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	Yes	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20190327	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.774027
In Handler Univ:	Y	**Location Longitude:**	-117.961439
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		

Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20190628
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	HOUSE OF HYBRIDS
Location Street No:	
Location Street1:	9825 GARDEN GROVE BLVD
Location Street2:	
Location City:	GARDEN GROVE
Location State:	CA
Location Zip:	92844
Location County Code:	CA059
Location County Name:	ORANGE
Location Country:	US
Contact Name:	REMTO VASCONCELOS
Contact Street No:	
Contact Street1:	2546 ORANGE AVE APT B
Contact Street2:	
Contact City:	COSTA MESA
Contact State:	CA
Contact Zip:	92627
Contact Country:	
Contact Phone And Ext:	949-254-5204
Contact Fax:	
Contact Email Address:	HHYBRIDS@YAHOO.COM
Contact Title:	
Owner Name:	REMTO VASCONCELOS
Owner Type:	O
Owner Seq:	1
Operator Name:	REMTO VASCONCELOS
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20190327
Handler Name:	HOUSE OF HYBRIDS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Tsd Activity:	Y
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	2546 ORANGE AVE APT B
Name:	REMTO VASCONCELOS	***Street2:***	
Dt Became Current:		***City:***	COSTA MESA
Dt Ended Current:		***State:***	CA
Phone:	949-254-5204	***Country:***	
Source Type:	Implementer	***Zip:***	92627

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	2546 ORANGE AVE APT B
Name:	REMTO VASCONCELOS	**Street2:**	
Dt Became Current:		**City:**	COSTA MESA
Dt Ended Current:		**State:**	CA
Phone:	949-254-5204	**Country:**	
Source Type:	Implementer	**Zip:**	92627

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
41	1 of1	NW	0.46 / 2,453.34	75.16 / 2	ORIENTAL LEASING 9672 GARDEN GROVE GARDEN GROVE CA 92641	LUST

Global ID:	T0605900714	**Case Type (DL):**	LUST Cleanup Site
Site Facility Type:	LUST CLEANUP SITE	**Oil Field (SRCH):**	
Site Fac Type (SRCH):	LUST CLEANUP SITE	**Oil Field Oper (SRCH):**	
Status:		**Census Tract (SRCH):**	6059088702
Status (SRCH):	COMPLETED - CASE CLOSED	**Latitude (DL):**	33.773646
Status (DL):	Completed - Case Closed	**Longitude (DL):**	-117.96357
Status Date (DL):	8/7/2000	**RWQCB Region (DL):**	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		

Site Facility Name (SRCH):	ORIENTAL LEASING
Address (SRCH):	9672 GARDEN GROVE
City (SRCH):	GARDEN GROVE
Zip (SRCH):	92641
County (SRCH):	ORANGE
Street No (DL):	9672
Street Name (DL):	GARDEN GROVE
City (DL):	GARDEN GROVE
Zip (DL):	92641
County (DL):	Orange
State (DL):	CA
Business Name (DL):	ORIENTAL LEASING
Site Facility Name:	ORIENTAL LEASING
Address :	9672 GARDEN GROVE
City :	GARDEN GROVE
Zip :	92641
County :	ORANGE
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	083000900T
Local Case No:	88UT083
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Other Groundwater (uses other than drinking water)
Begin Date:	4/15/1988
How Discovered:	Tank Closure
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	
Discharge Source:	
EPA Region:	9
Leak Reported Dt:	1988-04-15 00:00:00
Military DoD Site:	No

No Further Action Dt: 2000-08-07 00:00:00
Qty Rlsd Gallons: 0
Facility Project Sub Type:
Calenviroscreen 3 Score: 51-55%
Calenviroscreen 4 Score: 60-65%
A2022 Assembly District: 70
Claim No:
Claim Status:
A2022 Congressional District: 45
A2022 Senate District: 36
Site History:

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker
Contact Name: JESSICA LAW
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: jessica.law@waterboards.ca.gov
Phone No: 9517824381

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 8/7/2000

Status: Open - Case Begin Date
Status Date: 4/15/1988

GeoTracker Search - Regulatory Profile

Site Facility Name: ORIENTAL LEASING
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 9672 GARDEN GROVE
City: GARDEN GROVE
Zip: 92641
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605900714
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 8/7/2000
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605900714&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin: Coastal Plain Of Orange County (8-001)
Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 88UT083
SANTA ANA RWQCB (REGION 8) - CASE #: 083000900T
CASE MANAGER: JESSICA LAW
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:

Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 8/7/2000

Status: Open - Case Begin Date
Date : 4/15/1988

GeoTracker Search - Regulatory Activities

Action Type: Leak Action
Action: Leak Discovery
Action Date: 4/15/1988
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 4/15/1988
Received Issue Date:
Doc Link:
Title Description Comments:

42	1 of1	SSE	0.47 / 2,478.76	69.75 / -4	4 DAY TIRE STORE 13961 BROOKHURST GARDEN GROVE CA 92643	LUST

Global ID: T0605901280
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 9/14/1992
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): 4 DAY TIRE STORE
Address (SRCH): 13961 BROOKHURST
City (SRCH): GARDEN GROVE
Zip (SRCH): 92643
County (SRCH): ORANGE
Street No (DL): 13961
Street Name (DL): BROOKHURST
City (DL): GARDEN GROVE
Zip (DL): 92643
County (DL): Orange
State (DL): CA
Business Name (DL): 4 DAY TIRE STORE
Site Facility Name: 4 DAY TIRE STORE
Address : 13961 BROOKHURST
City : GARDEN GROVE
Zip : 92643
County : ORANGE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059088901
Latitude (DL): 33.7613062
Longitude (DL): -117.9550853
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	
Local Agency:	
RB Case No:	083001694T
Local Case No:	90UT255
File Location:	Local Agency
Potential COC:	Gasoline
Potential Media of Concern:	Soil
Begin Date:	11/14/1990
How Discovered:	Tank Closure
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
DWR GW Subbasin Name:	Coastal Plain Of Orange County (8-001)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	
Discharge Source:	
EPA Region:	9
Leak Reported Dt:	1990-11-14 00:00:00
Military DoD Site:	No
No Further Action Dt:	1992-09-14 00:00:00
Qty Rlsd Gallons:	0
Facility Project Sub Type:	
Calenviroscreen 3 Score:	56-60%
Calenviroscreen 4 Score:	55-60%
A2022 Assembly District:	70
Claim No:	1856
Claim Status:	Active
A2022 Congressional District:	45
A2022 Senate District:	36
Site History:	

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	9/14/1992
Status:	Open - Case Begin Date
Status Date:	11/14/1990

GeoTracker Search - Regulatory Profile

Site Facility Name:	4 DAY TIRE STORE
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	13961 BROOKHURST
City:	GARDEN GROVE
Zip:	92643
County:	ORANGE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0605901280
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 9/14/1992
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0605901280&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	SOIL
File Location:	LOCAL AGENCY
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
DWR GW Sub Basin:	Coastal Plain Of Orange County (8-001)

Calwater Watershed Name: Santa Ana River - Lower Santa Ana River - East Coastal Plain (801.11)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 90UT255
SANTA ANA RWQCB (REGION 8) - CASE #: 083001694T
CUF Claim No: 1856
CUF Priority Assig: C
CUF Amount Paid: $79,652
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, 8 - Note: Also incl parts of 801.13, 801.14, 845.61 - Note: Also incl parts of 801.13, 801.14, 845.61, 845.63.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 9/14/1992

Status: Open - Case Begin Date
Date : 11/14/1990

GeoTracker Search - Cleanup Action Report

Action Type: PERMEABLE REACTIVE BARRIER
Begin Date: 1/1/1965
End Date: 1/1/1965
Phase:
Contaminant Mass Removed:
Description:

Action Type: EXCAVATION
Begin Date: 1/1/1965
End Date: 1/1/1965
Phase:
Contaminant Mass Removed:
Description:

GeoTracker Search - Regulatory Activities

Action Type: Reports
Action: Other Report
Action Date: 4/30/2022
Received Issue Date: 4/30/2022
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901280&enforcement_id=6458307&temptable=ENFORCEMENT
Title Description Comments:

Historic Files **Note: Many records provided by the department have a truncated [Title Description Comments] field.

Action Type: Leak Action
Action: Leak Reported
Action Date: 11/14/1990
Received Issue Date:
Doc Link:
Title Description Comments:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Action Type: Leak Action
Action: Leak Discovery
Action Date: 11/14/1990
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Document Date: 4/30/2022
Type: OTHER REPORT
Submitted:
Submitted By: GENIECE HIGGINS (REGULATOR), KARL BEWLEY (REGULATOR)
Title: HISTORIC FILES **Note: Many records provided by the department have a truncated [Title] field.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0605901280&enforcement_id=6458307

43	1 of2	NW	0.48 / 2,548.01	74.14 / 0	Oriental Leasing 9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA	LOP ORANGE

Case ID: 88UT083

Details

Current Status: Closed
Type of Closure: Closure certification issued
Closed Date: 8/7/2000
File Location: Local Agency

43	2 of2	NW	0.48 / 2,548.01	74.14 / 0	Orental Leasing 9672 Garden Grove Blvd Garden Grove Ca 92844-1516 CA	LOP ORANGE

Case ID: 88UT077

Details

Current Status: Closed
Type of Closure: Invalidated
Closed Date: 1/1/1988
File Location: Local Agency

44	1 of1	NE	0.68 / 3,589.02	84.87 / 11	VETERANS ED'S INC 10372 STANFORD AVENUE #S GARDEN GROVE CA 92840	INSP COMP ENF

EPA ID: CAL000429855
County: ORANGE
Geotracker Address:
Geotracker Lat:
Geotracker City:
Geotracker Long:
Report URL: https://www.envirostor.dtsc.ca.gov/public/eerp_profile_report?global_id=3004769

Inspection Information

Inspection Type: Focused Compliance Inspection - Transporter
Violations: No Violations
Inspection Date: 5/18/2022
Return to Compliance:
Report Sent Date: 5/18/2022

Site Details (Download)

Envirostor ID: 3004769
Site Type: INSPECTION
Status: No Action

Unplottable Summary

Total: 4 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
HHSS	PINEHURST	STAR ROUTE' (1.10 MI N OF C. RD	NONE CA	95814	822979342
HHSS	CASA DE ORO VERDE	CASA DE ORO VERDE	NONE CA	NONE	822942878
HHSS	STOCKDALE HWY SHELL	S-E. CORNER I-5 AT STOCKDALE H TRASK	NONE CA	93206	822951300
HMIRS		BROOKHURST AVENUE	GARDEN GROVE CA		818603713

Unplottable Report

Site: ***PINEHURST***
STAR ROUTE' (1.10 MI N OF C. RD NONE CA 95814 HHSS

County: Sacramento
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00023a9f.pdf

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Site: ***CASA DE ORO VERDE***
CASA DE ORO VERDE NONE CA NONE HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002f209.pdf

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Site: ***STOCKDALE HWY SHELL***
S-E. CORNER I-5 AT STOCKDALE H TRASK NONE CA 93206 HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000250dd.pdf

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Site:
BROOKHURST AVENUE GARDEN GROVE CA HMIRS

Incident County: ORANGE

HMIR Historical Reports

Report No:	I-1994020201	***Fed DOT Agency Nm:***	
Report Type:	A hazardous material incident	***Fed DOT Report No:***	
Date of Incident:	1994-01-07	***Report Submit Src:***	Paper
Time of Incident:	1315	***Inc Multiple Rows:***	No
Haz Class Code:		***Inc Non US State:***	
Hazardous Class:	3	***Mode Transport:***	Highway
Commodity Short Nm:	GASOLINE INCLUDES GASOLI	***Transport Phase:***	Unloading
Commodity Long Nm:	GASOLINE INCLUDES GASOLINE MIXED WITH ETHYL ALCOHOL, WITH NOT MORE THAN 10% ALCOHOL	***Incident Occrrnce:***	
Trade Name:	ARCO UNLEADED GASOLI	***Mat Ship Approval?:***	No
ID No:	UN1203	***Mat Ship Approv No:***	
Haz Waste Ind:	No	***Undecl Hazmat Ship?:***	No
Haz Waste EPA No:		***Packaging Type:***	Cargo Tank Motor Vehicle (CTMV)
HMIS Tox Inhalation?:	No	***Packing Group:***	
TIH Hazard Zone:		***Carrier Reporter:***	ARCO PRODUCTS COMPANY
Qty Released:	1	***CR Street Name:***	1055 WEST 7TH STREET
Unit of Measure:	Liquid - Gallon	***CR City:***	LOS ANGELES
What Failed:		***CR State:***	CA
What Failed Desc:		***CR Postal Code:***	90017
How Failed Code:		***CR Non US State:***	
How Failed Desc:		***CR Fed DOT ID:***	0
Failure Cause Code:		***CR Hazmat Reg ID:***	
Failure Cause Desc:		***CR Country:***	US
Ident. Markings:		***Shipper Name:***	ARCO PRODUCTS COMPANY
Cont1 Pkging Type:		***Shipper Street Name:***	1055 W SEVENTH ATREET
Cont1 Const Mat:		***Shipper City:***	LOS ANGELES
Cont1 Head Type:		***Shipper State:***	CA
Cont1 Pkg Capacity:	8900	***Shipper Postal:***	90017
C1 Capacity UOM:	LGA	***Shipper Non US St:***	

Cont1 Pkg Amt:	0	***Shipper Country:***	US
C1 Pkg Amt UOM:		***Shipper Waybill:***	593203
Cont1 Pkg No:	1	***Ship Hazmat Reg ID:***	
C1 Pkg NO Failed:	1	***Origin City:***	SOUTH GATE
Cont1 Pkg Mnfctr:	WELD-IT INC	***Origin State:***	CA
Cont1 Pkg Mnfct Dt:	0-00-00 00:00:00	***Origin Postal:***	90280
Cont1 Pkg Serial NO:	4N61418	***Origin Non US St:***	
C1 Pkg Last Test Dt:	1993-07-01 00:00:00	***Origin Country:***	US
C1 Test Const Mat:		***Destination City:***	GARDEN GROVE
C1 Pkg Dsign Pres.:	0	***Destination State:***	CALIFORNIA
C1 Dsign Press UOM:		***Destination Postal:***	
C1 Pkg Shell Thick:	0	***Destination Non US:***	
C1 Shell Thick UOM:		***Destination Country:***	US
C1 Head Thickness:	0	***Cont2 Package Type:***	
C1 Head Thick UOM:		***Cont2 Const Mat:***	
C1 Pkg Srvc Pres.:	0	***Cont2 Pkg Capacity:***	0
C1 Srvc Press UOM:		***Cont2 Capacity UOM:***	
C1 Valve/Device Fail?:	No	***Cont2 Pkg Amount:***	0
C1 Device Type:		***Cont2 Pkg Amt UOM:***	
C1 Device Mnfctr:		***Cont2 Pkg No:***	0
C1 Device Model:		***Cont2 Pkg No Failed:***	0
NRC No:			

RAM Pkg Category:		***Haz NonHosp Public:***	0
RAM Pkg Cert.:	FALSE	***Haz NonHosp Old:***	
RAM Pkg Cert. NBR:		***Tot Haz Non Hosp Inj:***	
RAM Nuclide S:		***Total Hazmat Injuries:***	0
RAM Transport Index:		***Evacuation Indicator:***	No
RAM UOM:		***Public Evacuated:***	0
RAM Activity Rpted:	0	***Employees Evac:***	0
RAM UOM Rpted:		***Total Evacuated:***	0
RAM Activity:	0	***Total Evacuation Hrs:***	0
RAM Activity UOM:		***Major Artery Closed:***	No
RAM Mat Safety:		***Mjr Artery Hrs Closed:***	0
Spillage Result:	Yes	***Material Involved:***	No
Fire Result:	No	***Estimated Speed:***	0
Explosion Result:	No	***Weather Conditions:***	
Water Sewer Result:	No	***Vehicle Overturn:***	No
Gas Dispersion:	No	***Vehicle Left Roadway:***	No
Environment Damage:	No	***Passenger Aircraft:***	No
No Release Result:	No	***Cargo Baggage:***	
Fire EMS Report:	No	***Ship Non Transport:***	No
Fire EMS EMS Report:		***Ship Air First Flight:***	No
Police Report:	No	***Ship Air Subflight:***	No
Police Report No:		***Ship Init Transport:***	No
In House Cleanup:	No	***Ship Phase Transfer:***	No
Other Cleanup:	No	***Contact Name:***	B.W. SPENCER
Damage > 500:	No	***Contact Title:***	MANAGER E H & S
Material Loss:	1	***Contact Business:***	
Carrier Damage:	0	***Contact Street:***	
Property Damage:	0	***Contact City:***	
Response Cost:	0	***Contact State:***	
Remediation Cost:	4	***Contact Postal:***	
Damage Old Form:	0	***Contact Non US St:***	
Total Damages Amt:	5	***Contact Country:***	US
Hazmat Fatality:	No	***Inc. Report Prepared:***	
Haz Fatal Employees:	0	***HMIS Serious Incidnt:***	No
Haz Fatal Respndrs:	0	***HMIS Serious Fatality:***	No
Haz Fatal Gen Public:	0	***HMIS Serious Injury:***	No
Tot Hazmat Fatalities:	0	***HMIS Flight Plan:***	No
Non Hazmat Fatality:	No	***HMIS Serious Evacs:***	No
Non Hazmat Fatals:	0	***HMIS Major Artery:***	No
Hazmat Injury:	No	***HMIS Bulk Release:***	No
Haz Hospital Empl:	0	***HMIS Marine Pollutnt:***	No
Haz Hospital Resp:	0	***HMIS Radioactive:***	No
Haz Hosp Gen Public:	0	***HMIS Gen Pkg Type:***	TANK
Haz Hosp Old Form:	0	***HMIS Container Code:***	MC306
Total Haz Hosp Inj:	0	***HMIS Container Desc:***	Cargo tanks
Haz Non Hosp Empl:	0	***HMIS Bulk Incident:***	Yes
Haz Non Hosp Resp:	0	***Undeclared Shipment:***	No

Description of Events: WHILE DELIVERING TO COMPANY STATION, THE VAPOR RECOVERY HOSE FILLED WITH PRODUCT.

WHEN THE DRIVER DISCONNECTED THE HOSE FROM THE FITTING, 1 GALLON OF PRODUCT WAS RELEASED ONTO THE CONCRETE PAD. THE RELEASE WAS CLEANED UP BY THE DRIVER. THE CLEAN-UP MATERIAL WAS RETURNED TO THE TERMINAL FOR PROPER DISPOSAL.

Recommend Actions Taken:

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 8, 2025

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool.

Government Publication Date: Feb 26, 2025

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file.

Government Publication Date: Feb 26, 2025

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Jan 6, 2025

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: Jan 6, 2025

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Jan 6, 2025

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Jan 6, 2025

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Jan 6, 2025

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Jan 6, 2025

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Jan 6, 2025

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made availabe by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Mar 27, 2025

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Mar 27, 2025

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Mar 8, 2025

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Apr 6, 2025

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Feb 19, 2025

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. This listing includes FRP facilities from an applicable EPA FOIA file and Homeland Infrastructure Foundation-Level Data (HIFLD) data file.

Government Publication Date: Jan 9, 2024

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jan 9, 2024

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Oct 31, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from Oak Ridge National Laboratory hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Oct 31, 2024

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Jan 29, 2025

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Feb 26, 2025

State

State Response Sites: RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database serves a purpose similar to that of the federal NPL, functioning as a state-level counterpart for prioritizing cleanup efforts at hazardous substance release sites.

Government Publication Date: Jun 1, 2025

EnviroStor Database: ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Jun 1, 2025

Delisted State Response Sites: DELISTED ENVS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Jun 1, 2025

Solid Waste Information System (SWIS): SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: Apr 7, 2025

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels: SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Waste Management Unit Database: WMUD

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Government Publication Date: Jan 1, 2000

EnviroStor Hazardous Waste Facilities: HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Jun 1, 2025

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report: SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Construction and Demolition Debris Recyclers: C&D DEBRIS RECY

This listing of Construction and Demolition Debris Recyclers is maintained by the California Intergrated Waste Management Board-common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste related to land development.

Government Publication Date: Jun 20, 2018

Recycling Centers: RECYCLING

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Mar 5, 2025

Listing of Certified Processors: PROCESSORS

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: May 31, 2025

Listing of Certified Dropoff, Collection, and Community Service Programs: CONTAINER RECY

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: May 22, 2025

Land Disposal Sites: LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Apr 4, 2025

Leaking Underground Fuel Tank Reports: LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Apr 4, 2025

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: May 27, 2025

Permitted Underground Storage Tank (UST) in GeoTracker: UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: May 25, 2025

Proposed Closure of Underground Storage Tank Cases: UST CLOSURE

This listing includes Proposed Closure of Underground Storage Tank (UST) Cases which are being considered for closure by either the State Water Resources Control Board at a Future Board Meeting or the Executive Director that have been posted for a 60-day public comment period, and Closure of UST Cases with Closure Denials and Approved Orders. The lists are provided by the California Water Boards.

Government Publication Date: Apr 7, 2025

Historical Hazardous Substance Storage Information Database: HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Statewide Environmental Evaluation and Planning System: UST SWEEPS

The Statewide Environmental Evaluation and Planning System (SWEEPS) is a historical listing of active and inactive underground storage tanks made available by the California State Water Resources Control Board (SWRCB).

Government Publication Date: Oct 1, 1994

Aboveground Storage Tanks: AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

SWRCB Historical Aboveground Storage Tanks: AST SWRCB

A list of aboveground storage tanks made available by the California State Water Resources Control Board (SWRCB). Effective January 1, 2008, the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA).

Government Publication Date: Dec 1, 2007

Oil and Gas Facility Tanks: TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Feb 20, 2025

Delisted Storage Tanks: DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Jun 1, 2025

California Environmental Reporting System (CERS) Tanks: CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: May 28, 2025

Delisted California Environmental Reporting System (CERS) Tanks: DELISTED CTNK

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: May 28, 2025

Historical Hazardous Substance Storage Container Information - Facility Summary: HIST TANK

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in th 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions: LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Jun 1, 2025

CALSITES Database: CALSITES

This historical database was maintained by the Department of Toxic Substance Control (DTSC) for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

Government Publication Date: May 1, 2004

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions: HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Feb 18, 2021

Deed Restrictions and Land Use Restrictions: DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: May 27, 2025

Voluntary Cleanup Program: VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Jun 1, 2025

GeoTracker Cleanup Program Sites: CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Apr 4, 2025

Delisted Cleanup Program Sites: DELISTED CLEANUP

A list of Cleanup Program sites which were once included - and have since been removed from - the list of Cleanup Program Sites in GeoTracker. GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Government Publication Date: May 27, 2025

Delisted County Records: DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: May 15, 2025

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Oct 15, 2024

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Oct 15, 2024

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 18, 2024

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 18, 2024

County

Orange County - Industrial Cleanup Program Cases Listing: ICP ORANGE

Orange County Health Care Agency's Environmental Health Division has an Industrial Cleanup (IC) program which oversees the voluntary cleanup of contaminated property. This is a list of cases (by city) which the IC program has overseen in the past, or is currently overseeing.

Government Publication Date: May 15, 2023

Orange County - LOP Lead Cases List: LOP ORANGE

The Local Oversight Program of the County of Orange provides regulatory cleanup oversight for cleanup of leaking underground storage tanks (USTs). This dataset is provided by the Orange County Health Care Agency.

Government Publication Date: May 15, 2023

Orange County - Non-Petroleum Underground Storage Tank Cases: NPUT ORANGE

This list of open and closed non-petroleum underground storage tank cases is maintained by the Orange County Health Care Agency.

Government Publication Date: Sep 13, 2024

Orange County - Underground Storage Tanks Listing: UST ORANGE

A list of registered Underground Storage Tank (UST) sites in Orange County. This list is made available by Orange County Health Care Agency (OCHCA), Environmental Health Division which oversees the underground storage tank inspection program in most of the cities of Orange County, with the exception of Anaheim, Fullerton, and Orange.

Government Publication Date: May 15, 2023

Orange County - Aboveground Petroleum Storage Tank Listing: AST ORANGE

A list of Aboveground Petroleum Storage Tank (APST) facilities inspected by Orange County Certified Unified Program Agency (CUPA) Under the Aboveground Petroleum Storage Act (APSA). This list is made available by the Environmental Health Division of Orange County Health Care Agency.

Government Publication Date: May 15, 2023

Orange County - Anaheim City UST Cleanup Cases: UST CLP ANAHEIM

A list of UST Cleanup Cases in the City of Anaheim in Orange County. As part of its Groundwater Protection Program, the City of Anaheim managed the UST Cleanup Oversight Program from April 1991 to June 2014. This list is published by the City of Anaheim Underground Storage Tank Cleanup Program.

Government Publication Date: May 26, 2015

Orange County - Anaheim City UST List: UST ANAHEIM

A list of Underground Storage Tanks in Anaheim City, Orange County. This list is made available by Anaheim Fire & Rescue Department.

Government Publication Date: Oct 9, 2024

Orange County - Anaheim City AST List: AST ANAHEIM

List of Aboveground Storage Tanks (ASTs) in Anaheim City, Orange County made available by Anaheim Fire & Rescue.

Government Publication Date: Oct 9, 2024

Additional Environmental Record Sources

Federal

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation.

Government Publication Date: Apr 4, 2024

PFAS Greenhouse Gas Emissions Data: PFAS GHG

The U.S. Environmental Protection Agency's Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. Includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time. Note that some regulatory programs have specified chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard.

Government Publication Date: May 9, 2025

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).
Government Publication Date: Apr 23, 2025

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.
Government Publication Date: Sep 20, 2023

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data, previously the list was obtained by EPA FOIA requests. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. The information in the Superfund NPL and Superfund Alternative Agreement (SAA) PFAS detection site list is years old and may not be accurate today. Site information such as site name, site ID, and location has been confirmed for accuracy; however, PFAS-related information such as media sampled, drinking water being above the health advisory, or mitigation efforts has not been verified. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.
Government Publication Date: Mar 31, 2025

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

This list of federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS) is made available by the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools data. The EPA outlines that these data are gathered from several federal entities, such as the federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration (NASA), Department of Transportation (DOT), and Department of Energy (DOE). The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2024. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.
Government Publication Date: Oct 24, 2024

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/
Government Publication Date: Jun 27, 2024

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Mar 24, 2025

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Dec 16, 2024

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Jan 13, 2025

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest : PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Mar 23, 2025

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Mar 24, 2025

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: May 29, 2024

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).

Government Publication Date: Apr 25, 2025

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.

Government Publication Date: Apr 13, 2024

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Jan 6, 2025

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Jan 6, 2025

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset which applies to the Fiscal Year 2021 FUDS Inventory.

Government Publication Date: May 15, 2023

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: May 15, 2023

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: May 6, 2024

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Feb 5, 2024

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: May 20, 2024

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Dec 12, 2023

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: May 12, 2025

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Jun 26, 2024

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Feb 29, 2024

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: May 23, 2024

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Apr 15, 2024

Historical Business Activity Risk: HIST RISK

Proprietary list of sites identified as potentially having engaged in business activity that poses a higher-than-normal risk of contamination. Records originate from historical city directories, and are included in this list based on broad business categories Potentially Hazardous Chemical Users and Fuel and Automotive, including but not limited to Dry Cleaners and Fuel Stations, Garages, etc. Inclusion in this listing does not indicate that there is or ever has been contamination; rather, sites are included in this list due to their potential for having engaged in a business activity presenting an elevated risk of contamination. The list was compiled from various city directories including Polks, Millers, Mullin Kille, Interstate Directory, and State Directory Co; spanning roughly 1920s through 1960 depending on information available by city.

Government Publication Date: Jan 1, 1960

State

PFAS Sampling Locations: PFAS SAMPLING

This data is sourced from the State Water Board's GeoTracker Per- and Polyfluoroalkyl Substances (PFAS) Map tool which contains individual sampling points (i.e., soil boring, groundwater monitoring well, drinking water well for municipal drinking water systems, etc.) or a site location with PFAS analytical data. Includes analytical results that are finalized and submitted electronically by the Responsible Parties via GeoTracker's Electronic Submittal of Information Portal, and after it's accepted by a Regional Water Quality Control Board.

Government Publication Date: Feb 25, 2025

Dry Cleaning Facilities: DRYCLEANERS

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Dec 20, 2021

Delisted Drycleaners: DELISTED DRYCLEANERS

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Jan 31, 2022

Non-Toxic Dry Cleaning Incentive Program: DRYC GRANT

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Jan 31, 2022

PFAS GeoTracker Cleanup Sites: PFAS GT CLEANUPS

A list of applicable cleanup sites from the State Water Resources Control Board's (SWRCB) GeoTracker data management system where one or more of the potential contaminants of concern are identified in the PFAS Structure List and/or PFAS Chemicals Without Explicit Structure List made available by the United States Environmental Protection Agency (US EPA).

Government Publication Date: May 27, 2025

PFOA/PFOS Groundwater: PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Feb 15, 2025

PFAS Investigations: PFAS INVEST

This list of potential Per- and Polyfluoroalkyl Substance (PFAS) sites is compiled from the California State Water Resources Control Board's (SWRCB) PFAS Investigations Map tool. The SWRCB issued investigative orders, per California Water Code (CWC) Section 13267 and/or 13383, to these sites. Orders were also issued to the public water systems to sample wells in the vicinity of these locations. Military facilities have been identified by the Department of Defense (DOD) as part of their efforts to investigate PFAS per the Defense Environmental Restoration Program (DERP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The data includes locations for Airports, Chrome Plating Facilities, Landfills, Publicly Owned Treatment Works, Refineries and Bulk Terminals, DOD Facilities, and Monitored Drinking Water Wells being investigated for potential PFAS.

Government Publication Date: Jan 23, 2024

Hazardous Waste and Substances Site List - Site Cleanup: HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Mar 15, 2023

Toxic Pit Cleanup Act Sites: TOXIC PITS

The Toxic Pits Cleanup Act (TPCA) list identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. This list was maintained by the State Water Resources Control Board (SWRCB), is not longer maintained, and updates are not planned.
Government Publication Date: Jul 1, 1995

List of Hazardous Waste Facilities Subject to Corrective Action: DTSC HWF
This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.
Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement: INSP COMP ENF
A list of permitted facilities with inspections and enforcements tracked by the California Department of Toxic Substance Control's (DTSC) EnviroStor data management system.
Government Publication Date: Nov 23, 2023

School Property Evaluation Program Sites: SCH
A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.
Government Publication Date: Jun 1, 2025

California Hazardous Material Incident Report System (CHMIRS): CHMIRS
A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This listing has been made available by the California Governor's Office of Emergency Services (Cal OES).
Government Publication Date: Jan 8, 2025

Historical California Hazardous Material Incident Report System (CHMIRS): HIST CHMIRS
A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).
Government Publication Date: Jan 1, 1993

Handlers from Hazardous Waste Manifest Data: HAZNET
A list of handlers not otherwise classified as Treatment, Storage, Disposal facilities (TSDF) or generators from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Feb 20, 2025

Generators from Hazardous Waste Manifest Data: HAZ GEN
List of handlers listed as having generated waste from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Feb 20, 2025

TSDF from Hazardous Waste Manifest Data: HAZ TSD
List of Treatment, Storage, and Disposal Facilities (TSDFs) from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Feb 20, 2025

Historical Hazardous Waste Manifest Data: HIST MANIFEST
A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.
Government Publication Date: Dec 31, 1992

DTSC Registered Hazardous Waste Transporters: HW TRANSPORT
The California Department of Toxic Substances Control (DTSC) maintains this list of Registered Hazardous Waste Transporters.
Government Publication Date: Mar 20, 2025

Registered Waste Tire Haulers: WASTE TIRE

This list of registered waste tire haulers is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Apr 19, 2025

California Medical Waste Management Program Facility List: MEDICAL WASTE

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

Government Publication Date: Apr 28, 2025

Historical Cortese List: HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders: CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Dec 6, 2021

California Environmental Reporting System (CERS) Hazardous Waste Sites: CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: May 28, 2025

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites: DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker: GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Apr 4, 2025

Mines Listing: MINE

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

Government Publication Date: Apr 10, 2025

Recorded Environmental Cleanup Liens: LIEN

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

Government Publication Date: Apr 10, 2025

Waste Discharge Requirements: WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Apr 4, 2025

Toxic Pollutant Emissions Facilities: EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program.

Government Publication Date: Dec 31, 2021

Clandestine Drug Lab Sites: CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/clandestine drug laboratories.

Government Publication Date: Jan 19, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

Orange County - Hazardous Waste Facilities: HW ORANGE

A list of Hazardous Waste Facilities in Orange County. This list is made available by Orange County Environmental Health Department.

Government Publication Date: May 15, 2023

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		25061300823p
Date Completed:		June 15, 2025
Project Number:		25-500978.1
Project Property:		9822 Russell Avenue 9822 Russell Avenue GARDEN GROVE CA 92844
Coordinates:		
	Latitude:	33.7681234
	Longitude:	-117.9578273
	UTM Northing:	3736866.99597 Meters
	UTM Easting:	411313.043885 Meters
	UTM Zone:	UTM Zone 11S
	Elevation:	73.65 ft
	Slope Direction:	SW

Topographic Information....2
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Geologic Information....7
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The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2022)

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Anaheim, CA

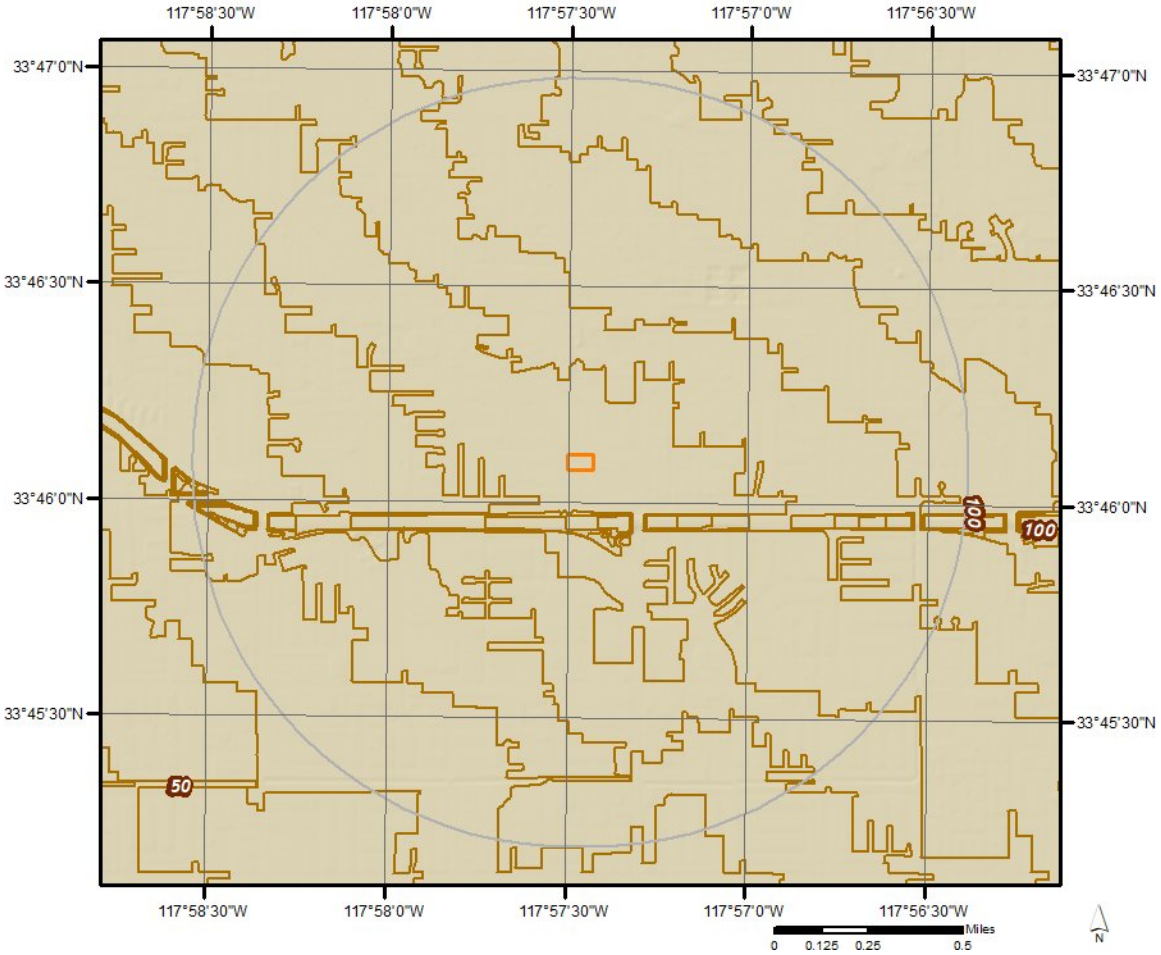
Source: USGS 7.5 Minute Topographic Map

Topographic Information

The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	73.65 ft
Slope Direction:	SW



Hydrologic Information



Wetland

0 0.075 0.15 0.3 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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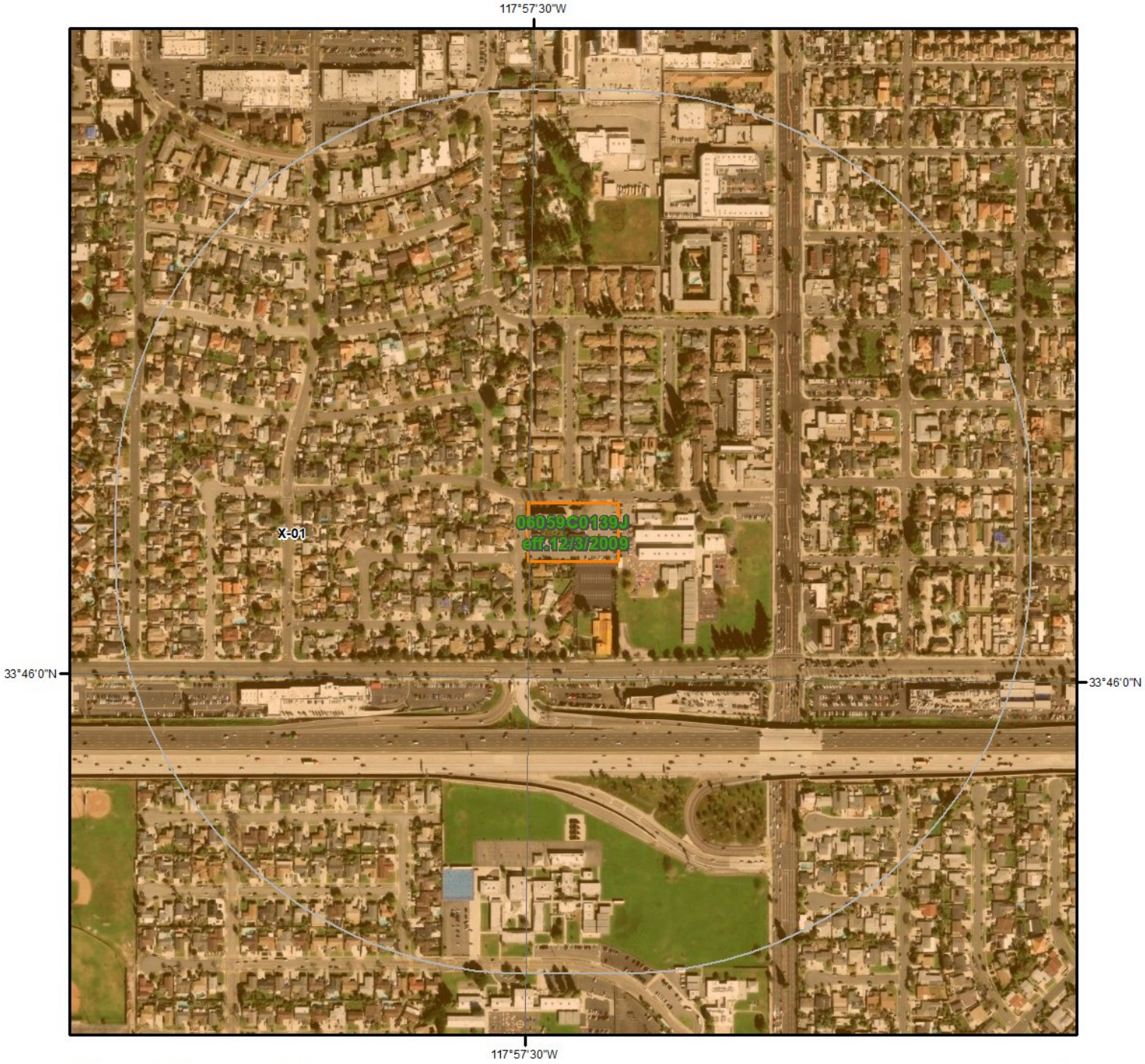
Hydrologic Information



Flood Hazard Zones

This map shows FEMA flood hazard zones based on FEMA's National Flood Hazard Layer. FIRM Panels are overlayed. An absent FIRM panel represents no data available.

Miles
0 0.075 0.15

N

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Open Water

Quadrangle(s): Anaheim,CA

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Hydrologic Information

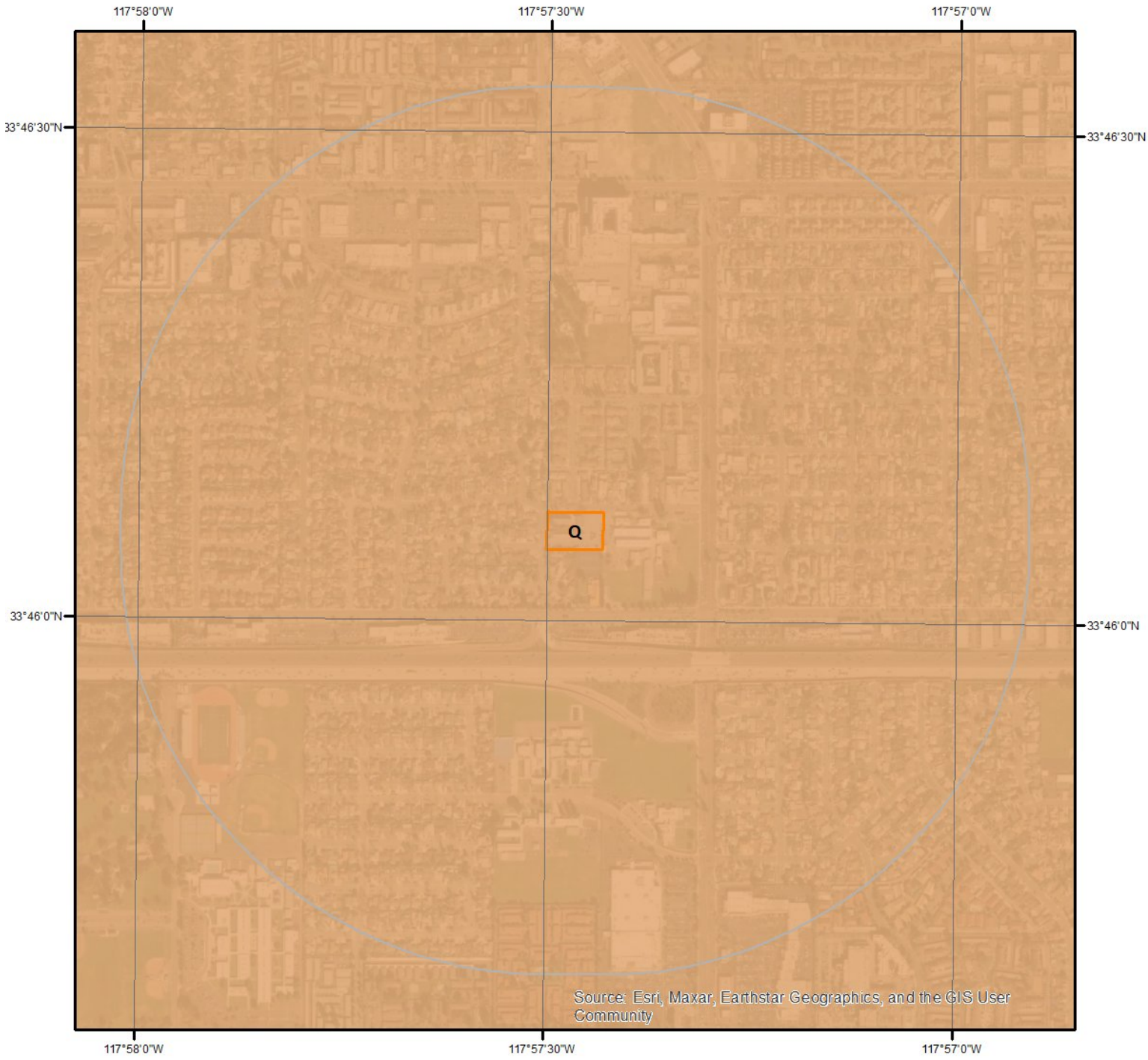
The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	06059C0139J(effective:2009-12-03)

Flood Zone X-01

Zone:	X
Zone subtype:	0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Geologic Information



Geologic Units

N

0 0.125 0.25 Miles

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

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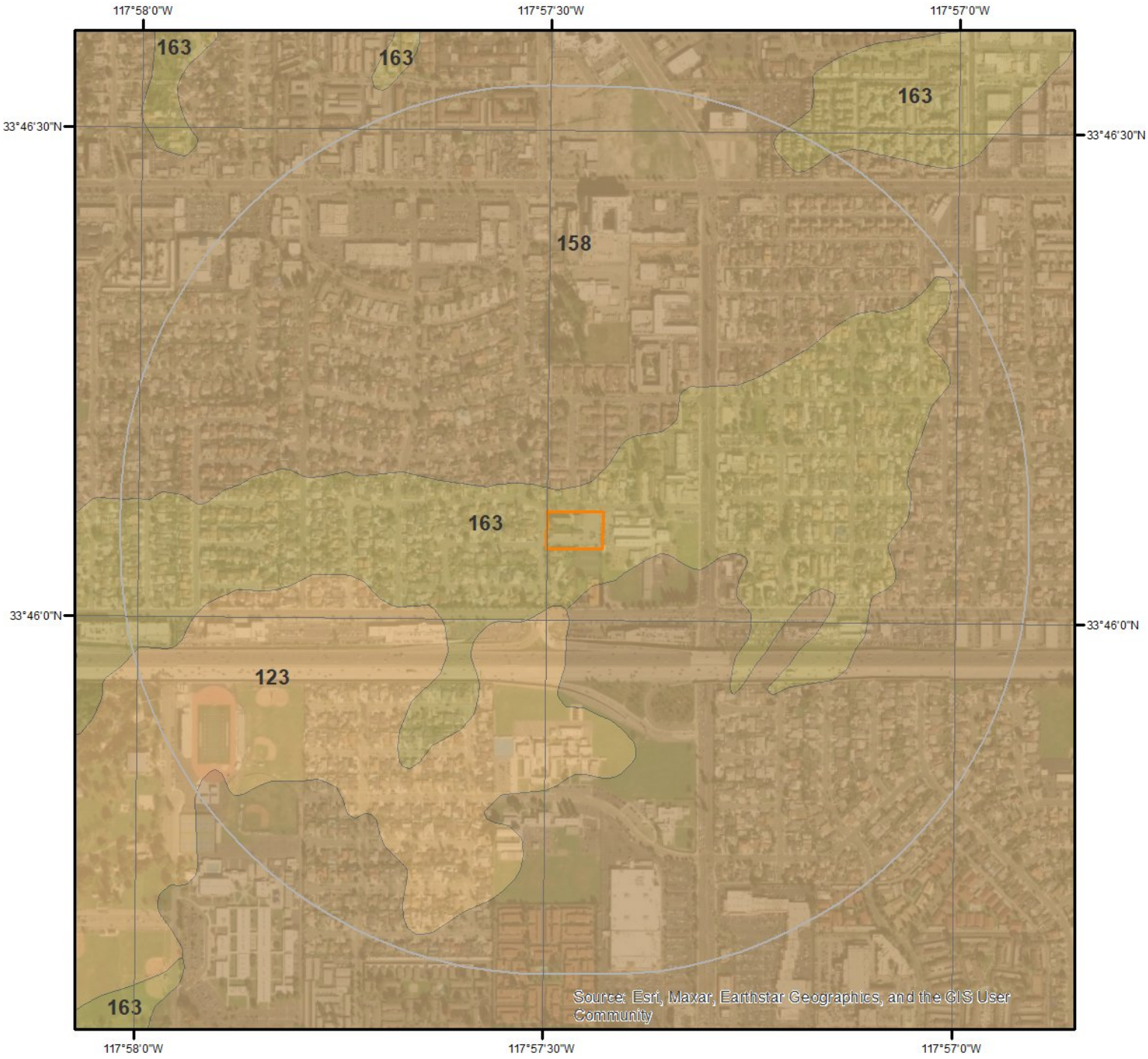
Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Q

Unit Name:	Quaternary alluvium and marine deposits
Unit Age:	Pleistocene to Holocene
Primary Rock Type:	Coarse-detrital
Secondary Rock Type:	
Unit Description:	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

Soil Information



SSURGO Soils

N

0 0.125 0.25 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

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Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 123 (0.5%)

Map Unit Name:	Bolsa silt loam, drained
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Bolsa(70%)

horizon Ap1(0cm to 15cm)	Silt loam
horizon Ap2(15cm to 30cm)	Silt loam
horizon C1(30cm to 46cm)	Silt loam
horizon C2(46cm to 74cm)	Silt loam
horizon C3(74cm to 99cm)	Silty clay loam
horizon C4(99cm to 124cm)	Silty clay loam
horizon C5(124cm to 140cm)	Silty clay loam
horizon Cg(140cm to 175cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 123 - Bolsa silt loam, drained

Component: Bolsa (70%)
The Bolsa component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans, coastal plains. The parent material consists of mixed alluvium derived from igneous, metamorphic and sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Hueneme (10%)
Generated brief soil descriptions are created for major soil components. The Hueneme soil is a minor component.

Component: Chino (10%)
Generated brief soil descriptions are created for major soil components. The Chino soil is a minor component.

Component: Metz (4%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: Omni (2%)
Generated brief soil descriptions are created for major soil components. The Omni soil is a minor component.

Component: San Emigdio (2%)
Generated brief soil descriptions are created for major soil components. The San Emigdio soil is a minor component.

Component: Bolsa (2%)
Generated brief soil descriptions are created for major soil components. The Bolsa soil is a minor component.

Soil Information

Map Unit 158 (45.24%)

Map Unit Name:	Hueneme fine sandy loam, drained
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Poorly drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Hueneme(85%)

horizon H1(0cm to 69cm)	Fine sandy loam
horizon H2(69cm to 152cm)	Stratified sand to silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 158 - Hueneme fine sandy loam, drained

Component: Hueneme (85%)
The Hueneme component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of stratified alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 1 This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. The soil has a very slightly saline horizon within 30 inches of the soil surface.

Component: San Emigdio (5%)
Generated brief soil descriptions are created for major soil components. The San Emigdio, FINE SANDY LOAM soil is a minor component.

Component: Bolsa (5%)
Generated brief soil descriptions are created for major soil components. The Bolsa, SILT LOAM, DRAINED soil is a minor component.

Component: Hueneme (5%)
Generated brief soil descriptions are created for major soil components. The Hueneme, FINE SANDY LOAM soil is a minor component.

Map Unit 163 (54.26%)

Map Unit Name:	Metz loamy sand
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Metz(80%)

horizon H1(0cm to 43cm)	Loamy sand
horizon H2(43cm to 160cm)	Stratified sand to fine sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 163 - Metz loamy sand

Soil Information

Component: Metz (80%)
The Metz component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Sandy (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: San Emigdio (4%)
Generated brief soil descriptions are created for major soil components. The San Emigdio soil is a minor component.

Component: Hueneme (4%)
Generated brief soil descriptions are created for major soil components. The Hueneme soil is a minor component.

Component: Riverwash (4%)
Generated brief soil descriptions are created for major soil components. The Riverwash soil is a minor component.

Component: Corralitos (4%)
Generated brief soil descriptions are created for major soil components. The Corralitos soil is a minor component.

Component: Metz (4%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

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Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	PWS ID	Distance (ft)	Direction
3	CA3000601	3234.51	SSW
11	CA3000596	4587.09	SSE

Safe Drinking Water Information System (SDWIS)

Map Key	PWS ID	Distance (ft)	Direction
3	CA3000601	3234.51	SSW
11	CA3000596	4587.09	SSE

USGS National Water Information System

Map Key	Site No	Distance (ft)	Direction
6	USGS-334637117580001	4159.80	NW
12	USGS-334548117562901	4816.84	ESE
13	USGS-334601117582401	4845.57	W

State Sources

Oil and Gas Wells

Map Key	API No	Distance (ft)	Direction
10	0405901160	4399.66	ENE

Periodic Groundwater Level Measurement Locations

Map Key	Site Code	Distance (ft)	Direction
5	337744N1179482W001	3467.26	NE
7	337770N1179685W001	4367.79	NW
8	337680N1179728W001	4400.13	W
9	337779N1179480W001	4386.24	NE
9	337779N1179480W003	4386.24	NE
9	337779N1179480W002	4386.24	NE
14	337632N1179423W001	4830.36	ESE
15	337588N1179714W001	5169.97	SW

Well Completion Reports

Map Key	WCR No	Distance (ft)	Direction
1	WCR0063856	1756.60	WSW
1	WCR2003-014554	1756.60	WSW
1	WCR2002-012376	1756.60	WSW
1	WCR0089995	1756.60	WSW
1	WCR1951-002234	1756.60	WSW
1	WCR0211065	1756.60	WSW

Wells and Additional Sources Summary

1	WCR1916-000053	1756.60	WSW
1	WCR2005-016303	1756.60	WSW
1	WCR1951-002233	1756.60	WSW
1	WCR1916-000098	1756.60	WSW
1	WCR2003-014553	1756.60	WSW
1	WCR2005-016302	1756.60	WSW
1	WCR0192657	1756.60	WSW
2	WCR2018-006771	3012.72	NE
2	WCR2018-006773	3012.72	NE
2	WCR2018-006770	3012.72	NE
2	WCR2018-006772	3012.72	NE
4	WCR2013-011024	3406.52	E
4	WCR1991-018197	3406.52	E
4	WCR1994-012639	3406.52	E
4	WCR2000-012810	3406.52	E
4	WCR1996-011170	3406.52	E
4	WCR0188896	3406.52	E
4	WCR0018492	3406.52	E
4	WCR1994-012638	3406.52	E
4	WCR2003-011639	3406.52	E
4	WCR0048313	3406.52	E
4	WCR0213456	3406.52	E
4	WCR0101687	3406.52	E
4	WCR2015-002061	3406.52	E
4	WCR2003-013248	3406.52	E
4	WCR2000-012811	3406.52	E
4	WCR0312206	3406.52	E
4	WCR0004384	3406.52	E
4	WCR1994-012641	3406.52	E
4	WCR2015-002048	3406.52	E
4	WCR0317682	3406.52	E
4	WCR1996-009469	3406.52	E
4	WCR2000-010560	3406.52	E
4	WCR2015-001904	3406.52	E
4	WCR2004-011703	3406.52	E
4	WCR2000-010588	3406.52	E
4	WCR2015-002050	3406.52	E
4	WCR1982-006459	3406.52	E
4	WCR0245173	3406.52	E
4	WCR1925-000213	3406.52	E
4	WCR1913-000197	3406.52	E
4	WCR0218899	3406.52	E
4	WCR2000-010559	3406.52	E
4	WCR0048314	3406.52	E
4	WCR2015-002052	3406.52	E
4	WCR1995-009635	3406.52	E
4	WCR1913-000112	3406.52	E
4	WCR2013-011023	3406.52	E
4	WCR2003-014689	3406.52	E
4	WCR2015-001907	3406.52	E
4	WCR1994-012635	3406.52	E
4	WCR0109811	3406.52	E
4	WCR0032803	3406.52	E
4	WCR1952-001800	3406.52	E
4	WCR0032802	3406.52	E
4	WCR0162237	3406.52	E
4	WCR0159395	3406.52	E
4	WCR0089994	3406.52	E
4	WCR0199919	3406.52	E
4	WCR0135543	3406.52	E
4	WCR2015-002047	3406.52	E
4	WCR2015-001906	3406.52	E
4	WCR2015-002051	3406.52	E
4	WCR1995-010624	3406.52	E
4	WCR2015-001905	3406.52	E
4	WCR0289442	3406.52	E

Wells and Additional Sources Summary

4	WCR1993-010775	3406.52	E
4	WCR0151862	3406.52	E
4	WCR2015-002060	3406.52	E
4	WCR2004-014549	3406.52	E
4	WCR0048315	3406.52	E
4	WCR1952-001801	3406.52	E
4	WCR0099525	3406.52	E
4	WCR2015-002049	3406.52	E
4	WCR1994-012640	3406.52	E
16	WCR2001-012359	5235.98	NNE
16	WCR2015-001794	5235.98	NNE
16	WCR0216525	5235.98	NNE
16	WCR1935-000227	5235.98	NNE
16	WCR2015-001797	5235.98	NNE
16	WCR2001-014491	5235.98	NNE
16	WCR1991-020973	5235.98	NNE
16	WCR0004415	5235.98	NNE
16	WCR1998-010754	5235.98	NNE
16	WCR1952-001717	5235.98	NNE
16	WCR2015-001793	5235.98	NNE
16	WCR2010-010358	5235.98	NNE
16	WCR1916-000043	5235.98	NNE
16	WCR1987-014318	5235.98	NNE
16	WCR1997-010365	5235.98	NNE
16	WCR2015-001792	5235.98	NNE
16	WCR0098806	5235.98	NNE
16	WCR1998-010753	5235.98	NNE
16	WCR2010-010357	5235.98	NNE
16	WCR0124850	5235.98	NNE
16	WCR1916-000105	5235.98	NNE
16	WCR2015-001796	5235.98	NNE
16	WCR2010-010356	5235.98	NNE
16	WCR1776-008728	5235.98	NNE
16	WCR2015-001798	5235.98	NNE
16	WCR2015-001795	5235.98	NNE
16	WCR1992-017555	5235.98	NNE
16	WCR1998-010752	5235.98	NNE
16	WCR0269481	5235.98	NNE
16	WCR2010-010355	5235.98	NNE
16	WCR0089617	5235.98	NNE

Public Water Systems Violations and Enforcement Data

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	SSW	0.61	3,234.51	61.97	PWSV

PWS ID:	CA3000601
PWS Type Code:	CWS
PWS Type Description:	Community water system
Primary Source Code:	GW
Primary Source Desc:	Ground water
PWS Activity Code:	I
PWS Activity Description:	Inactive
PWS Deactivation Date:	09/01/1981
Zip Code:	
Phone No:	
Phone Ext No:	
Admin Name:	OCEAN BREEZE TRAILER PARK
Alt Phone No:	
Email Addr:	
Fax No:	
Cds ID:	
Population Served Count:	190
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Gw Sw Code:	GW
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Source Water Protection:	
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Lt2 Schedule Cat Code:	
Last Reported Date:	07/24/1995
Org Name:	
Outstanding Perform Begin Date:	
Owner Type:	
Pop Cat 11:	101-500
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Season Begin Date:	01-01

Wells and Additional Sources Detail Report

Season End Date:	12-31
Service Connections Count:	0
Submission Status Code:	Y
Submissionyearquarter:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin Date:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	SSE	0.87	4,587.09	62.50	PWSV

PWS ID:	CA3000596
PWS Type Code:	CWS
PWS Type Description:	Community water system
Primary Source Code:	GW
Primary Source Desc:	Ground water
PWS Activity Code:	I
PWS Activity Description:	Inactive
PWS Deactivation Date:	11/01/1993
Zip Code:	92643
Phone No:	
Phone Ext No:	
Admin Name:	GARDEN GROVE ACRES01
Alt Phone No:	
Email Addr:	
Fax No:	
Cds ID:	
Population Served Count:	220
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Gw Sw Code:	GW
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Source Water Protection:	

Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Lt2 Schedule Cat Code:	
Last Reported Date:	07/24/1995
Org Name:	
Outstanding Perform Begin Date:	
Owner Type:	
Pop Cat 11:	101-500
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	168
Submission Status Code:	Y
Submissionyearquarter:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin Date:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	Orange

Safe Drinking Water Information System (SDWIS)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	SSW	0.61	3,234.51	61.97	SDWIS

PWS ID:	CA3000601
PWS Type Code:	CWS
PSW Type:	Community water system
Primary Source Code:	GW
Primary Source:	Ground water
Pws Activity Code:	I
Activity:	Inactive
PWS Deactivation Dt:	09/01/1981
Phone No:	
Phone Ext No:	
Admin Name:	OCEAN BREEZE TRAILER PARK

Wells and Additional Sources Detail Report

Alt Phone No:	
Email Addr:	
Fax No:	
Cds ID:	
Population Served Count:	190
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	07/24/1995
Org Name:	
Outstanding Perform Begin Date:	
Owner Type:	
Pop Cat 11:	101-500
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	0
Submission Yr Qtr:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	SSE	0.87	4,587.09	62.50	SDWIS

PWS ID: CA3000596

Wells and Additional Sources Detail Report

PWS Type Code:	CWS
PSW Type:	Community water system
Primary Source Code:	GW
Primary Source:	Ground water
Pws Activity Code:	I
Activity:	Inactive
PWS Deactivation Dt:	11/01/1993
Phone No:	
Phone Ext No:	
Admin Name:	GARDEN GROVE ACRES01
Alt Phone No:	
Email Addr:	
Fax No:	
Cds ID:	
Population Served Count:	220
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	07/24/1995
Org Name:	
Outstanding Perform Begin Date:	
Owner Type:	
Pop Cat 11:	101-500
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	168
Submission Yr Qtr:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	

Source Protection Begin Date:
City Served:
County Served: Orange

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	NW	0.79	4,159.80	74.79	FED USGS

Site No: USGS-334637117580001
Site Type: Well
Formation Type:
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 004S010W31P001S
Latitude: 33.77696058000000
Longitude: -117.9675596000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
12	ESE	0.91	4,816.84	77.67	FED USGS

Site No: USGS-334548117562901
Site Type: Well
Formation Type:
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth: 987
Well Hole Depth Unit: ft
Reporting Agency: USGS California Water Science Center
Station Name: 005S010W05J002S
Latitude: 33.76334989000000
Longitude: -117.9422808000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.92	4,845.57	63.29	FED USGS

Site No: USGS-334601117582401
Site Type: Well
Formation Type:
Date Drilled:

Well Depth:	960
Well Depth Unit:	ft
Well Hole Depth:	
Well Hole Depth Unit:	
Reporting Agency:	USGS California Water Science Center
Station Name:	005S011W01H002S
Latitude:	33.76696070000000
Longitude:	-117.9742263000000

Oil and Gas Wells

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	ENE	0.83	4,399.66	87.10	OGW

API No:	0405901160	Directional:	
All Well Key:		BLM Well:	
OP Well ID:		EPA Well:	
OID:		Operator Code:	C5640
Well No:	1	Operator Name:	Chevron U.S.A. Inc.
Well Status:	Plugged	Operator St:	
Well Stat Desc:	Plugged	County APIC:	
Well Type:	DH	District:	Southern
Well Type Desc:	Dry Hole	Geo District:	
Well Symbol:	PluggedDH	Field Code:	
Well Sym Desc:		Field Name:	Any Field
Release Date:		Area Code:	
Completion Date:		Area Name:	Any Area
Abandoned Date:		County Name:	Orange
Lease Name:	Chaffee	Section:	32
Elevation:		Township:	04S
Total Depth:		Range:	10W
Redrilled Depth:		Lat27:	
Redrill Cancel Flag:		Long27:	
Dryhole:		Lat83:	33.77463913
Confidential:		Long83:	-117.94469452
Confidential Well:	No	Base Meridian:	SB
Directional Drilled:	No	GIS Source Code:	hud
Hydr Fractured:		INHPZ:	Verified HPZ
Well Design:	Chaffee 1		
Location:			
Place:	Garden Grove		
Source83 Desc:	Heads Up Digitized - Coordinates generated from scanned, geo-referenced, static scale, Mylar maps		
URL:			

Periodic Groundwater Level Measurement Locations

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	NE	0.66	3,467.26	84.75	MONITOR WELLS

Station ID:	38658	Basin Region Desc:	North Lahontan
Site Code:	337744N1179482W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	04S10W32Q002S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	85.32000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	85.32000	GSE Accuracy:	Unknown
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.77440
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.94820
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	04S10W32Q002S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	NW	0.83	4,367.79	73.35	MONITOR WELLS

Station ID:	5235	Basin Region Desc:	North Lahontan
Site Code:	337770N1179685W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	04S10W31P001S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	74.21000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	73.83000	GSE Accuracy:	Unknown
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.77700
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.96850
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	04S10W31P001S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
8	W	0.83	4,400.13	63.98	MONITOR WELLS

Station ID:	25333	Basin Region Desc:	North Lahontan
Site Code:	337680N1179728W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	05S11W01H001S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	64.97000

Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	64.97000	GSE Accuracy:	Unknown
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.76800
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.97280
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	05S11W01H001S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	NE	0.83	4,386.24	88.33	MONITOR WELLS

Station ID:	47312	Basin Region Desc:	North Lahontan
Site Code:	337779N1179480W001	Basin Region Actv:	Y
WCR No:	349227,28	Basin Region Order:	8
State Well No:	04S10W32K001S	WLM Method:	
Well Depth:	2058.00000	WLM Accuracy:	
Well Use:	Observation	Ground Surf Elevtn:	87.91000
Monitoring Program:	SGMA	GSE Method:	Surveyed to a benchmark
RPE:	87.19000	GSE Accuracy:	0.1 ft.
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.77785
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.94804
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	GGM-1/MP1		
Well Type:	Part of a nested/multi-completion well		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	NE	0.83	4,386.24	88.33	MONITOR WELLS

Station ID:	47314	Basin Region Desc:	North Lahontan
Site Code:	337779N1179480W003	Basin Region Actv:	Y
WCR No:	349227,28	Basin Region Order:	8
State Well No:		WLM Method:	
Well Depth:	2058.00000	WLM Accuracy:	
Well Use:	Observation	Ground Surf Elevtn:	87.91000
Monitoring Program:	SGMA	GSE Method:	Surveyed to a benchmark
RPE:	87.19000	GSE Accuracy:	0.1 ft.
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.77785
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.94804
Basin Region Code:	8		
Continuous Data Station			

No:
Well Name: GGM-1/MP8
Well Type: Part of a nested/multi-completion well

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	NE	0.83	4,386.24	88.33	MONITOR WELLS

Station ID:	47313	Basin Region Desc:	North Lahontan
Site Code:	337779N1179480W002	Basin Region Actv:	Y
WCR No:	349227,28	Basin Region Order:	8
State Well No:		WLM Method:	
Well Depth:	2058.00000	WLM Accuracy:	
Well Use:	Observation	Ground Surf Elevtn:	87.91000
Monitoring Program:	SGMA	GSE Method:	Surveyed to a benchmark
RPE:	87.19000	GSE Accuracy:	0.1 ft.
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.77785
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.94804
Basin Region Code:	8		
Continuous Data Station No:			

Well Name: GGM-1/MP13
Well Type: Part of a nested/multi-completion well

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
14	ESE	0.91	4,830.36	77.89	MONITOR WELLS

Station ID:	25151	Basin Region Desc:	North Lahontan
Site Code:	337632N1179423W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	05S10W05R002S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	77.91000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	77.91000	GSE Accuracy:	Unknown
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.76320
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.94230
Basin Region Code:	8		
Continuous Data Station No:			

Well Name: 05S10W05R002S
Well Type: Unknown

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	SW	0.98	5,169.97	57.61	MONITOR WELLS

Wells and Additional Sources Detail Report

Station ID:	28371	Basin Region Desc:	North Lahontan
Site Code:	337588N1179714W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	05S10W07D003S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	55.64000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	56.22000	GSE Accuracy:	Unknown
Basin ID:	197	County Name:	Orange
Basin Code:	8-001	Latitude:	33.75880
Basin Name:	Coastal Plain Of Orange County	Longitude:	-117.97140
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	05S10W07D003S		
Well Type:	Unknown		

Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR0063856
Location:	
City:	
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR2003-014554
Location:	9011 Westminster Ave, Magnolia St
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	9011 Westminster Ave, Magnolia St
City(OSWCR):	Garden Grove

County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No: WCR2002-012376
Location: 9001 Garden Grove Blvd
City: Garden Grove
County: Orange
Decimal Latitude: 33.767
Decimal Longitude: -117.964
Location(OSWCR): 9001 Garden Grove Blvd
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No: WCR0089995
Location:
City:
County: Orange
Decimal Latitude: 33.767
Decimal Longitude: -117.964
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No: WCR1951-002234
Location: WRIGHT ST,17TH ST
City:
County: Orange

Decimal Latitude: 33.767
Decimal Longitude: -117.964
Location(OSWCR): WRIGHT ST,17TH ST
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No: WCR0211065
Location:
City:
County: Orange
Decimal Latitude: 33.767
Decimal Longitude: -117.964
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No: WCR1916-000053
Location: EMFRAL AVE, OCEAN AVE, WRIGHT ST
City:
County: Orange
Decimal Latitude: 33.767
Decimal Longitude: -117.964
Location(OSWCR): EMFRAL AVE, OCEAN AVE, WRIGHT ST
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

Wells and Additional Sources Detail Report

WCR No:	WCR2005-016303
Location:	8990 Westminster Avenue
City:	Westminster
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	8990 Westminster Avenue
City(OSWCR):	Westminster
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR1951-002233
Location:	WRIGHT AVE, 17TH ST
City:	
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	WRIGHT AVE, 17TH ST
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR1916-000098
Location:	EMFRAL AVE, OCEAN AVE, WRIGHT ST
City:	
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	EMFRAL AVE, OCEAN AVE, WRIGHT ST
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Wells and Additional Sources Detail Report

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR2003-014553
Location:	9011 Westminster Ave, Magnolia St
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	9011 Westminster Ave, Magnolia St
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR2005-016302
Location:	8990 Westminster Avenue
City:	Westminster
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	8990 Westminster Avenue
City(OSWCR):	Westminster
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.767
Decim Long(OSWCR):	-117.964
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	WSW	0.33	1,756.60	69.87	WATER WELLS

WCR No:	WCR0192657
Location:	
City:	
County:	Orange
Decimal Latitude:	33.767
Decimal Longitude:	-117.964
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange

Decimal Lat(OSWCR): 33.767
Decim Long(OSWCR): -117.964
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NE	0.57	3,012.72	80.76	WATER WELLS

WCR No: WCR2018-006771
Location: 10510 Garden Grove BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7732
Decimal Longitude: -117.949
Location(OSWCR): 10510 Garden Grove BLVD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7732
Decim Long(OSWCR): -117.949
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NE	0.57	3,012.72	80.76	WATER WELLS

WCR No: WCR2018-006773
Location: 10510 Garden Grove BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7732
Decimal Longitude: -117.949
Location(OSWCR): 10510 Garden Grove BLVD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7732
Decim Long(OSWCR): -117.949
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NE	0.57	3,012.72	80.76	WATER WELLS

WCR No: WCR2018-006770
Location: 10510 Garden Grove BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7732

Decimal Longitude:	-117.949
Location(OSWCR):	10510 Garden Grove BLVD
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7732
Decim Long(OSWCR):	-117.949
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NE	0.57	3,012.72	80.76	WATER WELLS

WCR No:	WCR2018-006772
Location:	10510 Garden Grove BLVD
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7732
Decimal Longitude:	-117.949
Location(OSWCR):	10510 Garden Grove BLVD
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7732
Decim Long(OSWCR):	-117.949
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2013-011024
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1991-018197

Wells and Additional Sources Detail Report

Location:	13222 Brookhurst
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13222 Brookhurst
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1994-012639
Location:	13331 EUCLID BLVD
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13331 EUCLID BLVD
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2000-012810
Location:	9972 Westminster Avenue
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	9972 Westminster Avenue
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1996-011170
Location:	BROOKHURST
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	BROOKHURST
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0188896
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0018492
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671

Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1994-012638
Location: 13331 EUCLID BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 13331 EUCLID BLVD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2003-011639
Location: 13954 Mills Rd
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 13954 Mills Rd
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0048313
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946

Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0213456
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0101687
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2015-002061
Location: 11162 Garden Grove Blvd

City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2003-013248
Location:	13482 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13482 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2000-012811
Location:	13842 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13842 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0312206
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0004384
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1994-012641
Location: 13331 EUCLID BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 13331 EUCLID BLVD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671

Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-002048
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0317682
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1996-009469
Location:	13482 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946

Wells and Additional Sources Detail Report

Location(OSWCR):	13482 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2000-010560
Location:	9972 Westminster Avenue
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	9972 Westminster Avenue
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-001904
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2004-011703
Location:	13482 Brookhurst Street

City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13482 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2000-010588
Location:	13842 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13842 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-002050
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1982-006459
Location:	WOODBURY, TAFT
City:	Graden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	WOODBURY, TAFT
City(OSWCR):	Graden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0245173
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1925-000213
Location:	WRIGHT ST, OCEAN AVE, GARDEN GROVE
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	WRIGHT ST, OCEAN AVE, GARDEN GROVE
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671

Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1913-000197
Location:	VERANO ST, TRASK AVE, OCEAN AVE
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	VERANO ST, TRASK AVE, OCEAN AVE
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0218899
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2000-010559
Location:	WESTMINSTER AVENUE
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946

Location(OSWCR): WESTMINSTER AVENUE
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0048314
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2015-002052
Location: 11162 Garden Grove Blvd
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 11162 Garden Grove Blvd
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1995-009635
Location: 13482 Brookhurst Street

City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13482 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1913-000112
Location:	VERANO ST, TRASK AVE, OCEAN AVE
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	VERANO ST, TRASK AVE, OCEAN AVE
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2013-011023
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2003-014689
Location:	10972 Westminster Avenue
City:	Westminster
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	10972 Westminster Avenue
City(OSWCR):	Westminster
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-001907
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1994-012635
Location:	13331 Euclid
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13331 Euclid
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671

Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0109811
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0032803
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1952-001800
Location: E WESTMINSTER BLVD, 17TH ST, TAFT
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946

Location(OSWCR): E WESTMINSTER BLVD, 17TH ST, TAFT
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0032802
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0162237
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0159395
Location:

City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0089994
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0199919
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0135543
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-002047
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-001906
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671

Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-002051
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1995-010624
Location:	13502 BROOKHURST
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	13502 BROOKHURST
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR2015-001905
Location:	11162 Garden Grove Blvd
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946

Wells and Additional Sources Detail Report

Location(OSWCR):	11162 Garden Grove Blvd
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0289442
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR1993-010775
Location:	10972 Westminster Avenue
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7671
Decimal Longitude:	-117.946
Location(OSWCR):	10972 Westminster Avenue
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7671
Decim Long(OSWCR):	-117.946
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No:	WCR0151862
Location:	

City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2015-002060
Location: 11162 Garden Grove Blvd
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 11162 Garden Grove Blvd
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2004-014549
Location: 13511 Euclid Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 13511 Euclid Street
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0048315
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1952-001801
Location: TAFT ST, 17TH ST, VERANO RD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): TAFT ST, 17TH ST, VERANO RD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR0099525
Location:
City:
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671

Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR2015-002049
Location: 11162 Garden Grove Blvd
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 11162 Garden Grove Blvd
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.65	3,406.52	77.31	WATER WELLS

WCR No: WCR1994-012640
Location: 13331 EUCLID BLVD
City: Garden Grove
County: Orange
Decimal Latitude: 33.7671
Decimal Longitude: -117.946
Location(OSWCR): 13331 EUCLID BLVD
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7671
Decim Long(OSWCR): -117.946
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2001-012359
Location:
City:
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95

Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2015-001794
Location: 12012 Brookhurst Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR): 12012 Brookhurst Street
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR0216525
Location:
City:
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR):
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR1935-000227
Location: VALENCIA, BROOKHURST, NICHOLS

City:	FULLERTON
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	VALENCIA, BROOKHURST, NICHOLS
City(OSWCR):	FULLERTON
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2015-001797
Location:	12012 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12012 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2001-014491
Location:	12012 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12012 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1991-020973
Location:	BROOKHURST ST, BROOKHURST WAY, STANFORD
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	BROOKHURST ST, BROOKHURST WAY, STANFORD
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR0004415
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1998-010754
Location:	BROCKHURST, CHAPMAN
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	BROCKHURST, CHAPMAN
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816

Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR1952-001717
Location: BROOKHURST, CHAPMAN
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR): BROOKHURST, CHAPMAN
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2015-001793
Location: 12012 Brookhurst Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR): 12012 Brookhurst Street
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2010-010358
Location: 12711 Brookhurst Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95

Wells and Additional Sources Detail Report

Location(OSWCR):	12711 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1916-000043
Location:	OCEAN AVE, EUCLID AVE
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	OCEAN AVE, EUCLID AVE
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1987-014318
Location:	BROOKHURST ST, STANFORD AVE
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	BROOKHURST ST, STANFORD AVE
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1997-010365
Location:	SWC GARDEN GROVE BLVD & EUCLID

City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	SWC GARDEN GROVE BLVD & EUCLID
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2015-001792
Location:	12012 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12012 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR0098806
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1998-010753
Location:	BROCKHURST, CHAPMAN
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	BROCKHURST, CHAPMAN
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2010-010357
Location:	12711 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12711 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR0124850
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816

Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR1916-000105
Location: GARDEN GROVE, OCEAN AVE, EUCLID AVE
City:
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR): GARDEN GROVE, OCEAN AVE, EUCLID AVE
City(OSWCR):
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2015-001796
Location: 12012 Brookhurst Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95
Location(OSWCR): 12012 Brookhurst Street
City(OSWCR): Garden Grove
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.7816
Decim Long(OSWCR): -117.95
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No: WCR2010-010356
Location: 12711 Brookhurst Street
City: Garden Grove
County: Orange
Decimal Latitude: 33.7816
Decimal Longitude: -117.95

Location(OSWCR):	12711 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1776-008728
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2015-001798
Location:	12012 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12012 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2015-001795
Location:	12012 Brookhurst Street

City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12012 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1992-017555
Location:	STANFORD AVE, NUTWOOD ST
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	STANFORD AVE, NUTWOOD ST
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR1998-010752
Location:	BROCKHURST, CHAPMAN
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	BROCKHURST, CHAPMAN
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR0269481
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR2010-010355
Location:	12711 Brookhurst Street
City:	Garden Grove
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	12711 Brookhurst Street
City(OSWCR):	Garden Grove
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816
Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	NNE	0.99	5,235.98	88.94	WATER WELLS

WCR No:	WCR0089617
Location:	
City:	
County:	Orange
Decimal Latitude:	33.7816
Decimal Longitude:	-117.95
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.7816

Wells and Additional Sources Detail Report

Decim Long(OSWCR):	-117.95
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *ORANGE* County: **3**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *ORANGE* County

No Measures/Homes:	31
Geometric Mean:	0.5
Arithmetic Mean:	0.7
Median:	0.6
Standard Deviation:	0.7
Maximum:	2.2
% >4 pCi/L:	0
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of California conducted during 1989-90. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

This list of drinking water violations and enforcement actions is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database, as part of the national download of Safe Drinking Water Act (SDWA) data. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program, including monitoring, enforcement, and violation data related to requirements established by the SWDA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

This national download of Safe Drinking Water Act (SDWA) data is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program related to requirements established by the Safe Drinking Water Act (SDWA). Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey's (USGS) National Water Information System (NWIS) is the nation's principal repository of water resources data. The data includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS database information is obtained through the Water Quality Data Portal (WQP). The WQP

is a cooperative service sponsored by the USGS, the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC).

State Sources

Oil and Gas Wells **OGW**

The California Department of Conservation, Geologic Energy Management Division (CalGEM) provides this oil and gas wells dataset. CalGEM makes no warranties, whether expressed or implied, and the data is for informational purposes.

Periodic Groundwater Level Measurement Locations **MONITOR WELLS**

Locations of groundwater level monitoring wells in the Department of Water Resources (DWR)'s Periodic Groundwater Levels dataset. The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies.

Well Completion Reports **WATER WELLS**

List of wells from the Well Completion Reports data made available by the California Department of Water Resources' (DWR) Online System for Well Completion Reports (OSWCR). Please note that the majority of well completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System section that the well is located in.

Liability Notice

Reliance on information in Report: The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

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APPENDIX D: QUALIFICATIONS/INSURANCE

PARTNER

Richard Kim
Senior Project Manager

Education

Bachelor of Arts, Global Studies with an Emphasis on Socioeconomics and Asian American Studies, University of California Santa Barbara

Highlights

19 years experience in various environmental assessments

Phase I Environmental Site Assessments
Transaction Screen Assessments
Phase II Subsurface Investigations
Environmental Desktop Reports
Review of Environmental Assessment Reports

Experience Summary

Richard Kim currently holds the role of Senior Project Manager for Partner Engineering and Science, Inc. (Partner). His responsibilities include due diligence practices such as environmental desktop reports and Phase I Environmental Site Assessment (ESA) Reports on property types within the scope of the ASTM E1527-21/AAI Standard.

Mr. Kim is responsible for the duties performed within the scope of a Phase I ESA, including site inspection, historical research, document review, and interviews. He has experience working with a variety of site types, including commercial buildings, industrial properties, agricultural properties, special-use sites, and vacant land.

Mr. Kim has personally conducted site visits and managed over 3,000 projects across multiple states, covering commercial, industrial, special-use, and agricultural properties. His hands-on experience includes performing preliminary screenings, assessing on-site conditions, and supporting Phase II investigations. Additionally, he reviews Phase I ESA reports and other environmental due diligence documents to ensure accuracy, compliance with ASTM and EPA AAI standards, and overall quality before finalizing deliverables.

Contact

rkim@partneresi.com

PARTNER

Reese Davis
Project Assessor

Education
B.S. Geobiology, Penn State University, University Park, PA

Registrations
California Department of Real Estate, Salesperson License #02166383

Training
OSHA 40-Hour HAZWOPER and OSHA 8-Hour HAZWOPER Refreshers

Highlights
Phase I Environmental Site Assessments per ASTM E1527-21
Phase II Environmental Site Assessments per ASTM E1903-19
Subsurface Investigations
Environmental Desktop Reports

Experience Summary
Mr. Davis is a Project Assessor at Partner Engineering and Science, Inc. (Partner), with three years of experience conducting Phase I Environmental Site Assessments (ESAs) for a variety of commercial real estate property types and clients, according to the ASTM E1527-21 standard and the US Environmental Protection Agency (USEPA) All Appropriate Inquiries (AAI) requirements.

Additionally, Mr. Davis has three years of experience conducting Phase II ESAs, according to the ASTM E1903-19 standard and the USEPA AAI requirements, and four years of experience with subsurface investigations in the form of fieldwork and technical report preparation. Mr. Davis exhibits expertise in a variety of soil and groundwater sampling techniques.

Mr. Davis has worked on various large-scope projects, including commercial, multi-family residential, industrial, and agricultural use. Mr. Davis works closely with state and local agencies to identify environmental issues pertaining to tank removal and regional groundwater plumes.

Contact
reese.davis@partneresi.com

PARTNER

Robert Vaughn
Principal

Education

B.A., Environmental Health & Planning and Criminal Justice, University of California, Irvine

Registrations/Training

OSHA 40-Hour Hazwoper Health and Safety Training
EPA Accredited Asbestos Inspector
EPA Accredited Asbestos Management Planner
EPA Accredited Asbestos Abatement/Contractor Supervisor
HUD Map Underwriter Certification – 2004

Highlights

31 Years of Experience in National Environmental Due Diligence Consulting
Phase I Environmental Site Assessments
Phase II Subsurface Soil/Soil Gas Investigations
Property Condition Assessments
Asbestos/Lead-Based Paint Inspections

Experience Summary

Mr. Vaughn currently serves as a National Client Manager with significant environmental and due diligence engineering experience nationwide. Mr. Vaughn's experience includes two former Engineering News-Record Top 500 Design firms and a Fortune 500 firm. His responsibilities include full-phase environmental consulting, national client management, multi-scope contract negotiation/execution, portfolio project management, and technical report quality control. Mr. Vaughn's regional and national expertise compliments the wide variety of Partner projects and client types including prominent fast-food retail chains, attorneys, commercial developers, mortgage bankers, real estate brokers, individual investors, equity/institutional investment groups, and financial lending institutions, including CMBS lenders, SBA lenders, and GSA (Fannie and Freddie) lenders.

Mr. Vaughn has served as an environmental scientist, project manager, or executive senior author on over 20,000 real estate transactions. Mr. Vaughn's due diligence resume includes experience at all levels, advising lenders and real estate investors through the following product types:

- Phase I Environmental Site Assessments
- Phase II Subsurface Investigations
- Phase III Site Characterizations
- Remedial Cost Estimates
- Remediation Design and Implementation
- Facility Condition Assessments
- Property Condition Assessments
- Probable Maximum Loss Assessments
- Property Condition Evaluations
- Asbestos Surveys
- Lead-Based Surveys

Real estate investors, redevelopment agencies, financial institutions, insurance lenders, and real estate equity funds have come to rely on his advice and judgment to help them with their real estate business decisions. Mr. Vaughn is a dedicated professional who takes pride and pleasure in meeting his client's needs and spearheading and assembling the team with the expertise to handle any issue that may come up during the transaction.

Project Experience

Multi-Site Portfolio, Nationwide - Managed performance and delivery of summary matrix and completed Phase I reports for a 300+-site portfolio of apartments for a large stakeholder group.

Multi-Site Portfolio, Nationwide - Managed a 350+-site portfolio of bank branches for one of the largest bank mergers the mid-1990s.

High Rise Office Building, San Francisco - Worked on one of the largest high-rise acquisitions in San Francisco in 2015 to manage pre-acquisition due diligence for equity investor of a high rise office building in downtown San Francisco. Included a Phase I ESA, equity PCA with specialty evaluations of facade, MEP, Fire and Life Safety, Roof, and ADA.

Multi-Site Gas Station Portfolio, California - Managed performance and delivery of complete reports for a 25-site portfolio of gas stations for national lender.

Multi-Site Fast-Food Portfolio, Midwest - Managed the completion of 25 Phase I ESAs located in the Midwest in a 10-business day turnaround.

Affiliations

Environmental Banks Association
National Retail Tenants Association

Speaking

Due Diligence 101, National Retail Tenants Association, Orlando, FL.
Environmental Due Diligence: What You Don't Know Can Hurt You, National Retail Tenants Association, Reno NV.

Contact

rvaughn@partneresi.com

PALEONTOLOGICAL ASSESSMENT FOR THE 9822 RUSSELL AVENUE PROJECT

CITY OF GARDEN GROVE, ORANGE COUNTY, CALIFORNIA

APN 098-081-19

Prepared on Behalf of:

RE Consulting
5742 Calle Polvorosa
San Clemente, California 92673

Prepared for:

City of Garden Grove
11222 Acacia Parkway
Garden Grove, California 92840

Prepared by:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

December 24, 2025

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

Author:	Todd A. Wirths, M.S., P.G., Principal Paleontologist, California Professional Geologist No. 7588
Prepared by:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064
Report Date:	December 24, 2025
Report Title:	Paleontological Assessment for the 9822 Russell Avenue Project, City of Garden Grove, Orange County, California, APN 098-081-19
Prepared on Behalf of:	RE Consulting 5742 Calle Polvorosa San Clemente, California 92673
Prepared for:	City of Garden Grove 11222 Acacia Parkway Garden Grove, California 92840
Assessor's Parcel Number:	098-081-19
USGS Quadrangle:	Township 5 South, Range 10 West, on the USGS *Anaheim, California* (7.5-minute) topographic quadrangle
Study Area:	Approximately 1.8 acres
Key Words:	Paleontological assessment; Holocene alluvial deposits; low paleontological sensitivity; monitoring is not recommended.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the 9822 Russell Avenue Project to comply with the California Environmental Quality Act (CEQA) and City of Garden Grove environmental requirements. The project is located southeast of the intersection of Russell Avenue and Kerry Street in the city of Garden Grove, Orange County, California (Figures 1 and 2). The approximately 1.8-acre project consists of one parcel (Assessor's Parcel Number [APN] 098-081-19) and is situated within Township 5 South, Range 10 West, on the U.S. Geological Survey (USGS) *Anaheim, California* (7.5-minute) topographic quadrangle map (see Figure 2).

The project includes the demolition and replacement of the existing church and preschool buildings and the surrounding lot with a multi-family residential development, including associated parking and infrastructure (Figure 3). A remedial grading cut of two feet was recommended for the project, as well as a minimum one foot cut below the bottom of footings for residential structures within "existing" soils (Albus and Nguyen 2025).

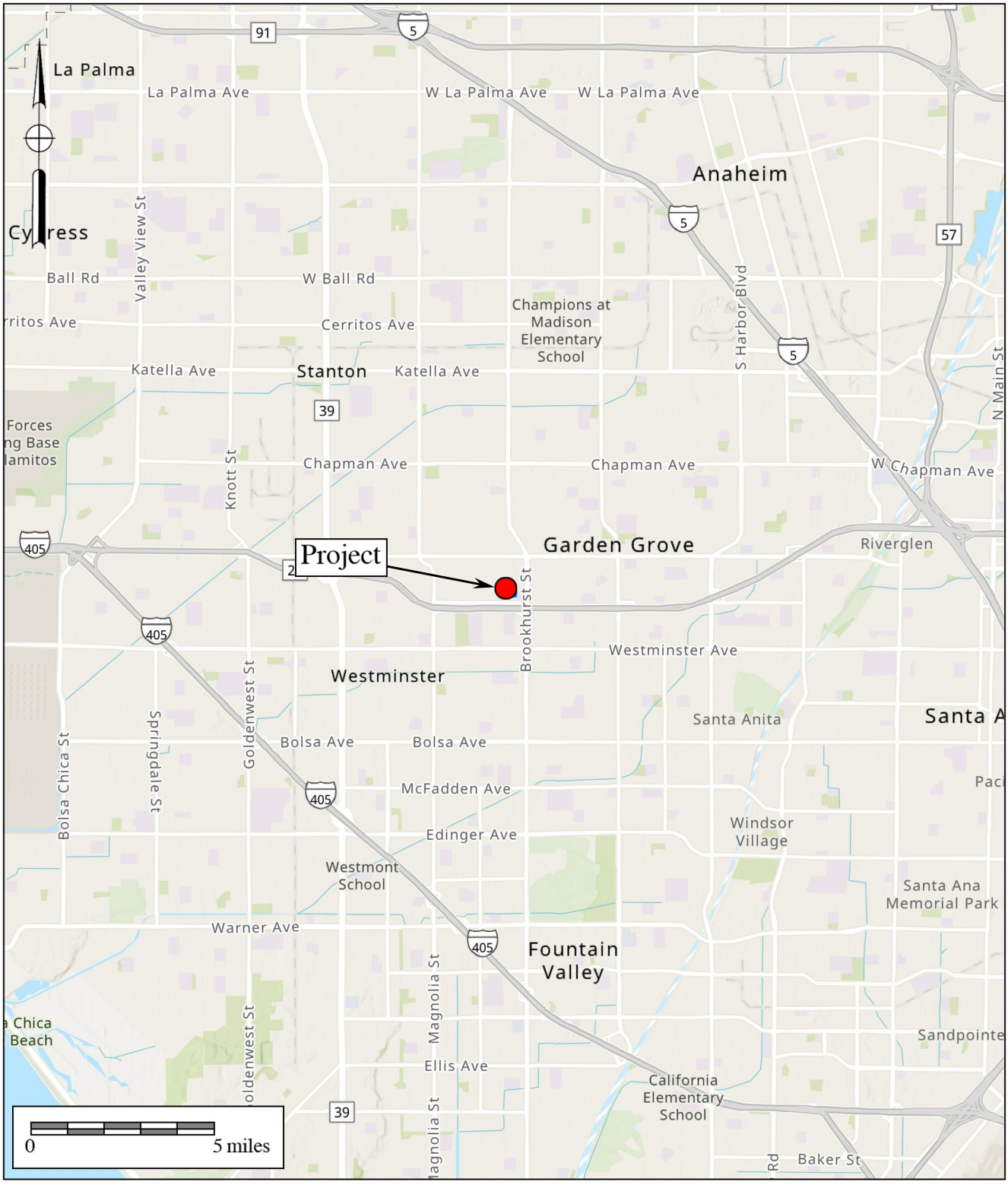
As the lead agency, the City of Garden Grove has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources, if necessary. A paleontological survey of the project was not performed, since the parcel is completely developed.

II. REGULATORY SETTING

CEQA, which is patterned after the National Environmental Policy Act, is the overriding regulation that sets the requirement for protecting California's cultural and paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact on the environment, determine whether the impacts are significant, and provide recommendations, if necessary.



BFSA Environmental Services
A Perennial Company

Figure 1

General Location Map

The 9822 Russell Avenue Project

ESRI World Topographic Map

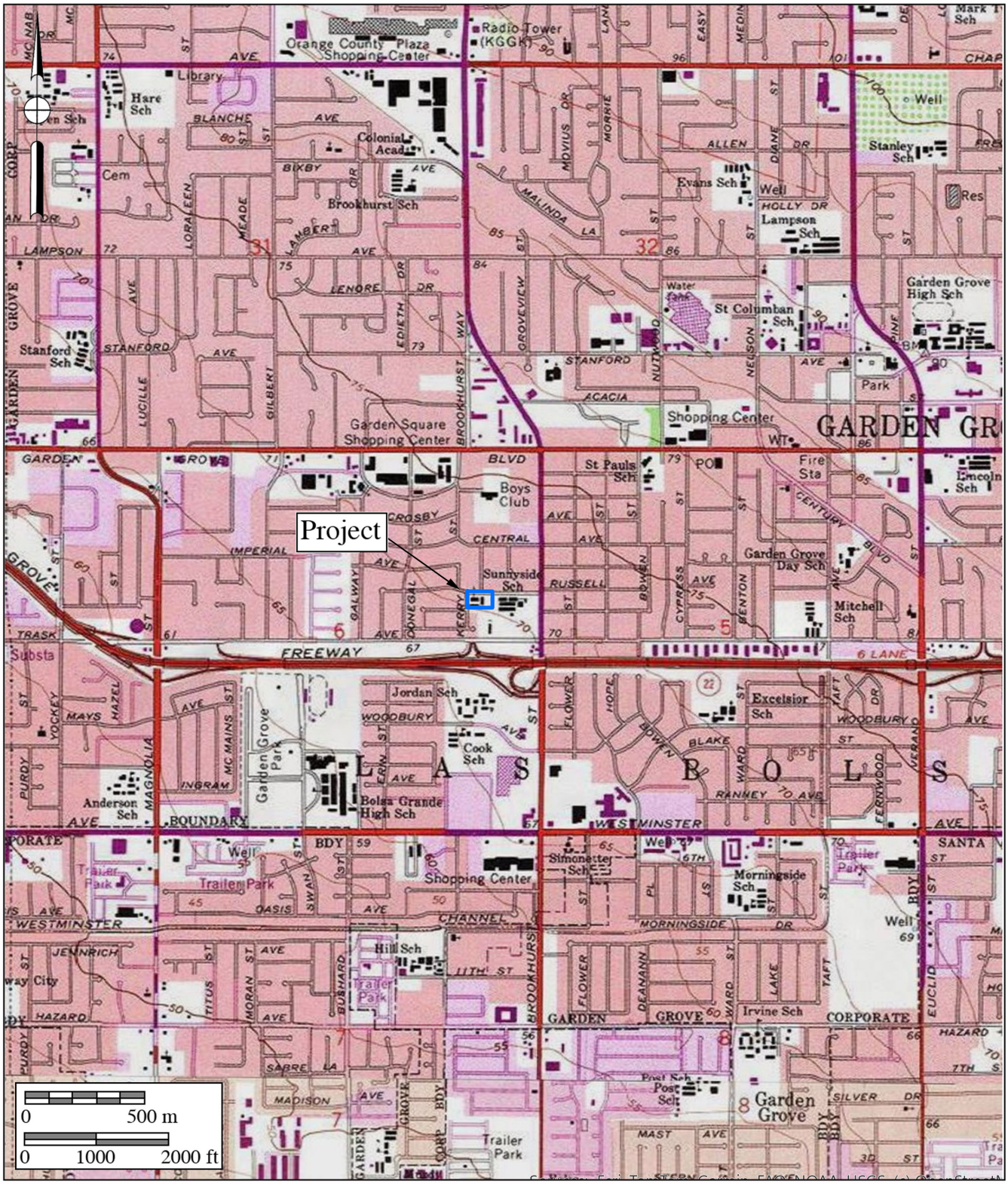


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Figure 2

Project Location Map

The 9822 Russell Avenue Project

USGS *Anaheim* and *Newport Beach* Quadrangles (7.5-minute series)

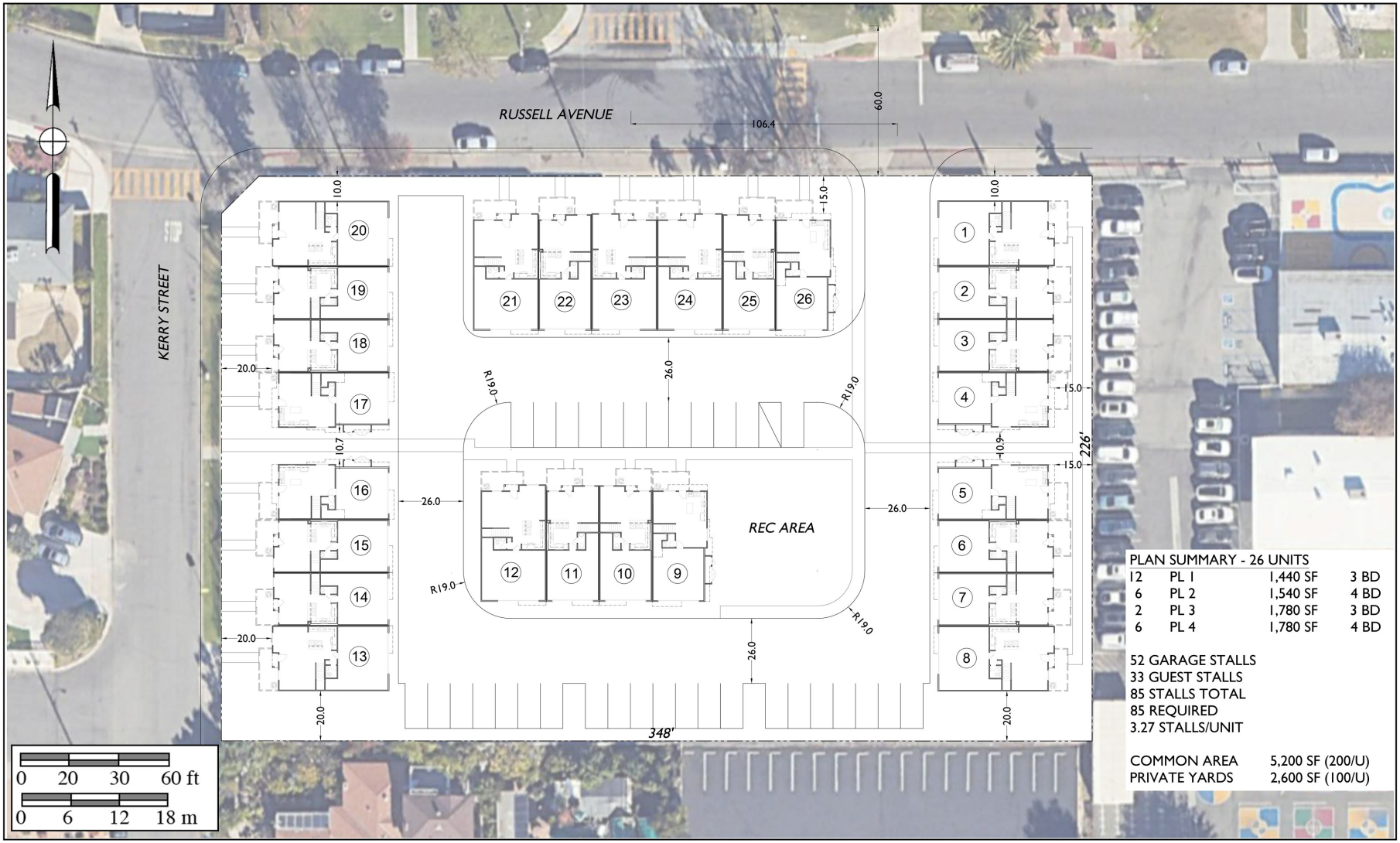

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Figure 3
Project Development Map
The 9822 Russell Avenue Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources including fossils, paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

City of Garden Grove

While the City's general plan does not specifically mention paleontological resources, they can be included under archeological/cultural resources, in which the general plan outlines policies and goals for their protection and preservation (City of Garden Grove 2008: 10-9).

III. GEOLOGY

The project is located within a broad, flat coastal plain composed of Holocene and late Pleistocene-aged young alluvium at the surface, within the southern part of the Los Angeles Basin (areas labeled as "Qyf_{sa}," "Qyf_{a}," and "Qya_{s}" on Figure 4, after Morton and Miller 2006; Hillhouse et al. 2002). These deposits are described as unconsolidated to moderately consolidated silty and sandy alluvial fan deposits (Morton and Miller 2006). During the Holocene, activity of the Santa Ana River points to widespread sheet flooding and wandering, as indicated by extensive and continuous "younger" sand and silt deposits (Greenwood and Pridmore 2001). The depth of the geologic age transition from Holocene to Pleistocene within the alluvial deposits is not known.

A geotechnical investigation was recently performed for the project by Albus & Associates, Inc. (Albus and Nguyen 2025). The investigation found that the project is covered by approximately two feet of compacted artificial fill, but locally thicker deposits of fill were anticipated under existing building pads. Alluvium underlying the fill extended to the maximum depth explored of 51 feet and generally consisted of silty sands to a depth of approximately 10 feet, in turn overlying sandy silts and sands with various amounts of silt. Albus and Nguyen (2025) did not speculate on the geologic age of the alluvium encountered at the project.

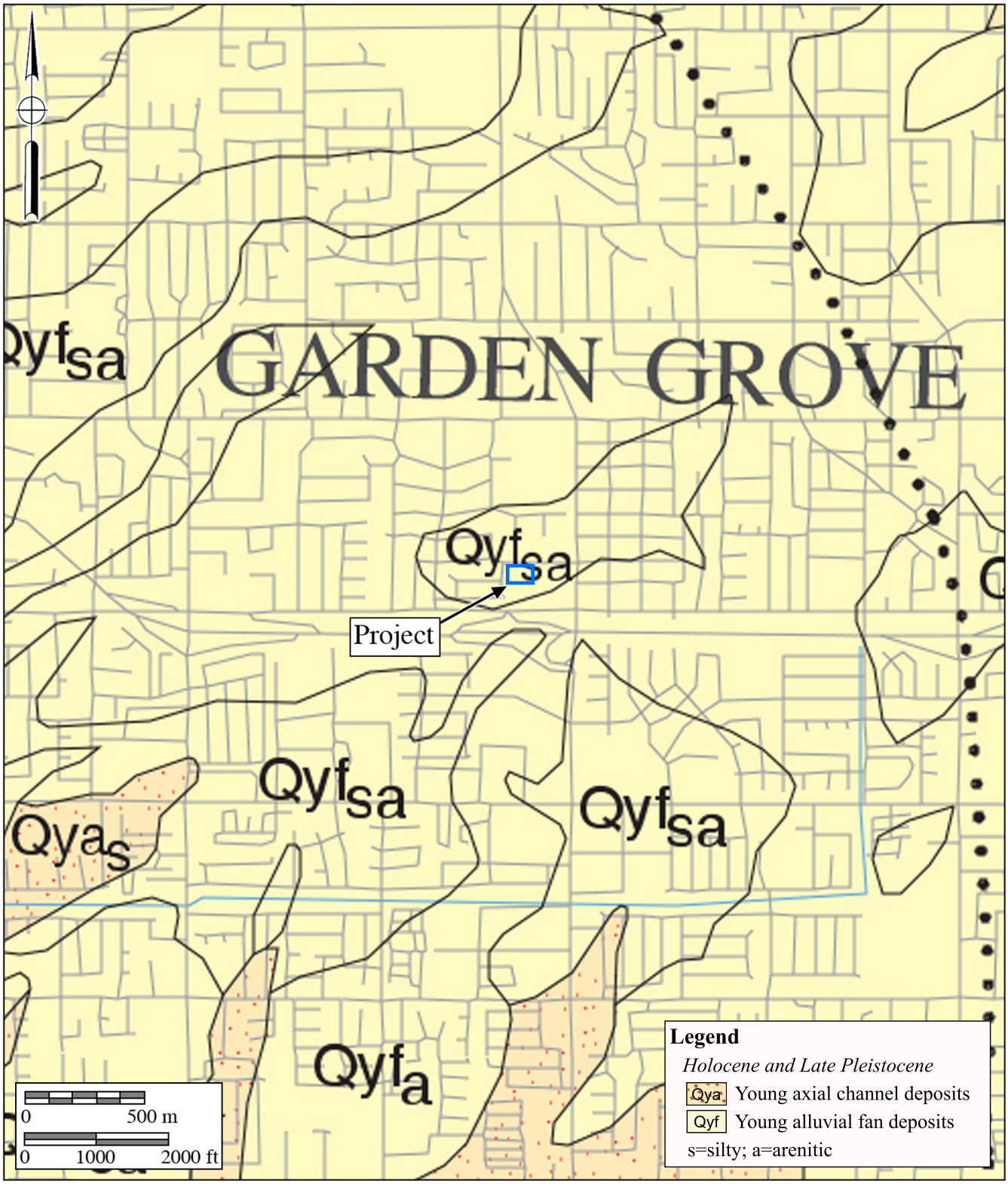

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Figure 4
Geologic Map

The 9822 Russell Avenue Project

Geology after Morton and Miller (2006)

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2025) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state guidelines (see Section II of this report).

Paleontological Resource Records Search

A paleontological collections and locality records search was conducted for the project by the Natural History Museum of Los Angeles County (LACM) (Bell 2025, Appendix B). Based upon the records search, no known fossil localities are within several miles of the project. According to Bell (2025), several fossil localities are known in more distant areas surrounding the project, and all are from Pleistocene-aged geologic formations (except locality LACM IP 4560, a Pliocene-aged scallop).

A paleontological collections and locality records search was performed for a prior, nearby project by the curator of paleontology for OC Parks ("Cooper Center") (Gelnaw 2024). Similar to the LACM records search results, no fossil localities are known within one mile of the project, according to the paleontological database maintained by OC Parks.

A search of the online paleontological database maintained by the San Diego Natural History Museum (SDNHM) was performed (SDNHM n.d.). The closest fossil locality to the project held by that institution is from Pleistocene-aged deposits in Anaheim, between three and four miles to the northeast, composed of the bones and teeth of multiple rodent species, unidentified large mammal bones, freshwater bivalve shells, and aquatic and land gastropod shells (SDNHM locality no. 5907).

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and is thus typically assigned a low paleontological sensitivity. Pleistocene (older than 11,700 years old) alluvial and alluvial fan

deposits in Orange County, however, are known to yield important terrestrial vertebrate fossils such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, and others (Jefferson 1991). These Pleistocene sediments are accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2025) has put forth the guideline criteria, a "Fossil Prediction Map System" (FPMS), which include six categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- *5 = Very High Potential:* Highly fossiliferous geologic units that consistently and predictably preserve scientifically significant fossils.
- *4 = High Potential:* Highly fossiliferous geologic units that preserve scientifically significant fossils, but their concentrations vary and are less predictable than 5.
- *3 = Moderate Potential:* Fossiliferous geologic units that are often marine in origin and in which fossils may be common, but scientifically significant fossils are isolated or sparse.
- *2 = Low Potential:* Geologic units that are not likely to preserve fossils, including sedimentary deposits that are generally younger than 11,700 years before present, older sedimentary units that only rarely preserve fossils, or units that exhibit physical and chemical alteration (diagenetic changes) that make fossil preservation unlikely.
- *1 = Very Low Potential:* Geologic units that are not likely to contain recognizable fossils including Precambrian units and units that are igneous or metamorphic, excluding air-fall and reworked volcanic ash.
- *U = Undetermined Potential:* Geologic units that cannot be assigned an informed FPMS designation. This includes units that have not been subject to prior field surveys but that contain lithologies or preserve depositional settings that are known to be conducive to fossil preservation, units that have not been published in the scientific literature, and units in which reports of fossils have not been verified.

Based upon the FPMS criteria, the alluvium mapped at the surface of the project has a low potential to contain paleontological resources.

VI. CONCLUSIONS AND RECOMMENDATIONS

The project is situated within Holocene-aged alluvial deposits that likely overlie older, paleontologically sensitive Pleistocene alluvial deposits. The depth of the age transition from Holocene to Pleistocene within the alluvial deposits is not known at the project; however, based upon the moderate density of the alluvial strata indicated in the geotechnical boring logs (Albus and Nguyen 2025), the age transition could be fairly deep. Based upon the shallow proposed

grading depths for the development, the project will not likely encounter potentially paleontologically sensitive Pleistocene alluvium. Therefore, paleontological monitoring is not recommended for the project. A Paleontological Resource Impact Mitigation Program (PRIMP) is not warranted. However, if paleontological resources are discovered during excavation activities, a qualified paleontologist should be consulted to determine the significance of the discovery. If the discovery is determined to be significant by the qualified paleontologist, paleontological monitoring could be required.

A qualified paleontologist is defined as an individual with a master's or doctorate in paleontology or geology, who has proven experience in paleontology and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.



December 24, 2025

Todd A. Wirths, M.S., P.G. — Date
Principal Paleontologist
California Professional Geologist No. 7588

VIII. REFERENCES

Albus, D.E., and Nguyen, H.D. 2025. Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California. Prepared for Melia Homes, Irvine, California, by Albus & Associates, Inc., Anaheim, California.

City of Garden Grove 2008. Garden Grove General Plan 2030. https://ggcity.org/planning/general-plan

Gelnaw, W. 2024. Paleontological record search letter for the Orco Stanton Project. For BFSA Environnemental Services, Poway, California, by the OC Parks Division of Orange County.

Greenwood, R.B., and Pridmore, C.L. 2001. Liquefaction Zones in the Anaheim and Newport Beach 7.5-Minute Quadrangles, Orange County, California, 1997, *revised* 2001; *in* Seismic Hazard Zone Report for the Anaheim and Newport Beach 7.5-Minute Quadrangles, Orange County, California; Seismic Hazard Zone Report 03, California Division of Mines and Geology.

Hillhouse, J.W., Reichard, E.G., and Ponti, D.J. 2002. Probing the Los Angeles Basin – Insights into ground-water resources and earthquake hazards. U.S. Geological Survey Fact Sheet 086-02.

Jefferson, G.T. 1991. A Catalogue of Late Quaternary Vertebrates from California: Part Two, Mammals. Natural History Museum of Los Angeles County, Technical Reports, no. 7: i-v + 1-129.

Morton, D.M. and Miller, F.K. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey Open-File Report 06-1217, scale 1:100,000.

San Diego Natural History Museum. N.d. Paleontology research collection database. Electronic database, https://www.sdnhm.org/science/paleontology/research/collection-database/, accessed December 17, 2025.

Society of Vertebrate Paleontology. 2025. Best Practice Guidelines for Mitigation of Adverse Impacts on Paleontological Resources; by the SVP Government Affairs Committee. https://vertpaleo.org/wp-content/uploads/2025/10/SVP_Mitigation_Paleontology_Best_Practices_First_edition_October_2025.pdf.

APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • Email: twirths@bfsa.perennialenv.com

BFSA Environmental Services
A Perennial Company

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board Director, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2025 *Paleontological Monitoring Report for the Ontario Ranch Business Park Project, City of Ontario, San Bernardino County, California*. Prepared for Real Estate Developmental Associates, LLC.

2025 *Paleontological Assessment for the Irwindale Aggregates Project, 13550 Live Oak Avenue, Irwindale, Los Angeles County, California*. Prepared for Lilburn Corporation, Inc.

2025 *Paleontological Resource Impact Mitigation Program for the Canterwood 53 Project (BGR2400072; TTM 38332), Riverside County, California*. Prepared for KB Home Inland Empire Division.

2025 *Paleontological Monitoring Report for the Alberhill Tract 28214-9 Project, city of Lake Elsinore, Riverside County, California*. Prepared for Pulte Group.

2025 *Paleontological Assessment for the Quail Valley Nature Park Project, City of Menifee, Riverside County, California*. Prepared for EPD Solutions, Inc.

2025 *Paleontological Assessment for the Hesperia Gateway Project, City of Hesperia, San Bernardino County, California.* Prepared for T&B Planning.

2024 *Paleontological Resource Impact Mitigation Program for the 450 The Promenade North Project, City of Long Beach, Los Angeles County, California.* Prepared for JPI-West Region.

2024 *Paleontological Assessment for the Noble Creek Vistas SPA Project, Beaumont, Riverside County, California*. Prepared for EPD Solutions, Inc.

2024 *Paleontological Assessment for the High Desert Gas Station Project, Yucca Grove, San Bernardino County, California*. Prepared for Lilburn Corporation, Inc.

2024 *Paleontological Resource Impact Mitigation Program for the 424 Berry Way Project, Brea, Orange County, California*. Prepared for EPD Solutions, Inc.

2024 *Paleontological Monitoring Report for the Manchester Pacific Gateway/IQHQ RaDD Project, San Diego, California*. Prepared for Manchester Financial Group LP.

2024 *Paleontological Resource Impact Mitigation Program for the Vernola Ranch Project, Jurupa Valley, Riverside County, California.* Prepared for Lennar Homes of California.

2023 *Paleontological Assessment for the Kramer Junction Solar Project, Kramer Junction, San Bernardino County, California*. Prepared for San Bernardino CSG 3 LLC.

2023 *Paleontological Monitoring and Mitigation Plan for the Moss Street Beach Access Improvements Project, Moss Street Beach, City of Laguna Beach, California*. Prepared for the City of Laguna Beach.

2023 *Paleontological Monitoring Report for the 11th and Broadway Residential Towers Project, San Diego, California*. Prepared for Pinnacle International Development.

2023 *Paleontological Assessment for the Willow Street and Orange Avenue Project, City of Signal Hill, Los Angeles County, California*. Prepared for CenterPoint Properties.

2023 *Paleontological Resource Assessment Update for the Summerwind Ranch Specific Plan Amendment, Phases 2-5, Calimesa*. Prepared for Jen So Cal 2, LLC.

2023 *Paleontological Resource Impact Mitigation Program for the Palisade Temescal Canyon Project, Riverside County, California, PPT220036, BGR2300031, BGR2300032*. Prepared for North Palisade Partners, LLC.

APPENDIX B

Paleontological Locality Records Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

December 14, 2025

BFSA Environmental Services
Attn: Todd A. Wirths

re: Paleontological resources records search for the 9822 Russell Avenue Project (BFSA project no. 25279.CA)

Dear Todd:

I have conducted a search of our paleontology collection records for the proposed development at the 9822 Russell Avenue Project area as outlined on the portion of the Anaheim USGS topographic quadrangle map that you sent to me via e-mail on December 2, 2025. We do not have fossil localities that have been recorded or georeferenced directly within the proposed project area, but we do have fossil localities nearby from similar sedimentary deposits that may occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM IP 4560	east of Hwy. 39; north from Rosecrans Ave	Unknown (Pliocene)	*Pecten caurinus* Gould	Surface in stream bed
LACM VP 1652	Rio Vista Avenue south of Lincoln Avenue	Alluvium (Pleistocene)	Sheep (*Ovis*)	Unknown (excavations for housing project)
LACM VP 65113	Wintersburg Road; Huntington Beach	Unknown formation (Pleistocene)	Mammoth (*Mammuthus*), bison (*Bison*); uncatalogued invertebrates	6 - 20 feet bgs
LACM VP 7657 - 7659	Ellis Avenue & Patterson Lane, Huntington Beach	Unknown formation (Pleistocene; gray siltstone)	School shark (*Galeorhinus*), eagle ray *(Myliobatus*), goby (*Lepidogobius, Leptocottus*), midshipmen (*Porichthys*), croaker (*Seriphus*), flatfish (*Citharichthys*), cusk-eel (*Otophidium*), skate (*Raja*), angelshark (*Squatina*), sculpin (Cottidae)	150 - 350 feet bgs
LACM IP 23657	Huntington Central Park West	Unknown formation (Plesitocene; sands)	Invertebrates (uncatalogued)	Surface

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search is limited to the records of the NHMLA. It is not intended as a

paleontological assessment of the project for the purposes of California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA). Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a paleontological assessment be conducted by a paleontologist meeting Federal (43 Code of Federal Regulations Part 49.110) or Society of Vertebrate Paleontology standards for compliance with applicable regulations, such as CEQA or NEPA.

Sincerely,



Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

CA ENGINEERING, INC.

Planning • Engineering • Surveying

PRELIMINARY HYDROLOGY REPORT

FOR

T.T.M. 19447

9822 Russell Avenue

City of Garden Grove, CA

Date: October 28th, 2025



PLANS PREPARED UNDER THE SUPERVISION OF:

Fred Cornwell, P.E. - R.C.E 45591 Date 10/28/25

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1.0 INTRODUCTION

The purpose of this report is to present the hydrology analysis and drainage calculations for a proposed residential development located at 9822 Russell Avenue, in the City of Garden Grove, California. The site proposes to construct 26 townhomes and related improvements on approximately 1.80 acres. This report will determine the existing and proposed storm water runoff rates from the project site and determine the impact on the existing surrounding drainage facilities,

2.0 EXISTING DRAINAGE CONDITIONS

The project site is located in the City of Garden Grove, California, and is comprised of approximately 1.80 acres (78,537 square feet), and is located in a predominantly residential development area. The rectangular site is bounded by Russell Avenue to the north (beyond which are residential buildings), Sunnyside Elementary School to the east, Kerry Street to the west (beyond which are residential buildings), and residential buildings and a church to the south.

The northwest portion of the site is currently occupied by buildings housing a church and a preschool, and there is a small storage shed located near the southwest corner of the site. The remainder of the site is covered in asphalt drive aisles and parking areas, concrete hardscape, and landscaping.

The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system downstream via a catch basin on Donegal Drive near the Trask Avenue intersection. The project area currently has no water quality or drainage mitigation devices installed on-site.

3.0 PROPOSED DRAINAGE CONDITIONS

The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into four drainage areas, identified as Areas 1-4. Storm flows from each area will be collected via curb & gutters in the drive aisles and drain to one of four curb-opening catch basins. Drainage in the non-drive aisle areas will be captured via proposed area drains. All of the captured drainage will be directed to one of three underground infiltration BMP facilities that will be sized to treat the Design Capture Volume (DCV) as defined in the Technical Guidance Document for the WQMP.

During larger storm events, as with existing conditions, drainage for the proposed project will outlet onto either Russell Avenue or Kerry Street. In Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. In Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance. Overflow drainage for Areas 3 and 4 will bubble out of the Area 3 catch basin and be discharged to Kerry Street via a parkway culvert.

4.0 METHODOLOGY

The hydrology calculations for the study were completed using AES software based on the Orange County Hydrology Manual methodology. The Rational Method was used to determine the peak discharges for the pre-and post-developed conditions and can be found in Appendix “A” (existing) & Appendix “B” (proposed).

These peak flow rates for the 2, 10 and 100 year storm events will be compared in the results section of this report found below. The hydrologic sub areas and flow paths that produce these rates are shown on the Existing (Exhibit A) & Proposed (Exhibit B) hydrology maps.

5.0 HYDRAULICS

Note, the hydraulic calculations including the catch basin and pipe sizing will be analyzed in the Final Hydrology Report.

6.0 WATER QUALITY

The BMP facilities will be sized to capture and treat the Design Capture Volume (DCV) per the Technical Guidance Document as published by the County of Orange. The underground infiltration BMP facilities will be sized to store a total of 5,760 cubic feet of stormwater, which is in excess of the total DCV of 3,736 cubic feet.

Since there are no hydraulic conditions of concern (HCOC's), the flow will not have to be detained. When a larger storm event occurs that increases the runoff to a point where the underground infiltration BMP facilities are full, the excess flows be discharged to Russell Avenue or Kerry Street via parkway culverts or the driveway entrance.

7.0 FLOOD PLAIN DESIGNATION

The site falls within a Zone "X" designation under the FEMA Map 06059C0138J, dated December 3, 2009. Zone X (Shaded Orange Area) represents areas determined 0.2% annual chance flood hazard, area of 1% annual chance flood with average depth less than one foot or with drainage areas less than one square mile.

8.0 RESULTS

The results of the Existing and Proposed conditions for the existing site outlet location as shown on the hydrology maps are as follows:

	Existing Condition			Proposed Condition					Increase/ (Decrease)	%
	A1	∑A2/A3	TOTAL	A1	A2	A3	A4	TOTAL	-	-
Area	0.54 AC	1.26 AC	**1.80 AC**	0.48 AC	0.73 AC	0.42 AC	0.17 AC	**1.80 AC**	-	-
2 Year Storm	0.94 CFS	1.66 CFS	**2.60 CFS**	0.83 CFS	1.13 CFS	0.73 CFS	0.31 CFS	**3.00 CFS**	0.40 CFS	15.4%
10 Year Storm	1.69 CFS	3.01 CFS	**4.70 CFS**	1.51 CFS	2.05 CFS	1.33 CFS	0.56 CFS	**5.45 CFS**	0.75 CFS	16.0%
100 Year Storm	2.58 CFS	4.63 CFS	**7.21 CFS**	2.31 CFS	3.15 CFS	2.05 CFS	0.85 CFS	**8.36 CFS**	1.15 CFS	16.0%

Under proposed conditions, flows for the 2 year storm is increased by 15.4%, flows for the 10 year storm is increased 16.0%, and flows for the 100 year storm is increase by 16.0% when compared to existing conditions.

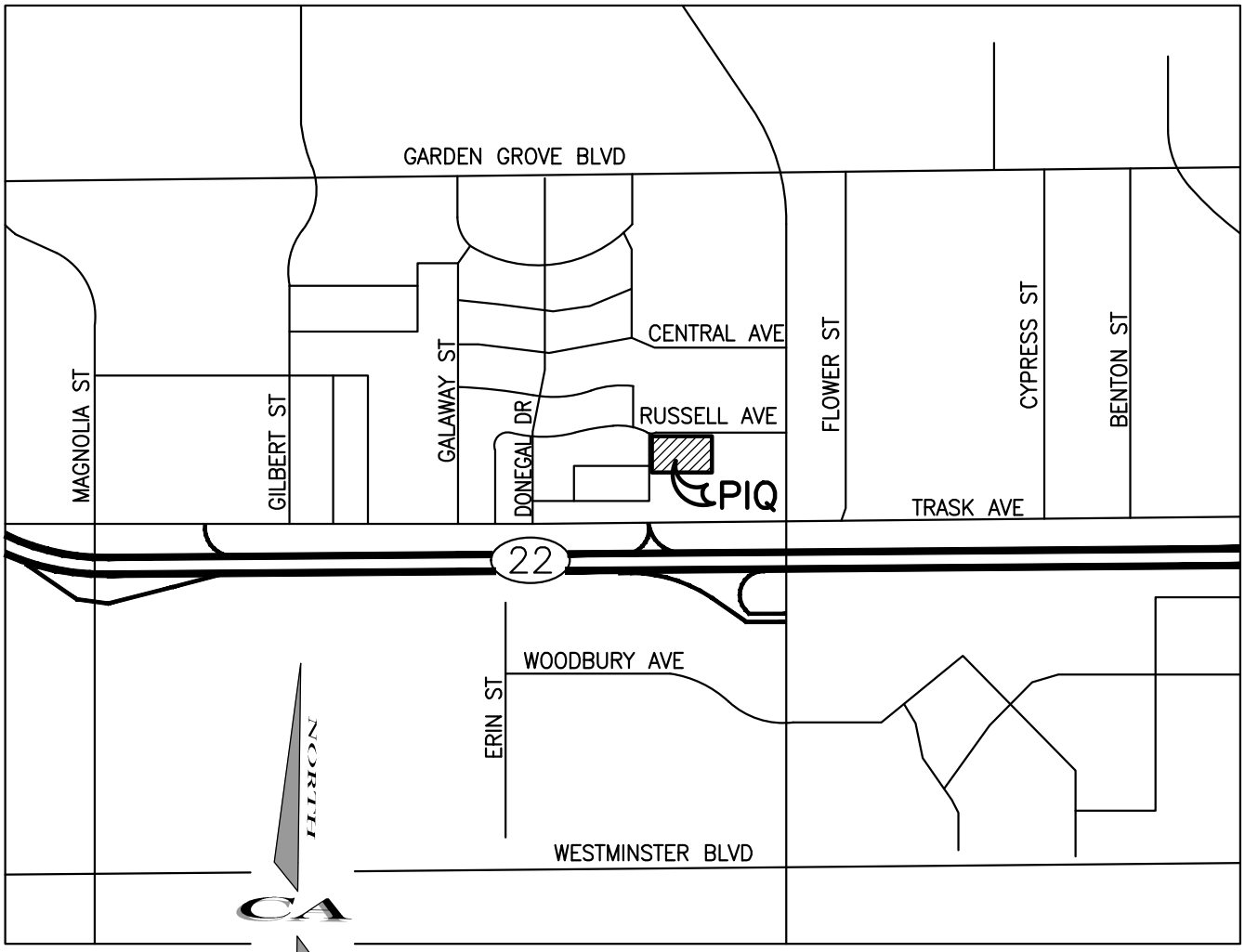
9.0 CONCLUSION

To meet water quality requirements, the DCV will be captured onsite with four curb inlet catch basins and treated in underground infiltration BMP facilities. During larger storm events, as with existing conditions, drainage for the proposed project will outlet onto Russell Avenue & Kerry Street.

During a 100 year storm event, existing flows (7.21 CFS) will be increase by 1.15 CFS under proposed conditions (8.36 CFS). For the 10 year storm event, existing flows (4.70 CFS) will be increased by 0.75 CFS under proposed conditions (5.45 CFS). For the 2 year storm event, existing flows (2.60 CFS) will be increased by 0.40 CFS under proposed conditions (3.00 CFS).

Since proposed flows are slightly increased from the existing flows, the proposed project site will have no significant impact on the existing surrounding drainage facilitates.

10.0 VICINITY MAP



VICINITY MAP

NOT TO SCALE

11.0 SOIL MAP



Map Scale: 1:1,010 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 19, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2024—Jul 1, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
163	Metz loamy sand	B	4.8	100.0%
Totals for Area of Interest			**4.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDICES

APPENDIX A: EXISTING RATIONAL METHOD, 2, 10, & 100 YEAR STORM FREQUENCY OUTPUT FILES.

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_____
 ************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
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                           Analysis prepared by:




  ************************** DESCRIPTION OF STUDY *************************
 * EXISTING CONDITION                                                    *
 * 2 YR STORM                                                            *
 *                                                                       *
  ************************************************************************

   FILE NAME: 491-22EX.DAT
   TIME/DATE OF STUDY: 13:24 10/27/2025
 ========================================================================
   USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
 ========================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

   USER SPECIFIED STORM EVENT(YEAR) =    2.00
   SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
   SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
   *DATA BANK RAINFALL USED*
   *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*

   *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
      HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
      WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)   (FT)    (n)
 ===  =====  =========  =================  ======  ===== ====== ===== =======
   1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

   GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
     1. Relative Flow-Depth =  0.00 FEET
        as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
     2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
   *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
    OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
   *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

 ************************************************************************
   FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
 ------------------------------------------------------------------------
   >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
   >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ========================================================================
   INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
   ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

   Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```

```
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.955
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30     0.100    36    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.94
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      0.94

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.617
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    36    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.30
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      1.30

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.491
  SUBAREA LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    36
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      1.53
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.82
  AVERAGE FLOW DEPTH(FEET) =   0.15   FLOOD WIDTH(FEET) =   14.53
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.36   Tc(MIN.) =   10.34
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    0.46
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       1.66

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.15   FLOOD WIDTH(FEET) =   15.47
  FLOW VELOCITY(FEET/SEC.) =   1.82   DEPTH*VELOCITY(FT*FT/SEC) =   0.28
```

```
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.34
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       1.66
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
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                            Analysis prepared by:

 ************************* DESCRIPTION OF STUDY *************************
* EXISTING CONDITION                                                    *
* 10 YR STORM                                                           *
*                                                                       *
 ************************************************************************

  FILE NAME: 491-22EX.DAT
  TIME/DATE OF STUDY: 13:28 10/27/2025
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   10.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ==================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
  ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.507
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30      0.100    56    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.69
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      1.69
```

```
****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.902
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    56    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.35
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      2.35

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.685
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      2.77
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.90
  AVERAGE FLOW DEPTH(FEET) =   0.18   FLOOD WIDTH(FEET) =   21.41
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.31   Tc(MIN.) =   10.29
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    0.84
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       3.01

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.19   FLOOD WIDTH(FEET) =   22.34
  FLOW VELOCITY(FEET/SEC.) =   1.93   DEPTH*VELOCITY(FT*FT/SEC) =   0.36
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.29
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       3.01
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

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**************************************************************************
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                            Analysis prepared by:

 ************************* DESCRIPTION OF STUDY ************************
* EXISTING CONDITION                                                    *
* 100 YR STORM                                                          *
*                                                                       *
 ************************************************************************

  FILE NAME: 491-22EX.DAT
  TIME/DATE OF STUDY: 13:28 10/27/2025
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.    (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ==================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
  ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.345
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30      0.100    76    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.58
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      2.58
```

```
****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.423
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    76    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.60
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      3.60

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.110
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      4.24
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.02
  AVERAGE FLOW DEPTH(FEET) =   0.21   FLOOD WIDTH(FEET) =   26.72
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.23   Tc(MIN.) =   10.21
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    1.29
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       4.63

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.21   FLOOD WIDTH(FEET) =   27.97
  FLOW VELOCITY(FEET/SEC.) =   2.04   DEPTH*VELOCITY(FT*FT/SEC) =   0.44
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.21
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       4.63
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

APPENDIX B: PROPOSED RATIONAL METHOD, 2, 10 & 100 YEAR STORM FREQUENCY OUTPUT FILES.

```
_____________________________________________________________________________
 ****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                            Analysis prepared by:




  ************************** DESCRIPTION OF STUDY *************************
 * PROPOSED CONDITION                                                     *
 * 2 YR STORM                                                             *
 *                                                                        *
  ************************************************************************

   FILE NAME: 491-22PR.DAT
   TIME/DATE OF STUDY: 16:44 10/27/2025
 ============================================================================
   USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
 ============================================================================
                       --*TIME-OF-CONCENTRATION MODEL*--

   USER SPECIFIED STORM EVENT(YEAR) =    2.00
   SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
   SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
   *DATA BANK RAINFALL USED*
   *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*

   *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
      HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
      WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
 ===  =====  =========  =================  ======  ===== ====== ===== =======
   1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

   GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
     1. Relative Flow-Depth =  0.00 FEET
        as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
     2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
   *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
    OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
   *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

 ****************************************************************************
   FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
 ----------------------------------------------------------------------------
   >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
   >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ============================================================================
   INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
   ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

   Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```

```
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.981
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    36    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.83
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      0.83

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.773
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    36    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.13
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      1.13

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.001
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    36    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.73
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      0.73

****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
```

```
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.056
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.17      0.30     0.200    36    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.31
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.31
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.31
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

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******************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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                           Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* PROPOSED CONDITION                                                      *
* 10 YR STORM                                                             *
*                                                                         *
 *************************************************************************

  FILE NAME: 491-22PR.DAT
  TIME/DATE OF STUDY: 16:50 10/27/2025
==============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==============================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   10.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.553
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
```

```
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    56    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.51
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      1.51

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.180
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    56    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.05
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      2.05

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.589
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    56    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.33
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      1.33

****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.688
```

```
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
        LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"        B        0.17      0.30      0.200    56    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.56
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.56
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.56
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                           Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* PROPOSED CONDITION                                                      *
* 100 YR STORM                                                            *
*                                                                         *
 *************************************************************************

  FILE NAME: 491-22PR.DAT
  TIME/DATE OF STUDY: 16:51 10/27/2025
==============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==============================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.416
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
```

```
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    76    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.31
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      2.31

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.847
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    76    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      3.15
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      3.15

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.470
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    76    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.05
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      2.05

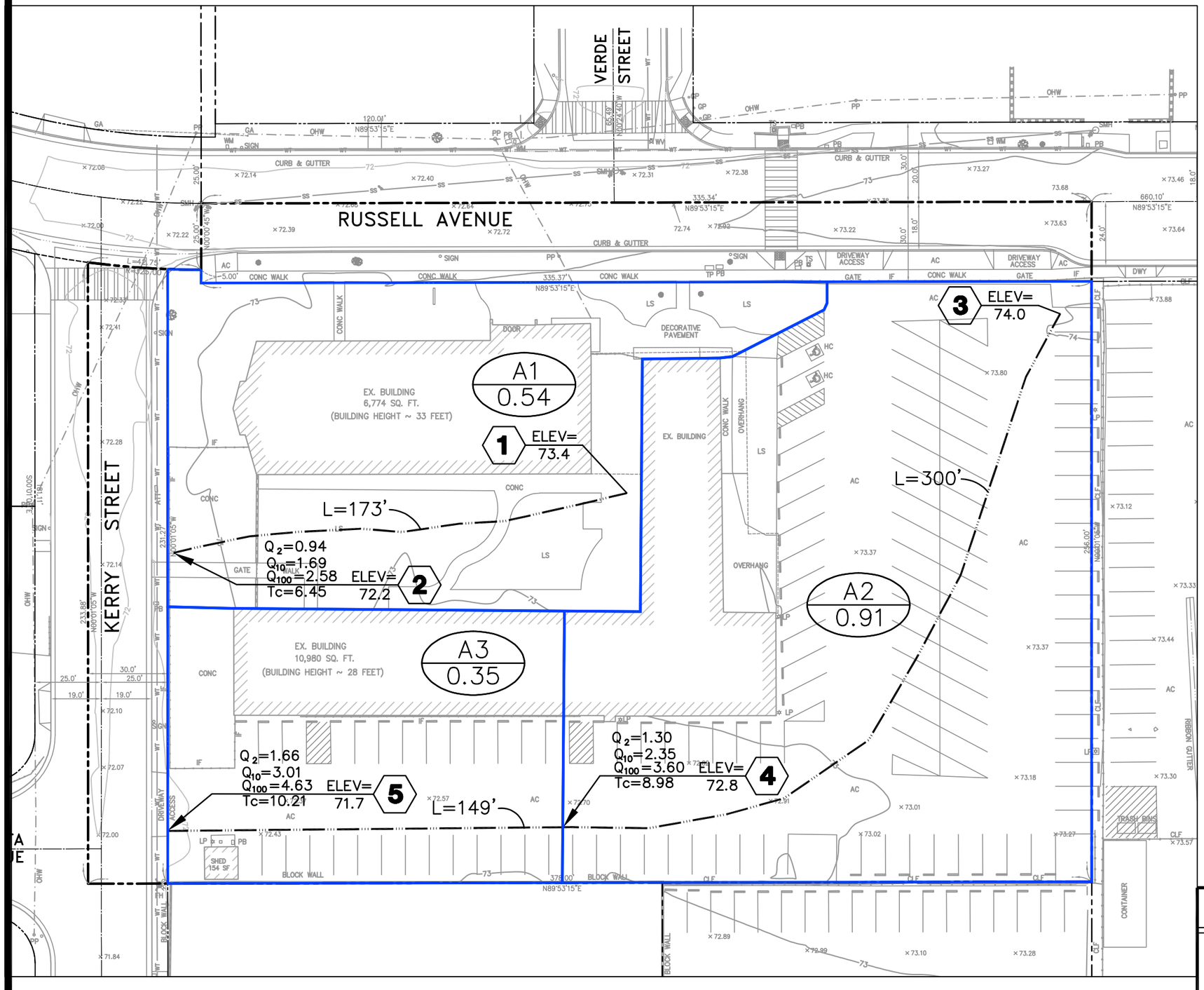
****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.620
```

```
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
        LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"        B        0.17      0.30      0.200    76    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.85
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.85
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.85
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

EXHIBITS

EXHIBIT A: EXISTING CONDITION HYDROLOGY MAP



LEGEND:

DISCHARGE AT NODE (Q_{100} cfs) — NODE NUMBER

Q=13.41 EL= 527.8 (4)

Tc=11.37

TIME OF CONCENTRATION — F.S. ELEVATION AT NODE(ft)

SUBAREA BOUNDARY

L=205'

FLOWPATH

ENTIRE SITE = SOIL TYPE B

A2 / 1.83 — SUBAREA DESIGNATION / TRIBUTARY AREA (AC.)

NORTH

CA

GRAPHIC SCALE

0 20 50 80

(IN FEET)
1 inch = 40 ft.

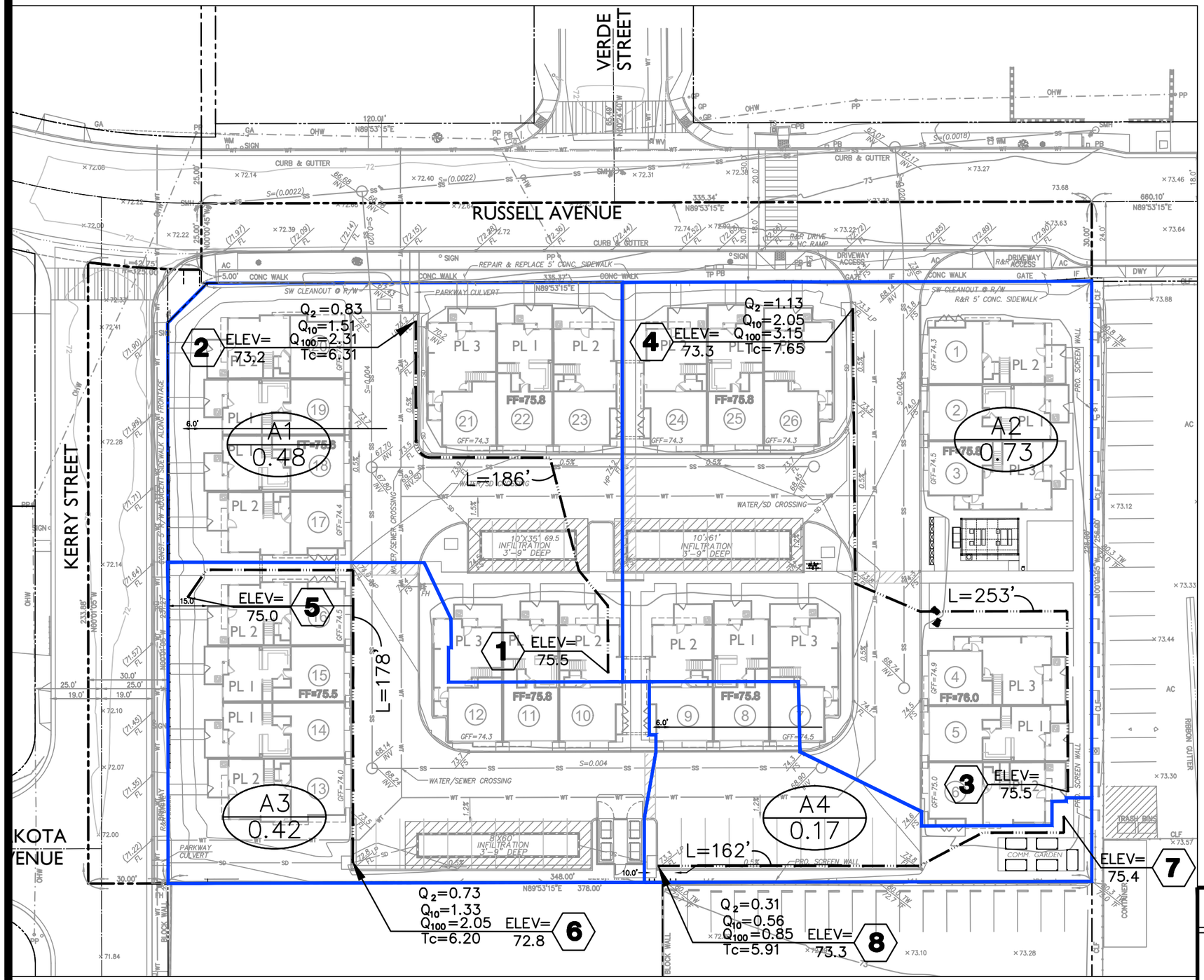
CITY OF GARDEN GROVE

HYDROLOGY MAP (EXISTING CONDITION)

9822 RUSSELL AVENUE
GARDEN GROVE, CA 92844

S:\491-22 Garden Grove_russell\HYDRO\491-22 HYDRO EX.dwg Last Modified: 27 Oct 2025 - 11:04am
Plotted on: 28 Oct 2025 - 2:40pm by cward

EXHIBIT B: PROPOSED CONDITION HYDROLOGY MAP



LEGEND:

DISCHARGE AT NODE (Q_{100} cfs) — NODE NUMBER

Q=13.41 EL= 527.8 (4)

Tc=11.37

TIME OF CONCENTRATION

F.S. ELEVATION AT NODE(ft)

SUBAREA BOUNDARY

L=205'

FLOWPATH

ENTIRE SITE = SOIL TYPE B

A2 / 1.83

SUBAREA DESIGNATION

TRIBUTARY AREA (AC.)

NORTH

CA

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

CITY OF GARDEN GROVE

HYDROLOGY MAP (PROPOSED CONDITION)

9822 RUSSELL AVENUE GARDEN GROVE, CA 92844

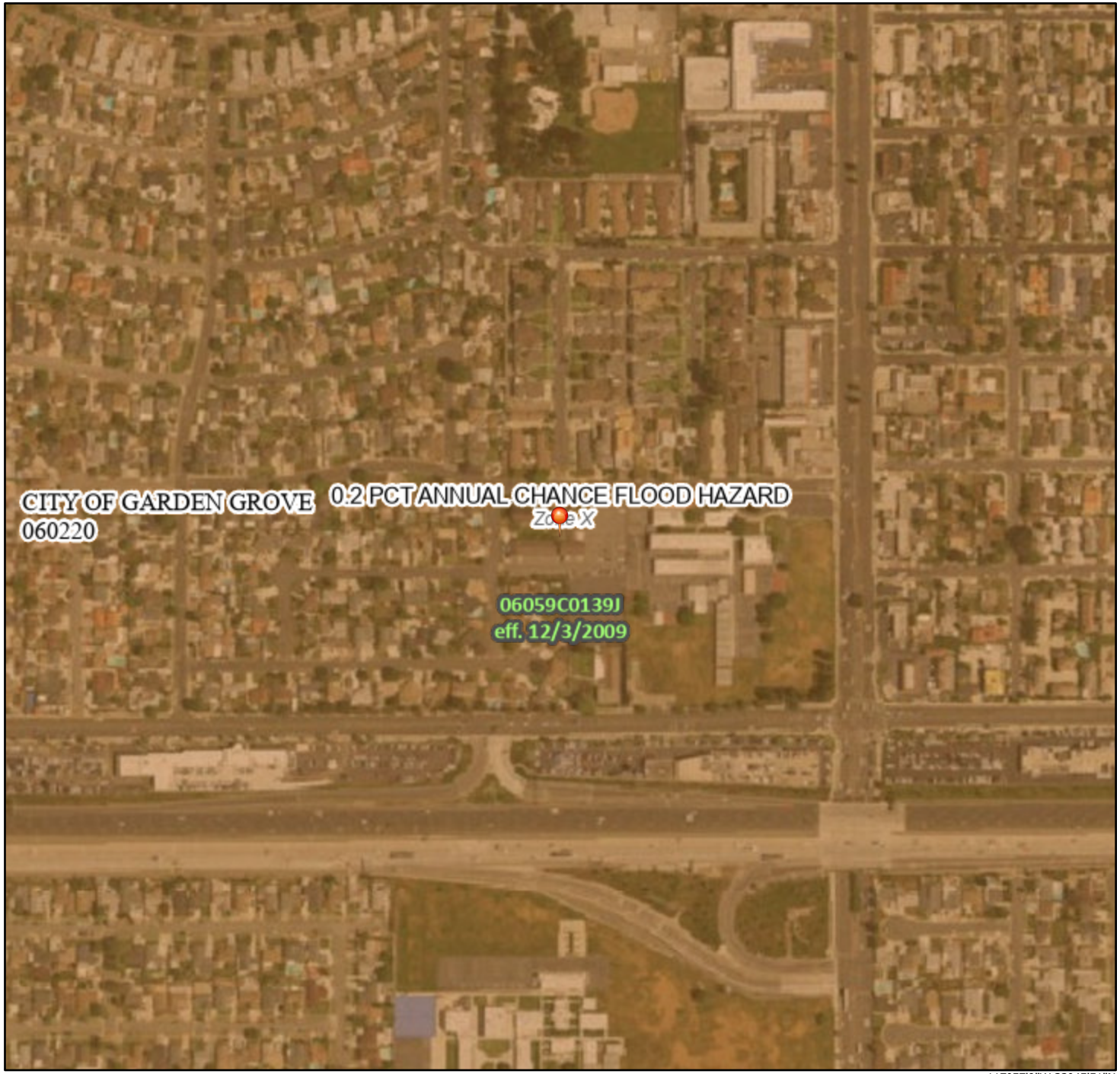
S:\491-22 Garden Grove russell\HYDRO\491-22 HYDRO PRO.dwg Last Modified: 28 Oct 2025 - 5:12pm
Plotted on: 03 Nov 2025 - 6:00pm by cward

EXHIBIT C: FIRM MAP

National Flood Hazard Layer FIRMette

FEMA

117°57'47"W 33°46'20"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

117°57'9"W 33°45'51"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

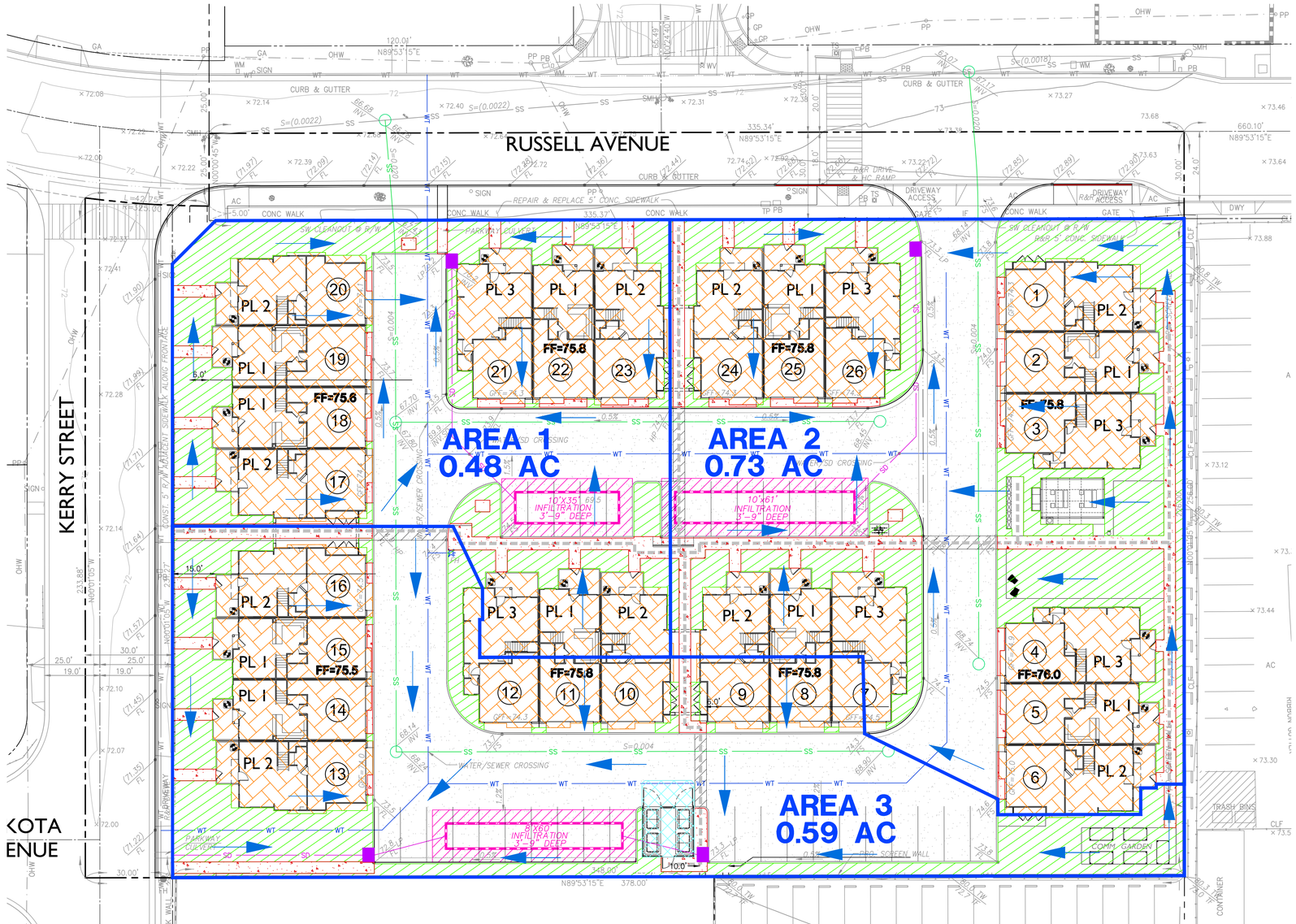
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/29/2025 at 1:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT D: WQMP SITE PLAN



BMP LEGEND

- DRAINAGE AREAS — **AREA 1**
- FLOW DIRECTION
- UNDERGROUND STORM DRAIN INFILTRATION CHAMBER
- LANDSCAPE AREA EFFICIENT IRRIGATION
  LANDSCAPE AREA RUNOFF–MINIMIZING DESIGN
- TRASH ENCLOSURE
- BUILDING
- CONCRETE HARDSCAPE
- ASPHALT CONCRETE DRIVE AISLES
- CATCH BASIN INSERT FILTERS
- PROPOSED STORM DRAIN
- PROPOSED SEWER
- EXISTING SEWER
- PROPOSED WATER
- EXISTING WATER

PROJECT DATA:

TOTAL SITE AREA OF PROPOSED DEVELOPMENT: 1.80 AC (78,537 SF)

BUILDING FOOTPRINT: 30,930 SF
WALKWAYS / CONC. GUTTER / DOCK AREAS: 8,096 SF
DRIVEWAYS / DRIVE AISLES / PARKING AREAS: 23,233 SF

16,278 SF LANDSCAPING PROVIDED
(20.7% PERVIOUS AREA)

CURRENT USE: COMMERCIAL
PROPOSED USE: RESIDENTIAL

WATERSHED:
ANAHEIM BAY – HUNTINGTON HARBOR

WATER QUALITY CALCULATIONS

FORMULAS

C = 0.75 * IMP % + 0.15
D = DESIGN CAPTURE STORM DEPTH (FIGURE III.1) = 0.77
Dremainder = D - Dhsc = 0.77 - 0 = 0.77
DCV = C * Dremainder * AREA (AC) * 43,560SF/AC * 1/12
A = DCV / Dp
INFILTRATION BASIN VOLUME (cf) = PROVIDED AREA * Dp

WQMP CALCULATIONS	AREA 1	AREA 2	AREA 3	TOTAL
AREA (sf)	20,945	31,680	25,912	**78,537**
% OF TOTAL AREA	26.7%	40.3%	33.0%	**100.0%**
AREA (ac)	0.48	0.73	0.59	**1.80**
LANDSCAPE (sf)	4,264	6,678	5,336	**16,278**
IMPERVIOUS %	79.6%	78.9%	79.4%	**79.3%**
C - RUNOFF COEFFICIENT	0.75	0.74	0.75	**0.74**
D - DESIGN STORM DEPTH	0.77	0.77	0.77	-
D-Remainder	0.77	0.77	0.77	-
DCV - DESIGN CAPTURE VOLUME (cf)	1,006	1,510	1,237	**3,753**
Dp - PONDING DEPTH (ft)	3.75	3.75	3.75	-
A - REQUIRED INFILTRATION BASIN AREA (sf)	268	403	330	-
PROVIDED INFILTRATION BASIN AREA (sf)	350	610	480	-
INFILTRATION BASIN VOLUME (cf)	1,313	2,288	1,800	-

NORTH

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PREPARED BY:

CA ENGINEERING, INC.
Planning • Engineering • Surveying
4101 BIRCH ST., STE 140
NEWPORT BEACH, CA 92660
949-724-9480 949-724-9484 FAX

OWNER:

MELIA HOMES INC.
9860 Irvine Center Drive
Irvine, CA 92618
Contact: Mr. Chad Brown
(949) 759-4367

Nov 03 2025

WATER QUALITY MANAGEMENT PLAN
BMP EXIBIT (SITE PLAN)
TR# 19447
9822 RUSSELL AVENUE
Garden Grove, CA 92844

SHEET 1 OF 1

S:\19-22 Garden Grove\russell\WQMP\19-22 PRELIM WQMP SITE PLAN.dwg Last Modified: 30 Oct 2025 – 6:38pm
Plotted on: 03 Nov 2025 – 5:58pm by sweid

CA ENGINEERING

RUSSELL AVENUE TOWNHOMES (TTM 19447)

9822 Russell Avenue
Garden Grove, CA 92844

Preliminary Water Quality Management Plan



Prepared By:

CA Engineering, Inc.
4101 Birch Street, Suite 140
Newport Beach, CA 92660
949.724.9480 / fcornwell@ca-eng.net

Prepared For:

Melia Homes, Inc.
9860 Irvine Center Drive
Irvine, CA 92618
949.759.4367

Date Prepared: October 30, 2025
Date Revised: January 13, 2026

County of Orange/Santa Ana Region Priority Project

Preliminary Water Quality Management Plan

(P-WQMP)

Project Name:

RUSSELL AVENUE TOWNHOMES

APN 098-081-19
TTM 19447

9822 RUSSELL AVENUE
GARDEN GROVE, CA 92844

Prepared for:
Melia Homes, Inc.
9860 Irvine Center Drive
Irvine, CA 92618
949-759-4367

Prepared by:
CA Engineering, Inc.
Fred Cornwell, P.E.
4101 Birch Street, Suite 140
Newport Beach, CA 92660
949-724-9480 (x2012) / fcornwell@ca-eng.net

Date Prepared: October 30, 2025
Date Revised: January 13, 2026

Fred Cornwell, RCE #45591



Project Owner's Certification			
Planning Application No. (If applicable)	**PUD-020-2026**	Grading Permit No.	**Pending**
Tract/Parcel Map and Lot(s) No.	**TTM 19447**	Building Permit No.	**Pending**
Address of Project Site and APN (If no address, specify Tract/Parcel Map and Lot Numbers)			**9822 Russell Avenue Garden Grove, CA 92844** **APN 098-081-19**

This Preliminary Water Quality Management Plan (P-WQMP) has been prepared for Melia Homes, Inc. by CA Engineering, Inc. The P-WQMP is intended to comply with the requirements of the County of Orange NPDES Stormwater Program requiring the preparation of the plan, and the California Environmental Quality Act (CEQA) to assess the impacts of the project and propose the necessary mitigation for the project as part of the entitlement review process.

The undersigned, while it owns the subject property, will be responsible for the implementation of the final provisions of this plan , including the ongoing operation and maintenance of all best management practices (BMPs), and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the Final WQMP. An appropriate number of approved and signed copies of the Final WQMP shall be available on the subject site in perpetuity.

Owner:	**Melia Homes, Inc.**		
Name / Title	B.J. Delzer / President		
Company	Melia Homes, Inc.		
Address	9860 Irvine Center Drive, Irvine, California 92618		
Email	bj@melia-homes.com		
Telephone #	949-759-4367		
I understand my responsibility to implement the provisions of this WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.			
Owner Signature		Date	

Preparer (Engineer): Fred Cornwell, P.E.		**QSD Certificate # 20652**	
Title	Principal	PE Registration #	45591
Company	CA Engineering, Inc.		
Address	4101 Birch Street, Suite 140, Newport Beach, CA 92660		
Email	fcornwell@ca-eng.net		
Telephone #	949-724-9480 (x2012)		

I hereby certify that this Water Quality Management Plan is in compliance with, and meets the requirements set forth in, Order No. R8-2009-0030/NPDES No. CAS618030, of the Santa Ana Regional Water Quality Control Board.

Preparer Signature		Date	1-13-2026
Place Stamp Here	REGISTERED PROFESSIONAL ENGINEER FRED CORNWELL NO. 45591 CIVIL STATE OF CALIFORNIA		

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Appendices

Appendix A.....Educational Materials

- .....The Ocean Begins at Your Front Door
- .....Tips for the Home Mechanic
- .....Homeowners Guide for Sustainable Water Use
- .....Household Tips
- .....Proper Disposal of Household Hazardous Waste
- .....Recycle at Your Local Used Oil Collection Center (North County)
- .....Responsible Pest Control
- .....Sewage Spill
- .....Tips for Home Improvement Projects
- .....Tips for Landscape and Gardening
- .....Tips for Pet Care
- .....Tips for Projects Using Paint

Appendix B.....Post Construction BMP Fact Sheets

- .....SD-10 Site Design & Landscape Planning
- .....SD-12 Efficient Irrigation
- .....SD-13 Storm Drain Signage
- .....SD-32 Trash Storage Areas
- .....R-1 Automobile Repair and Maintenance
- .....R-3 Automobile Parking
- .....R-4 Home and Garden Care Activities
- .....R-5 Disposal of Pet Wastes
- .....R-6 Disposal of Green Wastes
- .....R-7 Household Hazardous Waste
- .....R-8 Water Conservation
- .....FP-3 Roads, Streets, and Highways Operation and Maintenance
- .....FP-5 Solid Waste Handling
- .....FP-6 Water and Sewer Utility Operation and Maintenance
- .....DF-1 Drainage Facility Operation and Maintenance

Appendix C……Susceptibility Analysis Map for Anaheim Bay-Huntington Harbor Watershed

Appendix D……Rainfall Zone Map for Orange County

Appendix E……Albus & Associates, Inc.'s Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California, dated July 1, 2025

Appendix F……Albus & Associates, Inc.'s Preliminary Geotechnical Investigation for Proposed Water Quality Improvements, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California, dated October 20, 2025

Appendix G……Operation and Maintenance (O&M) Plan

Appendix H……Record of BMP Implementation, Maintenance and Inspection

Appendix I……Annual Certificate of Compliance (BMP Maintenance)

Appendix J……Notice of Transfer of Responsibility for WQMP

Appendix K……Preliminary Hydrology Report for TTM 19447, dated October 28, 2025

Appendix L……Water Quality Conditions of Approval (To Be Included in Final WQMP)

Appendix M……Engineer's Certification Form

Exhibits and Attachments Included in Section VI:

- **Vicinity Map**
- **BMP Exhibit (Site Plan)**
- **Oldcastle FloGard +PLUS Catch Basin Insert Filter Specifications and Inspection and Maintenance Guide**
- **GeoStorage Underground Stormwater Detention System Brochure**
- **BMP Fact Sheet—INF-7: Underground Infiltration**
- **BMP Fact Sheet—INF-1: Infiltration Basin (Included for Sizing Standards Regarding Underground Infiltration Only)**
- **State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021)**

Section I Permit(s) and Water Quality Conditions of Approval or Issuance

Project Infomation			
Permit/Application No. (If applicable)	**PUD-020-2026**	Grading or Building Permit No. (If applicable)	**Pending**
Address of Project Site (or Tract Map and Lot Number if no address) and APN	**9822 Russell Avenue, Garden Grove, CA 92844** **APN 098-081-19**		
Water Quality Conditions of Approval or Issuance			
Water Quality Conditions of Approval or Issuance applied to this project. (Please list verbatim.)	**No Conditions of Approval for the Project have been issued yet.**		
Conceptual P-WQMP			
Was a Conceptual Water Quality Management Plan previously approved for this project?	**No. This document is the Preliminary WQMP for the Project.**		
Watershed-Based Plan Conditions			
Applicable Watershed	**Anaheim Bay-Huntington Harbor Watershed**		
Provide applicable conditions from watershed - based plans including WIHMPs and TMDLS.	**There are no approved WIHMPs for the Anaheim Bay-Huntington Harbor Watershed, and no TMDLS have been established for the water bodies to which the project will discharge.**		

Section II Project Description

II.1 Project Description

Description of Proposed Project	
Development Category (From Model P-WQMP, Table 7.11-2; or -3):	**Significant Redevelopment Project.** Development Category No. 8 from Table 7.II-2 of the Model WQMP defines the following as a priority project for the North Orange County Permit Area: "All significant redevelopment projects, where significant redevelopment is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. If the redevelopment results in the addition or replacement of less than 50 percent of the impervious area on-site and the existing development was not subject to WQMP requirement, the numeric sizing criteria discussed in Section 7.II-2.0 only applies to the addition or replacement area. If the addition or replacement accounts for 50 percent or more of the impervious area, the Project WQMP requirements apply to the entire development." **The project site is approximately 1.8 acres, and is located in a predominantly residential development area with a proposed residential use. The northwest portion of the site is currently occupied by buildings housing a church and a preschool, and there is a small storage shed located near the southwest corner of the site. The remainder of the site is covered in asphalt drive aisles and parking areas, concrete hardscape, and landscaping. The proposed work will include demolition of all existing improvements at the site and the construction of 26 townhomes and related improvements. As described in greater detail below, the proposed project will add and/or replace 5,000 or more square feet of impervious surface on an already developed site, and the work will result in the addition or replacement of more than 50% of the impervious area on the entire site. Accordingly, the proposed development is a Priority Project, and the numeric sizing criteria applies to the entire project area.**

Land Use	**Attached Residential Development**			
Project Area (ft^2): **78,537**	Number of Dwelling Units: **26**		SIC Code: **N/A**	
Project Area	Pervious		Impervious	
	Area (acres or sq ft)	Percentage	Area (acres or sq ft)	Percentage
Pre-Project Conditions	**10,385 sq. ft.**	**13.2%**	**68,152 sq. ft.**	**86.8%**
Post-Project Conditions	**16,278 sq. ft.**	**20.7%**	**62,259 sq. ft.**	**79.3%**
Drainage Patterns/Connections	The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system. The project area currently has no water quality or drainage mitigation devices installed on-site. The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into three drainage areas, identified as Areas 1-3. Surface drainage from each area will be collected in catch basins with proprietary insert filters for pretreatment and then directed to that drainage area's underground infiltration BMP facility. The insert filters also will act as the project's trash treatment control devices. The project is proposing to use GeoStorage Infiltration System units, which are shallow proprietary infiltration chambers. The infiltration chambers comply with the design requirements set forth in BMP Fact Sheet INF-7 and are comprised of 3.75 foot deep, open-bottomed, rectangular vaults surrounded by gravel which will collect and then allow the storm water runoff to infiltrate into the native soils. The vaults are covered with concrete roof planks capable of H-20 traffic loading with a manhole opening in one plank to allow access for maintenance. A brochure describing the GeoStorage Infiltration System is included in Section VI of this P-WQMP. Groundwater at the site was encountered at a depth of 14 feet below current grade, and the site will be raised by one foot during grading operations. Therefore, the separation between the bottom of the infiltration chambers and on-site groundwater will be			

11.25 feet, thus achieving the required 10 foot separation.

The catch basin insert filters and underground infiltration BMPs, which will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP, will act as the project's LID BMPs.

The infiltration facilities for Areas 1 and 2 are located near the middle of the site, under parking areas. When the storm flows exceed the capacity of the infiltration chamber in Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. When the storm flows exceed the capacity of the infiltration chamber in Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance.

The infiltration facility for Area 3 is located at the southern border of the site, under a parking area. When the storm flows exceed the capacity of the infiltration chamber in Area 3, the excess flows will bubble out of the most westerly Area 3 catch basin and be discharged to Kerry Street via a parkway culvert.

The Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash, and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted by the State Water Board, dictate that trash shall not be present in ocean waters or along shorelines, and prohibit the discharge of trash into surface waters of the state (the "Trash Provisions"). Pursuant to the Trash Provisions, all trash treatment control devices shall meet the Full Capture System definition and be certified by the State Water Resources Control Board. In compliance with the Trash Provisions, the proprietary catch basin insert filters that have been proposed for the project are listed on the State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021), a copy of which is included in Section VI of this P-WQMP.

Infiltration chambers were chosen as the primary LID BMPs for the project since site soils are amenable to infiltration.

The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the

	storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See Section II.3 of this WQMP.)
Narrative Project Description: (Use as much space as necessary.)	The proposed project site is approximately 1.8 acres (78,537 square feet), and is located in a predominantly residential development area. The rectangular site is bounded by Russell Avenue to the north (beyond which are residential buildings), Sunnyside Elementary School to the east, Kerry Street to the west (beyond which are residential buildings), and residential buildings and a church to the south. The northwest portion of the site is currently occupied by buildings housing a church and a preschool, and there is a small storage shed located near the southwest corner of the site. The remainder of the site is covered in asphalt drive aisles and parking areas, concrete hardscape, and landscaping. The proposed work will include demolition of all existing improvements at the site and the construction of 26 townhomes, as well as drive aisles, parking areas, walkways, a recreation area, landscaping, and utility improvements. The existing site contains three buildings with a total footprint of approximately 17,908 square feet, and concrete/paved areas of approximately 50,244 square feet, for a total impervious area of 68,152 square feet (86.8% of the project area), and 10,385 square feet of landscaping/pervious area (13.2% of the project area), for a total project site of 78,537 square feet. The proposed development will contain 26 two-story townhomes (ranging from 1,442 to 1,800 square feet), with a total building footprint area of 30,930 square feet. In addition, the proposed development will contain 8,096 square feet of concrete walkways and recreation facilities, and 23,233 square feet of asphalt drive aisles and parking areas, for a total impervious area of 62,259 square feet, or 79.3% of the project area. The balance of the project site will contain 16,278 square feet of landscaping, or 20.7% of the project area, for a total project site of 78,537 square feet. The only community

	"facility" at the proposed development will be a recreation area located at the eastern border of the site, which will consist of concrete areas, landscaping, and benches. The area of this "facility" is included in the square foot concrete and landscaping figures above. In order to comply with the Trash Provisions and prevent the discharge of trash from the project site, the project will also include a walled trash enclosure with a solid roof. The trash enclosure will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP. The asphalt drive aisles contained within the proposed development are the only streets, roads, or highway projects planned to be constructed as part of this WQMP. There are no known materials or wastes that are anticipated to be used or produced at the proposed residential development that would be classified as "hazardous." Further, none of the materials to be used at the proposed residential development will be stored outside. The project will not violate any water quality standards because the project will be required to meet the City's NPDES permit discharge requirements.

II.2 Potential Stormwater Pollutants

Urban runoff from a developed site and storm water pollution associated with the runoff has the potential to contribute pollutants to the municipal storm drain system and ultimately to the tributary receiving waters. Pollutants that are commonly associated with urban development include suspended solids/sediment, nutrients, metals, microbial pathogens, oil and grease, toxic organic compounds, and trash and debris. The pollutants of concern for a specific project are based upon the pollutants identified by regulatory agencies as impairing receiving waters, and pollutants that are anticipated or potentially could be generated by the project based on the proposed land uses. Identifying the anticipated/potential pollutants will allow the project WQMP to appropriately assign BMPs to effectively mitigate storm water pollution prior to the runoff discharging off-site.

Table 2.1 of the Technical Guidance Document to Orange County's Model WQMP, dated May 19, 2011, lists the pollutants of concern generated by various land uses and is reprinted below:

Priority Project Categories and/or Project Features	General Pollutant Categories							
	Suspended Solid/ Sediments	Nutrients	Heavy Metals	Pathogens (Bacteria/ Virus)	Pesticides	Oil & Grease	Toxic Organic Compounds	Trash & Debris
Detached Residential Development	E	E	N	E	E	E	N	E
Attached Residential Development	E	E	N	E	E	E(2)	N	E
Commercial/ Industrial Development	E(1)	E(1)	E(5)	E(3)	E(1)	E	E	E
Automotive Repair Shops	N	N	E	N	N	E	E	E
Restaurants	E(1)(2)	E(1)	E(2)	E	E(1)	E	N	E
Hillside Development >5,000 ft²	E	E	N	E	E	E	N	E
Parking Lots	E	E(1)	E	E(4)	E(1)	E	E	E
Streets, Highways, & Freeways	E	E (1)	E	E(4)	E(1)	E	E	E
Retail Gasoline Outlets	N	N	E	N	N	E	E	E

E = expected to be of concern
N = not expected to be of concern

(1) Expected pollutant if landscaping exists on-site, otherwise not expected.
(2) Expected pollutant if the project includes uncovered parking areas, otherwise not expected.
(3) Expected pollutant if land use involves food or animal waste products, otherwise not expected.
(4) Bacterial indicators are routinely detected in pavement runoff.
(5) Expected if outdoor storage or metal roofs, otherwise not expected.

The table below identifies the potential pollutants of concern for the proposed Russell Avenue Townhomes project, as set forth in Table 2.1 of the Technical Guidance Document under "Attached Residential Development" and "Parking Lots":

Pollutants of Concern			
Pollutant	Check One for each: E=Expected to be of concern N=Not Expected to be of concern		Additional Information and Comments
Suspended-Solid/ Sediment	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Nutrients	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Heavy Metals	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Pathogens (Bacteria/Virus)	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.

Pesticides	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Oil and Grease	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Toxic Organic Compounds	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.
Trash and Debris	**E**		Identified as an anticipated and/or potential pollutant for Attached Residential Development with uncovered parking areas in Table 2.1 of the TGD to Orange County's Model WQMP, dated May 19, 2011.

Suspended Solids / Sediment consist of soils or other surficial materials that are eroded and then transported or deposited by wind, water, or gravity. Excessive sedimentation can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth. Sediments in runoff also transport other pollutants that adhere to them, including trace metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and phosphorus. The largest source of suspended solids/sediment is typically erosion from disturbed soils.

Nutrients include the macro-nutrients nitrogen and phosphorus. They commonly exist in the form of mineral salts dissolved or suspended in water and as particulate organic matter transported by storm water. Excessive discharge of nutrients to water bodies and streams can cause eutrophication, including excessive aquatic algae and plant growth, loss of dissolved oxygen, release of toxins in sediment, and significant swings in hydrogen ion concentration (pH). Primary sources of nutrients in urban runoff are fertilizers, trash and debris, and eroded soils. Urban areas with improperly managed landscapes can be substantial sources.

Heavy Metals include certain metals that can be toxic to aquatic life if concentrations become high enough to stress natural processes. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and are also raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Copper and zinc are typically associated with building materials, including galvanized metal and ornamental copper, and automotive products, including tires and brake pads.

Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns regarding the potential for release of metals to the environment have already led to restricted metal usage in certain applications, for example lead additives in gasoline. The primary source of metals in urban storm water is typically commercially available metal products and automobiles.

Pathogens (Bacteria / Viruses) include bacteria and viruses, which are ubiquitous microorganisms that thrive under a range of environmental conditions. Water containing excessive pathogenic bacteria and viruses can create a harmful environment for humans and aquatic life. The source of pathogenic bacteria and viruses is typically the transport of animal or human fecal wastes from the watershed, but pathogenic organisms do occur in the natural environment.

Pesticides include pesticides and herbicides comprised of chemical compounds commonly used to control nuisance growth or prevalence of organisms. Water containing excessive pesticides and herbicides can constitute a hazard to humans and aquatic life. Areas with improperly managed landscapes, including excessive or improper application of pesticides and/or herbicides, can be a substantial source.

Oil and Grease are characterized as high-molecular weight organic compounds. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality. Introduction of these pollutants to water bodies may occur due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids.

Toxic Organic Compounds include organic compounds (pesticides, solvents, hydrocarbons) which at toxic concentrations constitute a hazard to humans and aquatic organisms. Storm water coming into contact with organic compounds can transport excessive levels of organics to receiving waters. Dirt, grease, and grime retained in cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life. Sources of organic compounds include landscape maintenance areas, vehicle maintenance areas, waste handling areas, and potentially most other urban areas.

Trash and Debris includes trash, such as paper, plastic, and various waste materials, that can typically be found throughout the urban landscape, and debris which includes waste products of natural origin which are not naturally discharged to water bodies such as landscaping waste, woody debris, etc. The presence of trash and debris may have a significant impact on the recreational value of a water body and upon the health of aquatic habitat.

II.3 Hydrologic Conditions of Concern

[X] No – Show map

[ ] Yes – Describe applicable hydrologic conditions of concern below. *Refer to Section 2.2.3 in the TGD.*

In the North Orange County permit area, where the Russell Avenue Townhomes project is located, downstream channels are considered not susceptible to hydromodification, and therefore projects do not have the potential for an HCOC, if "[a]ll downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected." (See Section 7.II-2.3.3 of the Model WQMP.)

With respect to the proposed Russell Avenue Townhomes project, the site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See the Susceptibility Analysis Map for the Anaheim Bay-Huntington Harbor Watershed, Figure 2 of Appendix XVI.3 of the Technical Guidance Document, a copy of which is attached to this WQMP as Appendix C.)

II.4 Post Development Drainage Characteristics

The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system. The project area currently has no water quality or drainage mitigation devices installed on-site.

The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into three drainage areas, identified as Areas 1-3. Surface drainage from each area will be collected in catch basins with proprietary insert filters for pretreatment and then directed to that drainage area's underground infiltration BMP facility. The insert filters also will act as the

project's trash treatment control devices.

The project is proposing to use GeoStorage Infiltration System units, which are shallow proprietary infiltration chambers. The infiltration chambers comply with the design requirements set forth in BMP Fact Sheet INF-7 and are comprised of 3.75 foot deep, open-bottomed, rectangular vaults surrounded by gravel which will collect and then allow the storm water runoff to infiltrate into the native soils. The vaults are covered with concrete roof planks capable of H-20 traffic loading with a manhole opening in one plank to allow access for maintenance. A brochure describing the GeoStorage Infiltration System is included in Section VI of this P-WQMP. Groundwater at the site was encountered at a depth of 14 feet below current grade, and the site will be raised by one foot during grading operations. Therefore, the separation between the bottom of the infiltration chambers and on-site groundwater will be 11.25 feet, thus achieving the required 10 foot separation.

The catch basin insert filters and underground infiltration BMPs, which will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP, will act as the project's LID BMPs.

The infiltration facilities for Areas 1 and 2 are located near the middle of the site, under parking areas. When the storm flows exceed the capacity of the infiltration chamber in Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. When the storm flows exceed the capacity of the infiltration chamber in Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance.

The infiltration facility for Area 3 is located at the southern border of the site, under a parking area. When the storm flows exceed the capacity of the infiltration chamber in Area 3, the excess flows will bubble out of the most westerly Area 3 catch basin and be discharged to Kerry Street via a parkway culvert.

The Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash, and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted by the State Water Board, dictate that trash shall not be present in ocean waters or along shorelines, and prohibit the discharge of trash into surface waters of the state (the "Trash Provisions"). Pursuant to the Trash Provisions, all trash treatment control devices shall meet the Full Capture System definition and be certified by the State Water Resources Control Board. In compliance with the Trash Provisions, the proprietary catch basin insert filters that have been proposed for the project are listed on the State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021), a copy of which is included in Section VI of this P-WQMP.

Infiltration chambers were chosen as the primary LID BMPs for the project since site soils are amenable to infiltration.

The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See Section II.3 of this WQMP.)

II.5 Property Ownership/Management

All portions of the project and site are owned by Melia Homes, Inc. The individual at Melia Homes, Inc. responsible for this project and all related water quality issues is the president of the company, B.J. Delzer. Mr. Delzer's contact information is as follows: 9860 Irvine Center Drive, Irvine, California 92618; phone number (949) 759-4367; bj@melia-homes.com. All maintenance responsibilities, including the implementation and maintenance of BMPs for the Russell Avenue Townhomes project, shall be performed by Melia Homes, Inc. until a homeowners' association is formed, at which time all BMP implementation and maintenance responsibilities shall be transferred to said homeowners' association.

Section III Site Description

III.1 Physical Setting

Name of Planned Community/Planning Area (if applicable)	**Pending**
Location/Address	**9822 Russell Avenue, Garden Grove, CA 92844**
General Plan Land Use Designation	**Attached Residential Development**
Zoning	**R-2 (Proposed)**
Acreage of Project Site	**Approximately 1.8 acres**
Predominant Soil Type	**During the geotechnical investigation of the site, artificial fills were encountered within the upper two feet across the site. The fills were generally composed of damp, fine- to medium-grained, sands with silts. Underlying the fills were alluvial soils consisting of sands with silt, sandy silts, silty sands/sandy silts, and silty sands. The alluvial soils were present across the site to the maximum depth explored of 51.5 feet. (See page 4 of Albus & Associates, Inc.'s Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California, dated July 1, 2025 ("Geotechnical Report"), a copy of which is attached to this P-WQMP as Appendix E.)**

III.2 Site Characteristics

Site Characteristics	
Precipitation Zone	**0.77 inches** **(See Appendix D of this P-WQMP—Rainfall Zone Map for Orange County, Figure XVI-1, TGD)**
Topography	**Flat**
Drainage Patterns/Connections	The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system. The project area currently has no water quality or drainage mitigation devices installed on-site. The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into three drainage areas, identified as Areas 1-3. Surface drainage from each area will be collected in catch basins with proprietary insert filters for pretreatment and then directed to that drainage area's underground infiltration BMP facility. The insert filters also will act as the project's trash treatment control devices. The project is proposing to use GeoStorage Infiltration System units, which are shallow proprietary infiltration chambers. The infiltration chambers comply with the design requirements set forth in BMP Fact Sheet INF-7 and are comprised of 3.75 foot deep, open-bottomed, rectangular vaults surrounded by gravel which will collect and then allow the storm water runoff to infiltrate into the native soils. The vaults are covered with concrete roof planks capable of H-20 traffic loading with a manhole opening in one plank to allow access for maintenance. A brochure describing the GeoStorage Infiltration System is included in Section VI of this P-WQMP. Groundwater at the site was encountered at a depth of 14 feet below current grade, and the site will be raised by one foot during grading operations. Therefore, the separation between the bottom of the infiltration

	chambers and on-site groundwater will be 11.25 feet, thus achieving the required 10 foot separation. The catch basin insert filters and underground infiltration BMPs, which will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP, will act as the project's LID BMPs. The infiltration facilities for Areas 1 and 2 are located near the middle of the site, under parking areas. When the storm flows exceed the capacity of the infiltration chamber in Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. When the storm flows exceed the capacity of the infiltration chamber in Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance. The infiltration facility for Area 3 is located at the southern border of the site, under a parking area. When the storm flows exceed the capacity of the infiltration chamber in Area 3, the excess flows will bubble out of the most westerly Area 3 catch basin and be discharged to Kerry Street via a parkway culvert. The Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash, and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted by the State Water Board, dictate that trash shall not be present in ocean waters or along shorelines, and prohibit the discharge of trash into surface waters of the state (the "Trash Provisions"). Pursuant to the Trash Provisions, all trash treatment control devices shall meet the Full Capture System definition and be certified by the State Water Resources Control Board. In compliance with the Trash Provisions, the proprietary catch basin insert filters that have been proposed for the project are listed on the State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021), a copy of which is included in Section VI of this P-WQMP. Infiltration chambers were chosen as the primary LID BMPs for the project since site soils are amenable to infiltration.

	The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See Section II.3 of this WQMP.)
Soil Type, Geology, and Infiltration Properties	**During the geotechnical investigation of the site, artificial fills were encountered within the upper two feet across the site. The fills were generally composed of damp, fine- to medium-grained, sands with silts. Underlying the fills were alluvial soils consisting of sands with silt, sandy silts, silty sands/sandy silts, and silty sands. The alluvial soils were present across the site to the maximum depth explored of 51.5 feet. (See page 4 of the Geotechnical Report attached to this P-WQMP as Appendix E.)** **The geotechnical expert determined that infiltration of stormwater at the site is feasible utilizing the proposed shallow infiltration chambers, and that the "measured" infiltration rate is 1.9 in/hr. (See pages 6-7 of Albus & Associates, Inc.'s Preliminary Geotechnical Investigation for Proposed Water Quality Improvements, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California, dated October 20, 2025 (Infiltration Report), a copy of which is attached to this P-WQMP as Appendix F.**
Hydrogeologic (Groundwater) Conditions	**Groundwater was encountered at a depth of 14 feet at the time of the geotechnical expert's field investigation. (See page 4 of the Geotechnical Report attached to this P-WQMP as Appendix E.)**
Geotechnical Conditions (relevant to infiltration)	**The geotechnical expert determined that infiltration of stormwater at the site is feasible utilizing the proposed shallow infiltration chambers, and that the "measured" infiltration rate is 1.9 in/hr. (See pages 6-7 of the Infiltration Report, a copy of which is attached to this P-WQMP as Appendix F.**

Off-Site Drainage	**There are no off-site flows that drain onto the project site.**
Utility and Infrastructure Information	**The only utilities associated with the proposed development are the water, sewer, area drains, gas and electrical connections. These laterals will supply the necessary utility connections for the proposed development. There are no main lines contained on the site. The proposed infiltration chambers will not interfere with any on-site utilities.**

III.3 Watershed Description

Receiving Waters	**The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean.**
303(d) Listed Impairments	**Bolsa Chica Channel — Ammonia, Indicator Bacteria** **Anaheim Bay — Nickel, PCBs, Toxicity**
Applicable TMDLs	**No TMDLS have been established for the water bodies to which the project will discharge.**
Pollutants of Concern for the Project	**Suspended-Solids/Sediment, Nutrients, Heavy Metals, Pathogens (Bacteria / Viruses), Pesticides, Oil & Grease, Toxic Organic Compounds, and Trash & Debris**
Environmentally Sensitive and Special Biological Significant Areas	**The proposed project does not directly discharge to, and is not within or adjacent to, an ESA.**

Section IV Best Management Practices (BMPs)

IV. 1 Project Performance Criteria

(NOC Permit Area only) Is there an approved WIHMP or equivalent for the project area that includes more stringent LID feasibility criteria or if there are opportunities identified for implementing LID on regional or sub-regional basis?	YES ☐	NO ☒
If yes, describe WIHMP feasibility criteria or regional/sub-regional LID opportunities.	**Not applicable. There is currently no approved WIHMP for the Anaheim Bay-Huntington Harbor Watershed.**	

Project Performance Criteria	
If HCOC exists, list applicable hydromodification control performance criteria (Section 7.II-2.4.2.2 in MP-WQMP)	**No HCOC exists.**
List applicable LID performance criteria (Section 7.II-2.4.3 from MP-WQMP)	**Priority Projects must infiltrate, harvest and use, evapotranspire, or biotreat/biofilter the 85th percentile of the 24-hour storm event (Design Capture Volume).**

<table>
<tr><td>List applicable treatment control BMP performance criteria (Section 7.II-3.2.2 from MP-WQMP)</td><td>Capture and treat runoff from the 24-hour, 85th percentile storm event, and drawdown the captured/treated volume in 48 hours following end of event.</td></tr>
<tr><td>Calculate LID design storm capture volume for Project.</td><td>The project site has been divided into three drainage areas. The Design Capture Volume (DCV) has been calculated for each drainage area to establish that the underground infiltration BMPs meet the project performance criteria for LID BMPs. The detailed calculations used to determine the DCV are set forth in Section IV.3.2 of this WQMP.
<table>
<tr><th>DRAINAGE AREA</th><th>SQUARE FOOTAGE / ACREAGE OF DRAINAGE AREA</th><th>DCV (CF)</th></tr>
<tr><td>Area 1</td><td>20,945 SF / 0.48 AC</td><td>1,006</td></tr>
<tr><td>Area 2</td><td>31,680 SF / 0.73 AC</td><td>1,510</td></tr>
<tr><td>Area 3</td><td>25,912 SF / 0.59 AC</td><td>1,237</td></tr>
<tr><td>Total</td><td>78,537 SF / 1.80 AC</td><td>3,753</td></tr>
</table></td></tr>
</table>

IV.2. Site Design and Drainage

The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system. The project area currently has no water quality or drainage mitigation devices installed on-site.

The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into three drainage areas, identified as Areas 1-3. Surface drainage from each area will be collected in catch basins with proprietary insert filters for pretreatment and then directed to that drainage area's underground infiltration BMP facility. The insert filters also will act as the project's trash treatment control devices.

The project is proposing to use GeoStorage Infiltration System units, which are shallow proprietary infiltration chambers. The infiltration chambers comply with the design requirements set forth in BMP Fact Sheet INF-7 and are comprised of 3.75 foot deep, open-bottomed, rectangular vaults surrounded by gravel which will collect and then allow the storm water runoff to infiltrate into the native soils. The vaults are covered with concrete roof planks capable of H-20 traffic loading with a manhole opening in one plank to allow access for maintenance. A brochure describing the GeoStorage Infiltration System is included in Section VI of this P-WQMP. Groundwater at the site was encountered at a depth of 14 feet below current grade, and the site will be raised by one foot during grading operations. Therefore, the separation between the bottom of the infiltration chambers and on-site groundwater will be 11.25 feet, thus achieving the required 10 foot separation.

The catch basin insert filters and underground infiltration BMPs, which will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP, will act as the project's LID BMPs.

The infiltration facilities for Areas 1 and 2 are located near the middle of the site, under parking areas. When the storm flows exceed the capacity of the infiltration chamber in Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. When the storm flows exceed the capacity of the infiltration chamber in Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance.

The infiltration facility for Area 3 is located at the southern border of the site, under a parking area. When the storm flows exceed the capacity of the infiltration chamber in Area 3, the excess flows will bubble out of the most westerly Area 3 catch basin and be discharged to Kerry Street

via a parkway culvert.

The Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash, and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters,

Enclosed Bays, and Estuaries of California adopted by the State Water Board, dictate that trash shall not be present in ocean waters or along shorelines, and prohibit the discharge of trash into surface waters of the state (the "Trash Provisions"). Pursuant to the Trash Provisions, all trash treatment control devices shall meet the Full Capture System definition and be certified by the State Water Resources Control Board. In compliance with the Trash Provisions, the proprietary catch basin insert filters that have been proposed for the project are listed on the State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021), a copy of which is included in Section VI of this P-WQMP.

Infiltration chambers were chosen as the primary LID BMPs for the project since site soils are amenable to infiltration.

The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See Section II.3 of this WQMP.)

IV.3 LID BMP Selection and Project Conformance Analysis

Each sub-section below documents that the proposed design features conform to the applicable project performance criteria via check boxes, tables, calculations, narratives, and/or references to worksheets.

IV.3.1 Hydrologic Source Controls (HSCs)

Name	Included?
Localized on-lot infiltration	**No**
Impervious area dispersion (e.g. roof top disconnection)	**No**
Street trees (canopy interception)	**No**
Residential rain barrels (not actively managed)	**No**
Green roofs/Brown roofs	**No**
Blue roofs	**No**
Impervious area reduction (e.g. permeable pavers, site design)	**No**

The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, Hydrologic Source Controls are not required for the proposed Russell Avenue Townhomes project.

IV.3.2 Infiltration BMPs

Name	Included?
Bioretention without underdrains	**No**
Rain gardens	**No**
Porous landscaping	**No**
Infiltration planters	**No**
Retention swales	**No**
Infiltration trenches	**No**
Infiltration basins	**No**
Drywells	**No**
Subsurface infiltration galleries	**Yes**
French drains	**No**
Permeable asphalt	**No**
Permeable concrete	**No**
Permeable concrete pavers	**No**

The underground infiltration BMPs have been sized in compliance with Worksheet B and BMP Fact Sheet INF-1 of the Technical Guidance Document, as set forth below. (The Infiltration Basin Fact Sheet, INF-1, is to be used to size underground infiltration systems with open pore volume per BMP Fact Sheet INF-7.) The calculations demonstrating the storage provided by and the drawdown time of the underground infiltration BMPs are summarized below. These calculations establish that the Design Capture Volume can be met with the INF-7: Underground Infiltration BMPs, thereby satisfying the project performance criteria for LID BMPs. The underground infiltration BMPs will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP.

Further, groundwater at the site was encountered at a depth of 14 feet below current grade, and the site will be raised by one foot during grading operations. Therefore, the separation between the bottom of the 3.75 foot deep infiltration chambers and on-site groundwater will be 11.25 feet, thus achieving the required 10 foot separation.

Further, it has been determined that it is feasible to infiltrate the Design Capture Volume at the project site. See Table 2.7 from the Technical Guidance Document at the end of this section.

DRAINAGE AREA 1

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.77	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0.00	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.77	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.48	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.796	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.75	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	1,006	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate				
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (**Appendix VII**)	$K_{measured}$=	1.90	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	2.0	
3	Calculate design infiltration rate, $K_{design} = K_{measured} \times S_{final}$	K_{design}=	0.95	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	48	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	3.80	feet
6	**Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	265	sq-ft

****The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 350 square feet (10' x 35') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7: Underground**

Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 265 square feet as calculated in the above Worksheet B.

INF-1: Simple Sizing Method for Underground Infiltration Systems With Open Pore Volume (this sizing method is to be used per INF-7):

The sizing steps are as follows:

Step 1: Determine Infiltration Basin DCV

Calculate the DCV using the Simple Design Capture Volume Sizing Method described in Appendix III.3.1.

See Worksheet B above—the DCV for Drainage Area 1 = 1,006 cu-ft

Step 2: Determine the 48-hour Depth

The depth of water that can be drawn down in 48 hours can be calculated using the following equation:

$d_{48} = K_{DESIGN} \times 4$

Where:

d_{48} = basin 48-hour drawdown depth, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See Appendix VII)

This is the maximum depth of the basin below the overflow device to achieve drawdown in 48 hours.

K_{DESIGN} = 0.95 in/hr—See Worksheet B above, Step 3a (3)

d_{48} = 0.95 in/hr x 4 = 3.80 ft

Step 3: Calculate the Required Infiltrating Area

The required infiltrating area (i.e. basin area at mid ponding depth) can be calculated using the following equation:

$A = DCV / (d_P)$

Where:

A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)

DCV = design capture volume, cu-ft (see Step 1)

d_P = ponding depth, ft (should be equal to or less than d_{48})

d_P = 3.75 ft (See BMP Exhibit (Site Plan) included in Section VI of this WQMP)

A = 1,006 cu-ft / 3.75 ft = 268 sq-ft

**** The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 350 square feet (10' x 35') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7:**

Underground Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 268 square feet as calculated pursuant to BMP Fact Sheet INF-1.

DRAINAGE AREA 2

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.77	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0.00	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.77	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.73	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.789	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.74	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	1,510	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate				
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (**Appendix VII**)	$K_{measured}$=	1.90	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	2.0	
3	Calculate design infiltration rate, $K_{design} = K_{measured} \times S_{final}$	K_{design}=	0.95	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	48	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	3.80	feet
6	**Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	397	sq-ft

****The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 610 square feet (10' x 61') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7: Underground Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 397 square feet as calculated in the above Worksheet B.**

INF-1: Simple Sizing Method for Underground Infiltration Systems With Open Pore Volume (this sizing method is to be used per INF-7):

The sizing steps are as follows:

Step 1: Determine Infiltration Basin DCV

Calculate the DCV using the Simple Design Capture Volume Sizing Method described in Appendix III.3.1.

See Worksheet B above—the DCV for Drainage Area 1 = 1,510 cu-ft

Step 2: Determine the 48-hour Depth

The depth of water that can be drawn down in 48 hours can be calculated using the following equation:

$d_{48} = K_{DESIGN} \times 4$

Where:

d_{48} = basin 48-hour drawdown depth, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See Appendix VII)

This is the maximum depth of the basin below the overflow device to achieve drawdown in 48 hours.

K_{DESIGN} = 0.95 in/hr—See Worksheet B above, Step 3a (3)

d_{48} = 0.95 in/hr x 4 = 3.80 ft

Step 3: Calculate the Required Infiltrating Area

The required infiltrating area (i.e. basin area at mid ponding depth) can be calculated using the following equation:

$A = DCV / (d_P)$

Where:

A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)

DCV = design capture volume, cu-ft (see Step 1)

d_P = ponding depth, ft (should be equal to or less than d_{48})

d_P = 3.75 ft (See BMP Exhibit (Site Plan) included in Section VI of this WQMP)

A = 1,510 cu-ft / 3.75 ft = 403 sq-ft

**** The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 610 square feet (10' x 61') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7: Underground Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 403 square feet as calculated pursuant to BMP Fact Sheet INF-1.**

DRAINAGE AREA 3

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.77	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0.00	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.77	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.59	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.794	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.75	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	1,237	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate				
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (**Appendix VII**)	$K_{measured}$=	1.90	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	2.0	
3	Calculate design infiltration rate, $K_{design} = K_{measured} \times S_{final}$	K_{design}=	0.95	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	48	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	3.80	feet
6	**Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	326	sq-ft

****The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 480 square feet (8' x 60') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7: Underground Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 326 square feet as calculated in the above Worksheet B.**

INF-1: Simple Sizing Method for Underground Infiltration Systems With Open Pore Volume (this sizing method is to be used per INF-7):

The sizing steps are as follows:

Step 1: Determine Infiltration Basin DCV

Calculate the DCV using the Simple Design Capture Volume Sizing Method described in Appendix III.3.1.

See Worksheet B above—the DCV for Drainage Area 1 = 1,237 cu-ft

Step 2: Determine the 48-hour Depth

The depth of water that can be drawn down in 48 hours can be calculated using the following equation:

$d_{48} = K_{DESIGN} \times 4$

Where:

d_{48} = basin 48-hour drawdown depth, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See Appendix VII)

This is the maximum depth of the basin below the overflow device to achieve drawdown in 48 hours.

K_{DESIGN} = 0.95 in/hr—See Worksheet B above, Step 3a (3)

d_{48} = 0.95 in/hr x 4 = 3.80 ft

Step 3: Calculate the Required Infiltrating Area

The required infiltrating area (i.e. basin area at mid ponding depth) can be calculated using the following equation:

$A = DCV / (d_P)$

Where:

A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)

DCV = design capture volume, cu-ft (see Step 1)

d_P = ponding depth, ft (should be equal to or less than d_{48})

d_P = 3.75 ft (See BMP Exhibit (Site Plan) included in Section VI of this WQMP)

A = 1,237 cu-ft / 3.75 ft = 330 sq-ft

**** The designed INF-7: Underground Infiltration BMP for Drainage Area 1 measures 610 square feet (10' x 61') (see BMP Exhibit (Site Plan) included in Section VI of this WQMP); therefore, the INF-7: Underground Infiltration BMP for Drainage Area 1 exceeds the minimum required BMP area of 330 square feet as calculated pursuant to BMP Fact Sheet INF-1.**

FACTOR OF SAFETY FOR DRAINAGE AREAS 1, 2 & 3

Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	2	0.50
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.25
B	Design	Tributary area size	0.25	1	0.25
		Level of pretreatment/ expected sediment loads	0.25	2	0.50
		Redundancy	0.25	2	0.50
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			1.5
Combined Safety Factor, $S_{Total} = S_A \times S_B$ **(1.25 x 1.50 = 1.875, use 2 per TGD)**					2.0
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)					1.90
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_{Observed} / S_{Total}$					0.95
Supporting Data					
Briefly describe infiltration test and provide reference to test forms: **See pages 6-7 of the Infiltration Report, a copy of which is attached to this P-WQMP as Appendix F.**					

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

STORAGE AND DRAWDOWN TIME CALCULATIONS FOR INF-7: UNDERGROUND INFILTRATION BMPS

DRAINAGE AREA 1

REQUIRED STORAGE: DCV = 1,006 CF

STORAGE PROVIDED = (10' x 35') X 3.75' = 1,313 CF

STORAGE PROVIDED (1,313 CF) > REQUIRED STORAGE (1,006 CF)

DRAWDOWN CALCULATION

DRAWDOWN TIME = STORAGE / FACILITY AREA X INFILTRATION RATE
1,313 CF / (10' X 35') X (0.0792'/HR) = 47.4 HR < 48 HR

DRAINAGE AREA 2

REQUIRED STORAGE: DCV = 1,510 CF

STORAGE PROVIDED = (10' x 61') X 3.75' = 2,288 CF

STORAGE PROVIDED (2,288 CF) > REQUIRED STORAGE (1,510 CF)

DRAWDOWN CALCULATION

DRAWDOWN TIME = STORAGE / FACILITY AREA X INFILTRATION RATE
2,288 CF / (10' X 61') X (0.0792'/HR) = 47.4 HR < 48 HR

DRAINAGE AREA 3

REQUIRED STORAGE: DCV = 1,237 CF

STORAGE PROVIDED = (8' x 60') X 3.75' = 1,800 CF

STORAGE PROVIDED (1,800 CF) = REQUIRED STORAGE (1,237 CF)

DRAWDOWN CALCULATION

DRAWDOWN TIME = STORAGE / FACILITY AREA X INFILTRATION RATE
1,800 CF / (8' X 60') X (0.0792'/HR) = 47.4 HR < 48 HR

Table 2.7: Infiltration BMP Feasibility Worksheet

	Infeasibility Criteria	*Yes*	*No*
1	**Would Infiltration BMPs pose significant risk for groundwater related concerns?** Refer to Appendix VIII (Worksheet I) for guidance on groundwater-related Infiltration feasibility criteria.		**X**
Provide basis: **The groundwater level for the site is 14 feet in depth and the site will be raised by a foot during grading operations. Therefore, a chamber system set at a depth of 3.75 feet will maintain the minimum required clearance of 10 feet from groundwater. (See pages 6-7 of the Infiltration Report, a copy of which is attached to this P-WQMP as Appendix F.** Summarize findings of studies provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	Would Infiltration BMPs **pose significant risk of increasing risk of geotechnical hazards that cannot be mitigated to an acceptable level?** (Yes if the answer to any of the following questions is yes, as established by a geotechnical expert): • The BMP can only be located less than 50 feet away from slopes steeper than 15 percent. • The BMP can only be located less than eight feet from building foundations or an alternative setback. • A study prepared by a geotechnical professional or an available watershed study substantiates that storm water infiltration would potentially result in significantly increased risks of geotechnical hazards that cannot be mitigated to an acceptable level.		**X**
Provide basis: **The site is flat and the BMPs are located more than eight feet from the building foundations. See BMP Exhibit (Site Plan) included in Section VI of this WQMP.** Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
3	Would infiltration of the DCV from drainage area **violate downstream water rights?**		**X**
Provide basis: Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc.			

	Partial Infeasibility Criteria	*Yes*	*No*
4	Is proposed infiltration facility **located on HSG D soils** or the site geotechnical investigation identifies presence of soil characteristics which support categorization as D soils?		**X**
Provide basis: **During the geotechnical investigation of the site, artificial fills were encountered within the upper two feet across the site. The fills were generally composed of damp, fine- to medium-grained, sands with silts. Underlying the fills were alluvial soils consisting of sands with silt, sandy silts, silty sands/sandy silts, and silty sands. The alluvial soils were present across the site to the maximum depth explored of 51.5 feet. (See page 4 of the Geotechnical Report attached to this P-WQMP as Appendix E.) The geotechnical expert determined that the "measured" infiltration rate at the site is 1.9 in/hr. (See pages 6-7 of the Infiltration Report, a copy of which is attached to this P-WQMP as Appendix F.)** Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
5	Is **measured infiltration rate below proposed facility less than 0.3 inches per hour?** This calculation shall be based on the methods described in Appendix VII.		**X**
Provide basis: **The measured infiltration rate at the site is 1.9 in/hr. (See pages 6-7 of the Infiltration Report, a copy of which is attached to this P-WQMP as Appendix F.)** Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
6	Would **reduction of over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?**		**X**
Provide citation to applicable study and summarize findings relative to the amount of infiltration that is permissible: Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
7	Would **an increase in infiltration over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?**		**X**
Provide citation to applicable study and summarize findings relative to the amount of infiltration that is permissible: Summarize findings of studies, provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			

Infiltration Screening Results (check box corresponding to result):			
8	Is there substantial evidence that infiltration from the project would result in a significant increase in I & I to the sanitary sewer that cannot be sufficiently mitigated? (See Appendix XVII) Provide narrative discussion and supporting evidence: Summarize findings of studies provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability. **The referenced document is not attached to the current version of the TGD.**		**X**
9	**If any answer from row 1-3 is yes**: infiltration of any volume is not feasible within the DMA or equivalent. Provide basis: Summarize findings of infeasibility screening	**N/A**	
10	**If any answer from row 4-7 is yes**, infiltration is permissible but is not presumed to be feasible for the entire DCV. Criteria for designing biotreatment BMPs to achieve the maximum feasible infiltration and ET shall apply. Provide basis: Summarize findings of infeasibility screening	**N/A**	
11	If all answers to rows 1 through 11 are no, infiltration of the full DCV is potentially feasible, BMPs must be designed to infiltrate the full DCV to the maximum extent practicable. **The selected LID BMPs, INF-7 Underground Infiltration BMPs, have been designed to infiltrate the full DCV.**	**X**	

IV.3.3 Evapotranspiration, Rainwater Harvesting BMPs

Name	Included?
All HSCs; *See Section IV.3.1*	**No**
Surface-based infiltration BMPs	**No**
Biotreatment BMPs	**No**
Above-ground cisterns and basins	**No**
Underground detention	**No**

The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, additional Evapotranspiration and/or Rainwater Harvesting BMPs are not required for the proposed Russell Avenue Townhomes project.

IV.3.4 Biotreatment BMPs

Name	Included?
Bioretention with underdrains	**No**
Stormwater planter boxes with underdrains	**No**
Rain gardens with underdrains	**No**
Constructed wetlands	**No**
Vegetated swales	**No**
Vegetated filter strips	**No**
Proprietary vegetated biotreatment systems	**No**
Wet extended detention basin	**No**
Dry extended detention basins	**No**

The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, no biotreatment BMPs will be utilized at the proposed Russell Avenue Townhomes project.

IV.3.5 Hydromodification Control BMPs

Hydromodification Control BMPs	
BMP Name	**BMP Description**
The site's stormwater flows are discharged to either Russell Avenue or Kerry Street and are conveyed westerly and southerly until entering the storm drain system via a catch basin on Donegal Drive (near the intersection of Donegal Drive and Trask Avenue). The storm drain discharges to Westminster Channel, which drains to Bolsa Chica Channel, which in turn flows to Anaheim Bay, which outlets to the Pacific Ocean. No Hydrologic Conditions of Concern exist for the project since all downstream conveyance channels that will receive runoff from the project are engineered, hardened, and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. (See the Susceptibility Analysis Map for the Anaheim Bay-Huntington Harbor Watershed, Figure 2 of Appendix XVI.3 of the Technical Guidance Document, a copy of which is attached to this P-WQMP as Appendix C.) Since a Hydrologic Condition of Concern does not exist for this project, no hydromodification control BMPs are required.	

IV.3.6 Regional/Sub-Regional LID BMPs

Regional/Sub-Regional LID BMPs
The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, no Regional/Sub-Regional LID BMPs are required for the proposed Russell Avenue Townhomes project.

IV.3.7 Treatment Control BMPs

Treatment Control BMPs	
BMP Name	**BMP Description**
The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. In addition, the proposed Oldcastle FloGard +PLUS Catch Basin Insert Filters have been certified by the State Water Resources Control Board as a trash treatment control device that meets the Full Capture System definition. (See the State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021), a copy of which is included in Section VI of this P-WQMP.) No other Treatment Control BMPs will be utilized at the site.	

IV.3.8 Non-Structural Source Control BMPs

Non-Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**If not applicable, state brief reason**
		Included	**Not Applicable**	
N1	Education for Property Owners, Tenants and Occupants	X		
N2	Activity Restrictions	X		
N3	Common Area Landscape Management	X		
N4	BMP Maintenance	X		
N5	Title 22 CCR Compliance (How development will comply)		X	Not applicable. The project site will not require Title 22 CCR compliance since the operation of the project site will not generate hazardous wastes as part of its routine operation.
N6	Local Industrial Permit Compliance		X	BMP not applicable to this project.
N7	Spill Contingency Plan		X	Not applicable. This site does not mandate the stockpiling of cleanup materials; therefore, it does not require a spill contingency plan.
N8	Underground Storage Tank Compliance		X	Not applicable. There are no underground storage tanks proposed for the project site.
N9	Hazardous Materials Disclosure Compliance		X	Not applicable. The project site will not handle or dispose of hazardous materials as part of its routine operations.
N10	Uniform Fire Code Implementation		X	Not applicable. The project site will not handle or dispose of hazardous materials as part of its routine operations.
N11	Common Area Litter Control	X		
N12	Employee Training	X		

N13	Housekeeping of Loading Docks		X	Not applicable. No loading docks are proposed.
N14	Common Area Catch Basin Inspection	X		
N15	Street Sweeping Private Streets and Parking Lots	X		
N16	Retail Gasoline Outlets		X	Not applicable. No retail gasoline outlets are proposed.

N1 Property Owner Education

The Owner will review the environmental awareness educational materials and BMP Fact Sheets included in Appendices A and B of this Project WQMP upon completion of the residential development. Among other things, these materials will inform the Owner of the impacts of dumping oil, paints, solvents or other potentially harmful chemicals into the storm drain; the proper use and management of fertilizers, pesticides and herbicides in landscaping practices; the impacts of littering and improper watering; and proper maintenance practices for the development.

N2 Activity Restrictions

The Owner shall identify surface water quality protection requirements to ensure that surface water quality activities shall be conducted in conformance with the Project WQMP as it relates to the handling and disposal of contaminants and, through the use of employee training manuals or another equally effective method, shall develop corresponding use restrictions. The use restrictions shall include, but not be limited to, the following:

(a) The Owner shall periodically provide to his employees environmental awareness education materials made available by the local municipalities. These materials will describe the use of chemicals (including pesticides and fertilizers) that should be limited to the covered property with no discharge of specified wastes via hosing or other direct discharge to gutter, catch basins, settling basins and storm drains.

(b) The Owner shall require the use of fertilizers and pesticides to be in strict conformance with City and County guidelines.

(c) The Owner shall prohibit the discharge of leaf litter, grass clippings, trash, animal wastes, paint, or masonry wastes to streets or storm drain systems.

(d) The Owner shall prohibit hosing down any paved surface where the result would be the flow of non-storm water into the street or storm drains.

(e) The Owner shall prohibit oil changing or other auto repairs that could discharge pollutants.

(f) The Owner shall prohibit washing of cars.

N3 Common Area Landscape Management

Management programs will be designed and implemented by the Owner to maintain all of the landscaped areas within the project site. These programs will include how to mitigate the potential dangers of fertilizer and pesticide usage, require that fertilizer and pesticide usage shall be consistent with City and County guidelines, discuss utilization of water-efficient landscaping practices, require that maintenance be consistent with the County Water Conservation Resolution or the City equivalent, and detail the proper disposal of landscape wastes.

The Owner shall implement irrigation and landscaping which will utilize moisture sensors, smart timers, rain shut-off valves and the grouping of plants with similar water requirements in order to prevent excess irrigation and its corresponding runoff. The Owner shall also maintain erosion control devices on the property until adequate vegetation coverage has been achieved following establishment of the landscape plantings.

The Owner shall also perform periodic inspection and adjustment of the automatic irrigation system for valve and sprinkler operation and irrigation spray heads for damage as necessary to ensure adequate moisture delivery without allowing overspray or excessive watering that would lead to unnecessary runoff.

N4 BMP Maintenance

The Owner shall be responsible for implementation of each applicable non-structural BMP as well as scheduling inspection and maintenance cleaning of all applicable structural BMP facilities. The Owner, through its landscape or other maintenance contractor, will be responsible for inspection and maintenance activities in landscape areas. Debris and other water pollutants will be controlled, contained and disposed of in a proper manner by the maintenance contractor, and landscaping debris and silt shall be kept out of the infiltration BMP chambers. Refer to Section V.

N11 Common Area Litter Control

The Owner will be responsible to provide or arrange for weekly sweeping and trash pick-up at the site. The Owner may contract with its landscape or other maintenance contractor to perform these duties, as well as to conduct weekly inspections of all trash receptacles to make sure lids are closed and pick-up of any excess trash on the ground has occurred, and to note and investigate any trash disposal violations.

N12 Employee Training

The Owner shall establish an education program for his employees and/or contractors to inform and train personnel engaged in maintenance activities regarding the impact of dumping oil, paints, solvents or other potentially harmful chemicals into the storm drain; the proper use of fertilizers and pesticides in landscaping maintenance practices; and the impacts of littering and improper water disposal.

N14 Common Area Catch Basin Inspection

All catch basin inlets will be inspected and maintained by Owner at least once a year, prior to the rainy season, no later than October 1st of each year.

N15 Parking Lot Sweeping

The Owner, through his employees and/or landscaping or other maintenance contractor, shall sweep all parking areas and drive aisles within the project at least every two weeks, or more often if needed. Debris, sediment and trash picked up during sweeping operations will be deposited in the trash receptacles, and landscaping debris and silt shall be kept out of the infiltration BMP chambers.

IV.3.9 Structural Source Control BMPs

Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**If not applicable, state brief reason**
		Included	**Not Applicable**	
S1	Provide storm drain system stenciling and signage	X		
S2	Design and construct outdoor material storage areas to reduce pollution introduction		X	Not applicable. No outdoor material storage areas are proposed.
S3	Design and construct trash and waste storage areas to reduce pollution introduction	X		
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	X		
S5	Protect slopes and channels and provide energy dissipation		X	Not applicable. The site has no slopes or channels.
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)			
S6	Dock areas		X	Not applicable. No loading dock areas are proposed.
S7	Maintenance bays		X	Not applicable. No maintenance bays are proposed.
S8	Vehicle wash areas		X	Not applicable. No vehicle wash areas are proposed.
S9	Outdoor processing areas		X	Not applicable. No outdoor processing areas are proposed.
S10	Equipment wash areas		X	Not applicable. No equipment wash areas are proposed.
S11	Fueling areas		X	Not applicable. No fueling areas are proposed.
S12	Hillside landscaping		X	Not applicable. No hillside landscaping is proposed.
S13	Wash water control for food preparation areas		X	Not applicable. No food preparation areas are proposed.
S14	Community car wash racks		X	Not applicable. No community car wash racks are proposed.

Structural BMPs shall be installed by the Owner through the construction and development of the project. For instance, irrigation systems shall be designed by a licensed landscape architect and installed by a qualified contractor to the specifications and standards of the City of Garden Grove and the County of Orange. Thereafter, these structural source control BMPs shall be maintained by the Owner.

S1 Provide Storm Drain System Stenciling and Signage (CASQA SD-13)

The Owner is responsible for labeling all of the project's storm drain inlets and catch basins with the phrase, "NO DUMPING! DRAINS TO OCEAN," or an equally effective phrase, to alert the public to the destination of pollutants discharged into storm water. This signage is to be included on the project plans. The signage and stenciling shall be maintained for legibility by the Owner.

S3 Design Trash Enclosures to Reduce Pollution Introduction (CASQA SD-32)

One outdoor trash enclosure is proposed for this site. The proposed trash enclosure will be paved with an impervious surface, and has been designed to not allow run-on from adjoining areas and to divert drainage from adjoining roofs and pavements around the trash enclosure area. The trash enclosure shall also provide a solid roof to prevent direct precipitation, and the trash area drain will not connect to the municipal storm drain system. The trash enclosure will be located as shown on the BMP Exhibit (Site Plan) included in Section VI of this WQMP.

In conjunction with maintenance activities, the Owner will be responsible for inspecting the trash enclosure on a weekly basis to ensure that no hazardous materials or other inappropriate materials are being disposed of, and to ensure that trash is not allowed to overflow the provided bins.

S4 Use Efficient Irrigation Systems and Landscape Design (CASQA SD-12)

The Owner shall direct its landscaping architect to design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the municipal storm drain system. The following methods to reduce excessive irrigation runoff shall be incorporated where determined applicable and feasible:

1. Employing rain shutoff devices to prevent irrigation after precipitation.

2. Designing irrigation systems to each landscape area's specific water requirements.

3. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

4. Implementing a landscape plan consistent with County Water Conservation Resolution or city equivalent, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

5. The timing and application methods of irrigation water shall be designed to minimize the runoff of excess irrigation water into the municipal storm drain system.

6. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

7. Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider other design features, such as:

   (a) Use mulches (such as wood chips or shredded wood products) in planter areas without ground cover to minimize sediment in runoff.

   (b) Install appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant material where possible and/or as recommended by the landscape architect.

   (c) Leave a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible.

   (d) Choose plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth.

The Owner shall be responsible for implementing and maintaining efficient irrigation systems for all landscaping including but not limited to provisions for water sensors, programmable irrigation cycles, and rain shutoff devices. The irrigation systems shall comply with local and statewide ordinances related to irrigation efficiency. The Owner shall also be responsible for the installation and maintenance of all landscape areas utilizing similar planting materials with similar water requirements to reduce excess irrigation runoff.

IV.4 Alternative Compliance Plan (If Applicable)

The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, no Alternative Compliance Plan will be utilized at the site.

IV.4.1 Water Quality Credits

<table>
<tr><th colspan="5">Description of Proposed Project</th></tr>
<tr><td colspan="5">Project Types that Qualify for Water Quality Credits (Select all that apply):</td></tr>
<tr><td>☐ Redevelopment projects that reduce the overall impervious footprint of the project site.</td><td colspan="2">☐Brownfield redevelopment, meaning redevelopment, expansion, or reuse of real property which may be complicated by the presence or potential presence of hazardous substances, pollutants or contaminants, and which have the potential to contribute to adverse ground or surface WQ if not redeveloped.</td><td colspan="2">☐ Higher density development projects which include two distinct categories (credits can only be taken for one category): those with more than seven units per acre of development (lower credit allowance); vertical density developments, for example, those with a Floor to Area Ratio (FAR) of 2 or those having more than 18 units per acre (greater credit allowance).</td></tr>
<tr><td colspan="2">☐ Mixed use development, such as a combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that can demonstrate environmental benefits that would not be realized through single use projects (e.g. reduced vehicle trip traffic with the potential to reduce sources of water or air pollution).</td><td colspan="2">☐ Transit-oriented developments, such as a mixed use residential or commercial area designed to maximize access to public transportation; similar to above criterion, but where the development center is within one half mile of a mass transit center (e.g. bus, rail, light rail or commuter train station). Such projects would not be able to take credit for both categories, but may have greater credit assigned</td><td>☐ Redevelopment projects in an established historic district, historic preservation area, or similar significant city area including core City Center areas (to be defined through mapping).</td></tr>
<tr><td>☐Developments with dedication of undeveloped portions to parks, preservation areas and other pervious uses.</td><td>☐ Developments in a city center area.</td><td>☐ Developments in historic districts or historic preservation areas.</td><td>☐ Live-work developments, a variety of developments designed to support residential and vocational needs together – similar to criteria to mixed use development; would not be able to take credit for both categories.</td><td>☐ In-fill projects, the conversion of empty lots and other underused spaces into more beneficially used spaces, such as residential or commercial areas.</td></tr>
<tr><td>Calculation of Water Quality Credits (if applicable)</td><td colspan="4">The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, no Water Quality Credits will be claimed for the Project WQMP.</td></tr>
</table>

IV.4.2 Alternative Compliance Plan Information

The proposed INF-7: Underground Infiltration BMPs will retain and infiltrate the entire LID Design Storm Capture Volume. Therefore, no Alternative Compliance Plan will be utilized at the site.

Section V Inspection/Maintenance Responsibility for BMPs

Melia Homes, Inc. (the owner of the project), shall assume all BMP inspection and maintenance responsibilities for the Russell Avenue Townhomes project located in Garden Grove, California, until a homeowners' association is formed, at which time all BMP implementation and maintenance responsibilities shall be transferred to said homeowners' association.

CONTACT NAME	**B.J. Delzer**
COMPANY	**Melia Homes, Inc.**
ADDRESS	**9860 Irvine Center Drive** **Irvine, California 92618**
PHONE /EMAIL	**(949)759-4367 / bj@melia-homes.com**

A copy of the Operation and Maintenance Plan is attached to this WQMP as Appendix G.

A Master Covenant and Agreement Regarding On-Site BMP Maintenance (with a copy of the Final WQMP Site Plan attached) will be recorded in the County Recorder's Office with respect to the Project Property prior to approval of the Final WQMP.

The Owner also will prepare and record CC&Rs for the project. The CC&Rs will include activity restrictions intended to reduce or eliminate the introduction of pollutants into site runoff, and activities required to maintain and repair the LID BMPs and non-structural and structural source control BMPs implemented at the project.

The design Engineer will be required to perform a final inspection of the project site to confirm that all required design features and structural BMPs have been constructed and installed per plan and were functioning and maintainable at the completion of the project. See the Engineer's Certification Form attached hereto as Appendix M.

Should the maintenance responsibility be transferred at any time during the operational life of the Russell Avenue Townhomes project, a formal notice of transfer shall be submitted to the City of Garden Grove at the time the maintenance responsibility of the property subject to this WQMP is transferred. A Notice of Transfer of Responsibility form is included in Appendix J. The transfer of responsibility shall be incorporated into this WQMP as an amendment.

ANNUAL CERTIFICATION OF BMP MAINTENANCE

The Owner (until the HOA is formed) shall verify BMP implementation and ongoing maintenance through inspection, self- certification, survey, or other equally effective measures. The certification shall verify, at a minimum, the inspection and maintenance of all structural BMPs including inspection and performance of any required maintenance in the late summer/early fall, prior to the start of the rainy season. The form that will be used to record the implementation, maintenance, and inspection of BMPs is included in Appendix H. A form that may be utilized to prepare the Annual Certificate of Compliance for BMP maintenance to be submitted to the City is included in Appendix I.

The Annual Certificate of Compliance for BMP maintenance is required to be submitted to the City by July 1st of every year.

The Owner (until the HOA is formed) shall retain operations, inspections and maintenance records of these BMPs and they will be made available to the City or County upon request. All records must be maintained for at least five (5) years after the recorded inspection date for the lifetime of the project.

LONG-TERM FUNDING FOR BMP MAINTENANCE

The Owner shall be responsible for long-term funding for BMP maintenance. BMPs shall be maintained throughout the year, and inspection and maintenance activities shall be documented in this WQMP. When the HOA is formed and takes over maintenance of the project common areas, funding for all BMP maintenance, replacement and repair shall be addressed by the HOA fees.

ACCESS EASEMENT FOR CITY / COUNTY INSPECTION

The City of Garden Grove may conduct verifications to ensure that implementation and appropriate maintenance of structural and non-structural BMPs prescribed within this WQMP are taking place at the project site. Access for inspection shall be confirmed and conveyed in the Owner's Certification on the Final Tract Map with an onsite blanket easement across all common areas (exterior of buildings).

The table below identifies the party responsible for performing the inspection and maintenance of each BMP for the Russell Avenue Townhomes project, and details the maintenance and inspection activities to be performed and the frequency with which each shall be performed.

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
N1. Education for Property Owners, Tenants and Occupants (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Educational materials shall be reviewed and made available to purchasers of the Russell Avenue Townhomes. Refer to Appendices A and B of the Project WQMP for a list of applicable educational materials and BMP Fact Sheets.	Upon occupancy, and annually thereafter
N2. Activity Restrictions (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	The owner shall include appropriate on-site activity restrictions in the CCRs for the project. These will include, but are not limited to, use of pesticides and fertilizers consistent with City and County guidelines, prohibiting washing or hosing of walkways and driveways, and prohibiting the washing of cars on the property.	Continuous

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
N3. Common Area Landscape Management (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Maintenance shall be consistent with City requirements, plus fertilizer and/or pesticide usage shall be consistent with County Management Guidelines for Use of Fertilizers (OC DAMP Section 5.5). Typical maintenance includes mowing, trimming, replanting, and debris removal.	Weekly
N4. BMP Maintenance (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Owner shall be responsible for implementation of each non- structural BMP and regularly scheduled cleaning of all BMP structural facilities. Records of inspections and BMP maintenance shall be maintained by the owner and shall be available for review upon request.	Continuous

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
N11. Common Area Litter Control (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Litter patrol, violation investigation, reporting and other litter control activities shall be performed in conjunction with maintenance activities.	Weekly
N12. Employee Training (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	The owner shall educate all new employees/managers on storm water pollution prevention, particularly good housekeeping practices prior to the start of the rainy season (October 1st). Refresher courses shall be conducted on an as needed basis.	Upon hire, and annually thereafter

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
N14. Common Area Catch Basin Inspection (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Catch basin inlets shall be inspected and, if necessary, cleaned prior to the storm season by October 1st each year and after all major storm events.	Annually and Immediately After Major Storm Events
N15. Street Sweeping Private Streets and Parking Lots (Non-Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Parking lots and drive aisles must be swept every two weeks or more often if needed, including prior to the start of the rainy season (October 1st). Sweeping shall be done with a vacuum-type sweeper. Under no circumstances are outdoor areas/lots to be rinsed or washed with water unless said rinse/wash water is collected and disposed of properly (i.e. into the sewer).	Biweekly or More Often if Needed

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
S1. Provide Storm Drain System Stenciling and Signage (Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Storm drain stencils shall be inspected for legibility, at a minimum, once prior to the storm season, and no later than October 1st of each year. Those signs determined to be illegible will be re-stenciled as soon as possible.	Annually

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
S3. Design Trash Enclosures to Reduce Pollutant Introduction	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	In conjunction with maintenance activities, all trash enclosures shall be inspected weekly to ensure that no hazardous materials or other inappropriate materials are being disposed of, and to ensure that trash is not allowed to overflow the provided bins.	Weekly
S4. Use Efficient Irrigation Systems & Landscape Design (Structural Source Control BMP)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Ongoing maintenance must be consistent with the City's adopted water conservation ord., and fertilizer and pesticide usage consistent with the "County Guidelines for Use of Fertilizers and Pesticides." Maintain all common landscape areas utilizing planting materials with similar watering requirements to reduce excess irrigation runoff. Inspect and maintain the efficient irrigation systems installed for the common area landscaping to ensure the proper functioning of all water sensors, programmable irrigation cycles and rain shutoff valves.	Monthly

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
Infiltration BMP # 1 Underground Infiltration (INF-7)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Quarterly inspections of the underground infiltration BMPs shall be conducted utilizing the designed manholes. The BMPs shall be cleaned when inspection reveals that accumulated sediment or trash is clogging the system. Accumulated sediment and trash can be evacuated through the manholes.	Quarterly And Immediately After Major Storm Events
Pretreatment BMP #1 Proprietary Catch Basin Insert Filters (Pretreatment for Infiltration)	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**	Twice a year, prior to and after the rainy season, and after major storm events, the catch basin insert filters shall be visually inspected for damage, have all sediment and debris removed, and the filter medium pouches shall be replaced if necessary. The owner may conduct this maintenance itself or may enter into a service contract for the maintenance as detailed in the Oldcastle FloGardPlus Specs/Maintenance Requirements brochure, located in Section VI of the Project WQMP.	Every Six Months (Approximately April 1st and October 1st) and Immediately After Major Storm Events

Section VI BMP Exhibit (Site Plan)

VI.1 BMP Exhibit (Site Plan)

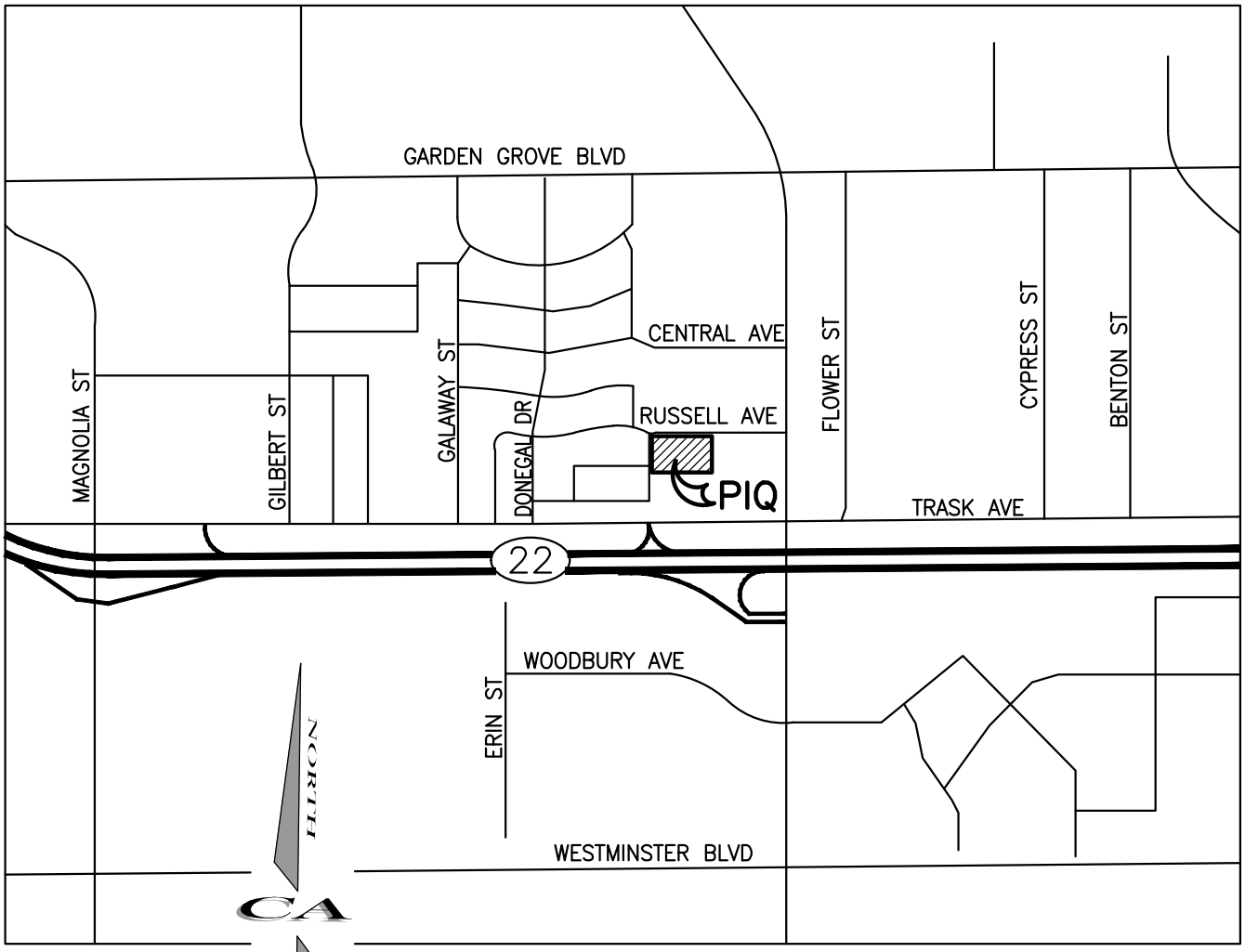
The following documents are included in this section of the WQMP:

- **Vicinity Map**
- **BMP Exhibit (Site Plan)**
- **Oldcastle FloGard +PLUS Catch Basin Insert Filter Specifications and Inspection and Maintenance Guide**
- **GeoStorage Underground Stormwater Detention System Brochure**
- **BMP Fact Sheet—INF-7: Underground Infiltration**
- **BMP Fact Sheet—INF-1: Infiltration Basin (Included for Sizing Standards Regarding Underground Infiltration Only)**
- **State Water Resources Control Board's Certified Full Capture System List of Trash Treatment Control Devices (Updated May 2021)**

VI.2 Submittal and Recordation of Water Quality Management Plan

Following approval of the Final Project-Specific WQMP, the approved WQMP (excluding Appendices) shall be recorded in the Orange County Clerk-Recorder's Office prior to close-out of grading and/or building permit.

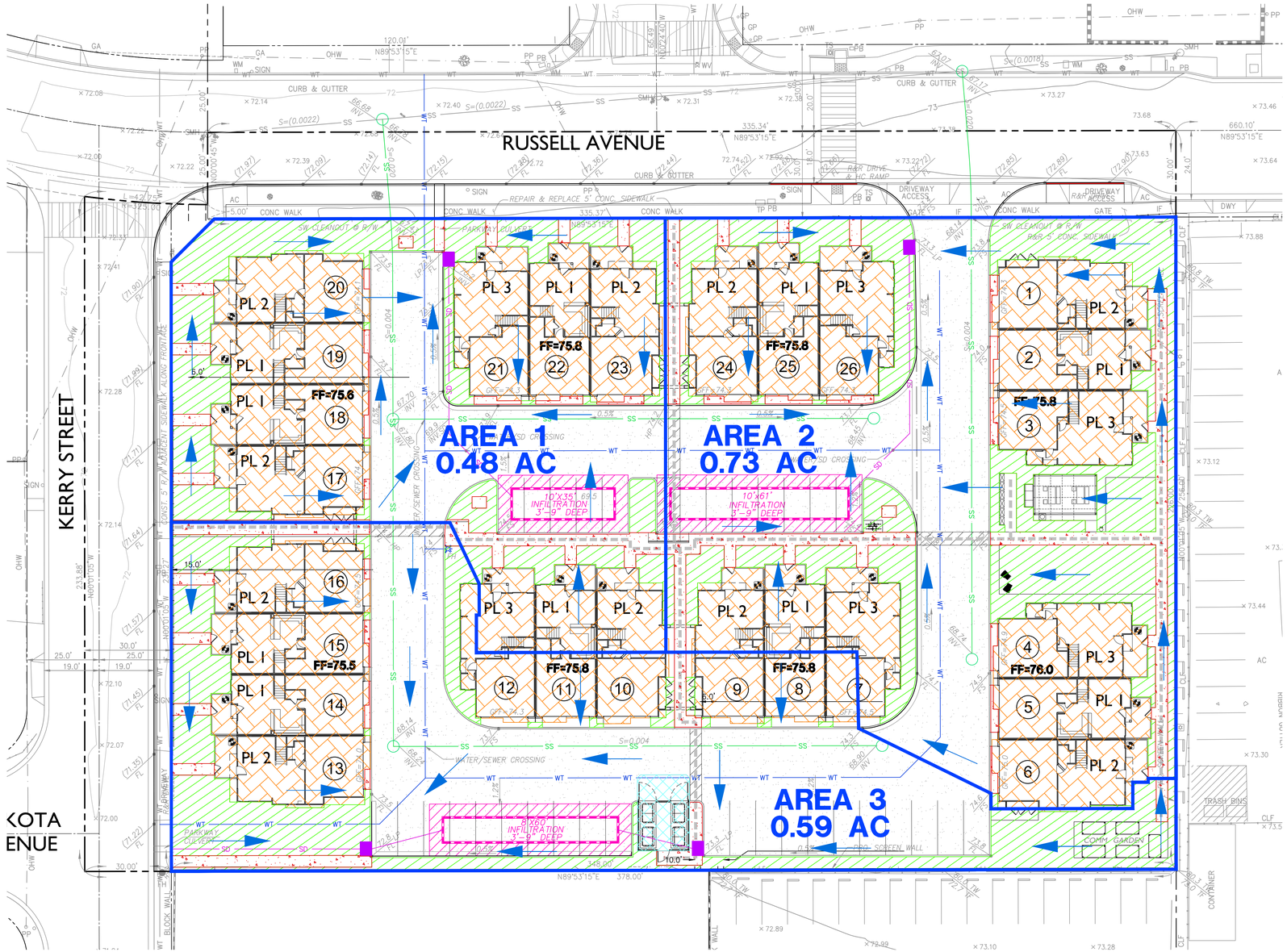
VICINITY MAP



VICINITY MAP

NOT TO SCALE

BMP EXHIBIT (SITE PLAN)



BMP LEGEND

- DRAINAGE AREAS — **AREA 1**
- FLOW DIRECTION
- UNDERGROUND STORM DRAIN INFILTRATION CHAMBER
- LANDSCAPE AREA EFFICIENT IRRIGATION / LANDSCAPE AREA RUNOFF–MINIMIZING DESIGN
- TRASH ENCLOSURE
- BUILDING
- CONCRETE HARDSCAPE
- ASPHALT CONCRETE DRIVE AISLES
- CATCH BASIN INSERT FILTERS
- SD — PROPOSED STORM DRAIN
- SS — PROPOSED SEWER
- SS — EXISTING SEWER
- WT — PROPOSED WATER
- WT — EXISTING WATER

PROJECT DATA:

TOTAL SITE AREA OF PROPOSED DEVELOPMENT: 1.80 AC (78,537 SF)

BUILDING FOOTPRINT: 30,930 SF
WALKWAYS / CONC. GUTTER / DOCK AREAS: 8,096 SF
DRIVEWAYS / DRIVE AISLES / PARKING AREAS: 23,233 SF

16,278 SF LANDSCAPING PROVIDED (20.7% PERVIOUS AREA)

CURRENT USE: COMMERCIAL
PROPOSED USE: RESIDENTIAL

WATERSHED:
ANAHEIM BAY – HUNTINGTON HARBOR

WATER QUALITY CALCULATIONS

FORMULAS
C = 0.75 * IMP % + 0.15
D = DESIGN CAPTURE STORM DEPTH (FIGURE III.1) = 0.77
Dremainder = D - Dhsc = 0.77 - 0 = 0.77
DCV = C * Dremainder * AREA (AC) * 43,560SF/AC * 1/12
A = DCV / Dp
INFILTRATION BASIN VOLUME (cf) = PROVIDED AREA * Dp

WQMP CALCULATIONS	AREA 1	AREA 2	AREA 3	TOTAL
AREA (sf)	20,945	31,680	25,912	**78,537**
% OF TOTAL AREA	26.7%	40.3%	33.0%	**100.0%**
AREA (ac)	0.48	0.73	0.59	**1.80**
LANDSCAPE (sf)	4,264	6,678	5,336	**16,278**
IMPERVIOUS %	79.6%	78.9%	79.4%	**79.3%**
C - RUNOFF COEFFICIENT	0.75	0.74	0.75	**0.74**
D - DESIGN STORM DEPTH	0.77	0.77	0.77	-
D-Remainder	0.77	0.77	0.77	-
DCV - DESIGN CAPTURE VOLUME (cf)	1,006	1,510	1,237	**3,753**
Dp - PONDING DEPTH (ft)	3.75	3.75	3.75	-
A - REQUIRED INFILTRATION BASIN AREA (sf)	268	403	330	-
PROVIDED INFILTRATION BASIN AREA (sf)	350	610	480	-
INFILTRATION BASIN VOLUME (cf)	1,313	2,288	1,800	-

NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PREPARED BY:

CA ENGINEERING, INC.
Planning • Engineering • Surveying
4101 BIRCH ST., STE 140
NEWPORT BEACH, CA 92660
949-724-9480 949-724-9484 FAX

OWNER:

MELIA HOMES INC.
9860 Irvine Center Drive
Irvine, CA 92618
Contact: Mr. Chad Brown
(949) 759-4367

Oct 30 2025

WATER QUALITY MANAGEMENT PLAN
BMP EXIBIT (SITE PLAN)
TR# 19447
9822 RUSSELL AVENUE
Garden Grove, CA 92844

SHEET 1 OF 1

OLDCASTLE FLOGARD +PLUS CATCH BASIN INSERT FILTER SPECIFICATIONS AND INSPECTION AND MAINTENANCE GUIDE

Oldcastle Infrastructure™
A CRH COMPANY

PUT A STOP to TSS

Removes Pollutants from Runoff Prior to Entering Waterways

Efficient System
Catches pollutants where they are easiest to catch, at the inlet.

Variable Design
Able to be retrofitted or used in new projects.

Treatment Train
Can be incorporated as part of a "Treatment Train".

No Standing Water
Helps to minimize bacteria and odor problems.

Focused Treatment
Removes petroleum hydrocarbons, trash and Total Suspended Solids (TSS).

Maximum Flexibility
Available in a variety of standard sizes to fit round and square inlets.

Economical
Earn a higher return on system investment.

Two-part stainless-steel insert to filter solids and oils/grease.



Easy to install, inspect and maintain, even on small and confined sites.

By the Numbers*:
Filter will remove up to 80% of Total Suspended Solids (TSS), at least 70% of oils and grease, and up to 40% of Total Phosphorus (TP) associated with organic debris as well as Polycyclic Aromatic Hydrocarbons (PAH) from oil leaks and spills.

*Approximate for urban street application.

CATCH BASIN FILTER TEST RESULTS SUMMARY			
Testing Agency	% TSS Removal	% Oil & Grease Removal	% PAH Removal
UCLA	80	70 to 80	
U of Auckland Tonking & Taylor, Ltd (for City of Auckland)	78 to 95		
U of Hawaii (for City of Honolulu)	80		20 to 40

Oldcastle Infrastructure™
A CRH COMPANY

PUT A STOP
to TSS

Multi-Purpose Catch Basin Insert Retains Sediment, Debris, Trash and Oils/Grease

FloGard® catch basin insert filters are recommended for areas subject to silt and debris as well as low-to-moderate levels of petroleum hydrocarbons (oils and grease). Examples of such areas include vehicle parking lots, aircraft ramps, truck and bus storage yards, business parks, residential and public streets.

CATCH BASIN FILTER COMPETITIVE FEATURE COMPARISON		
Evaluation of Catch Basin Filters (Based on flow-comparable units) (Scale 1-10)	Oldcastle	Other Insert Filter Types**
Flow Rate	10	7
Removal Efficiency*	80%	45%
Capacity - Sludge & Oil	7	7
Service Life	10	3
Installation - Ease of Handling / Installation	8	6
Ease of Inspections & Maintenance	7	7
Value	10	2

*Approximate, based on field sediment removal testing in urban street application **Average

Long-Term Value Comparison (Based on flow-comparable units) (Scale 1-10)	Oldcastle	Other Insert Filter Types**
Unit Value - Initial ($/cfs treated)	10	4
Installation Value ($/cfs treated)	10	7
Absorbent Replacement (annual avg ($/cfs treated)	10	2
Materials Replacement Value (annual avg ($/cfs treated)	10	10
Maintenance Value (annual avg ($/cfs treated)	10	7
Total First Year ROI ($/cfs treated)	10	5
Total Annual Avg Value ($/cfs treated, avg over 20 yrs)*	10	5



Captured debris from FloGard catch basin insert filter in Dana Point, California.



Combination Inlet



Flat-Grated Inlet

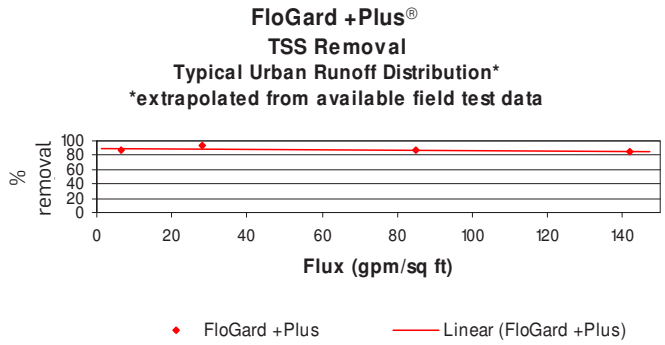


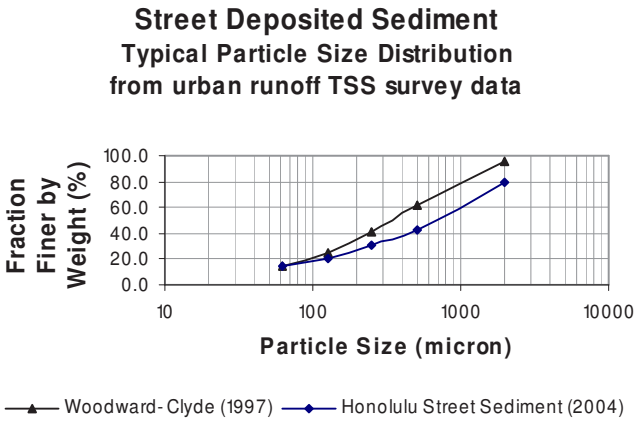
Circular Frame Inlet

(800) 579-8819
oldcastleinfrastructure.com

FLOGARD +PLUS®

Independent field tests conducted in Hawaii and New Zealand on FloGard +PLUS® Catch Basin Insert Filters to determine removal efficiency of Total Suspended Solids (TSS). Results were extrapolated to a typical street deposited sediment particle size. Removal efficiencies were plotted and reflect effective TSS removal over a typical range of operating flow rates. Results are shown below as a function of unit internal surface area.





FloGard +PLUS® Catch Basin Insert Filter is an efficient inlet prefilter designed to remove suspended sediment and floatable trash and hydrocarbons from stormwater runoff in new or retrofit applications. It is ideally suited for removal of primary pollutants from paved surfaces in commercial and residential areas, or may form part of a treatment train. The device features a unique dual-bypass design, durable components, flexible installation options and easy maintenance access.

Units are sized to fit most common styles of drainage inlet grate frames or inlet widths. Rated filtered flow capacities for each model typically exceed the required "first flush" treatment flow rate, and account for reduction in capacity as the unit accumulates suspended pollutants. Rated bypass capacity for each model also typically exceeds the inlet capacity of the catch basin.

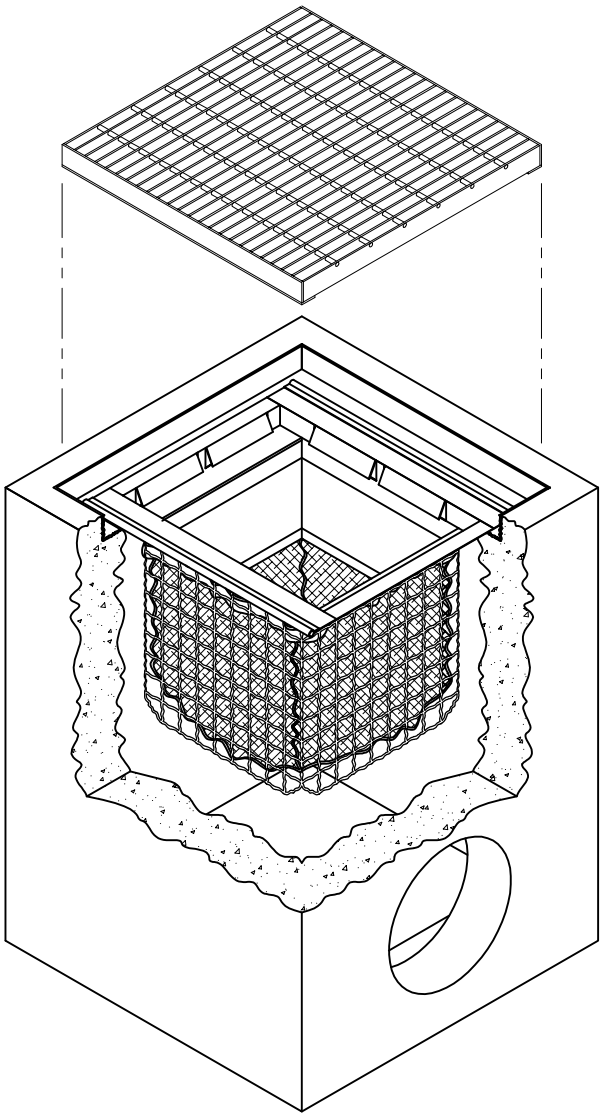
FloGard +PLUS® Test Results Summary

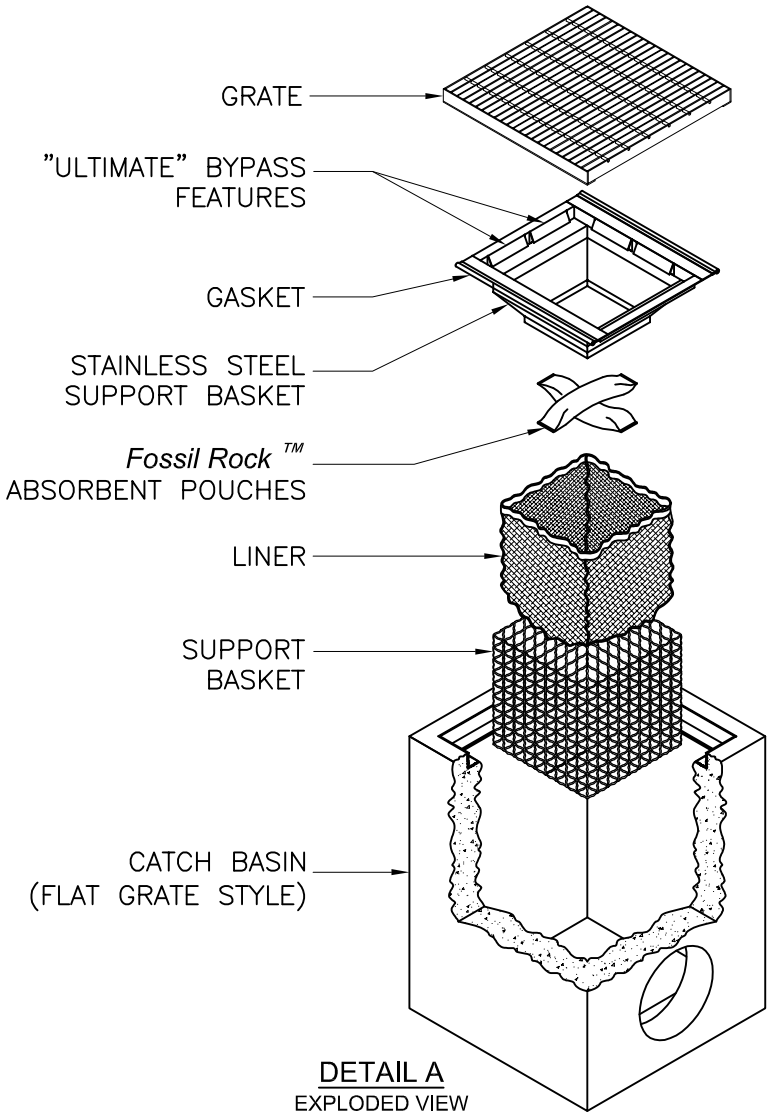
Testing Agency	%TSS Removal	% Oil & Grease Removal
UCLA	80*	70-80
U of Auckland Tonkin & Taylor LTD (City of Auckland)	95** 78-86***	
U of Hawaii (City of Honolulu)	80***	

*Sand larger than ~ 575 µm
**Sand distribution ~ 100-1000 µm
***Local street sweep material (distribution consistent with NURP)

See product specifications for standard model details.

FGP-0001





DETAIL A
EXPLODED VIEW

FloGard® FILTER
-INSTALLED INTO CATCH BASIN-

U.S. PATENT # 6,00,023 & 6,877,029

NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

Inlet Filtration

FloGard®

Catch Basin Insert Filter

Grated Inlet Style

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

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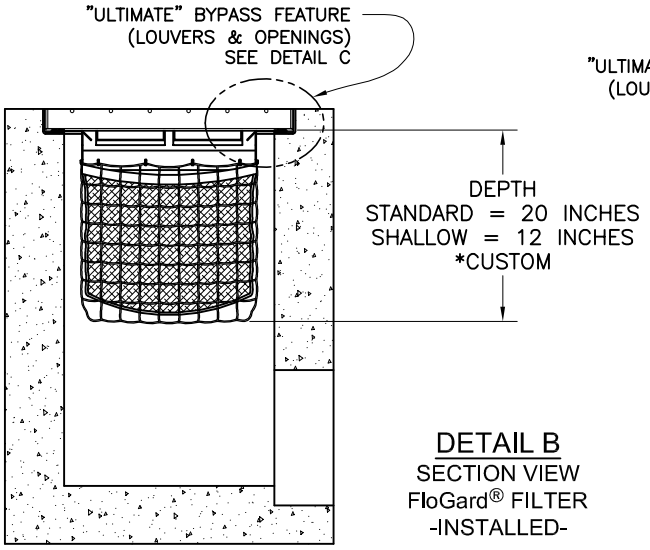
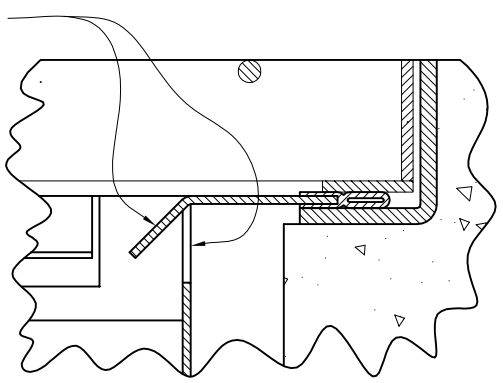
DRAWING NO.	REV	ECO	DATE	
FGP-0001	G	ECO-0142 JPR 7/13/16	JPR 11/3/06	SHEET 1 OF 2

U.S. PATENT # 6,00,023 & 6,877,029



DETAIL B
SECTION VIEW
FloGard® FILTER
-INSTALLED-



DETAIL C
"ULTIMATE"
BYPASS FEATURES

* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART

MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Data In these columes Is the same for both STANDARD & SHALLOW versions)			STANDARD DEPTH -20 Inches-		MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH -12 Inches-	
	INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)		SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85



Inlet Filtration

FloGard®

Catch Basin Insert Filter

Grated Inlet Style

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

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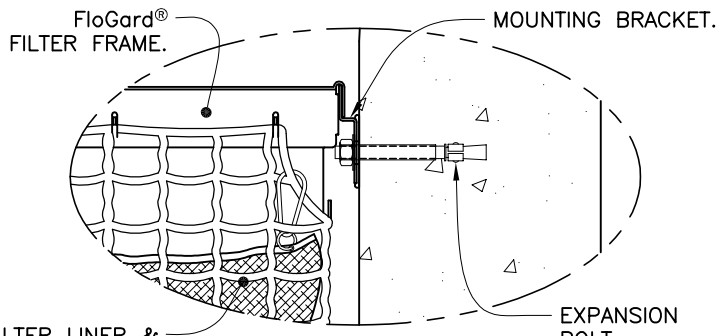
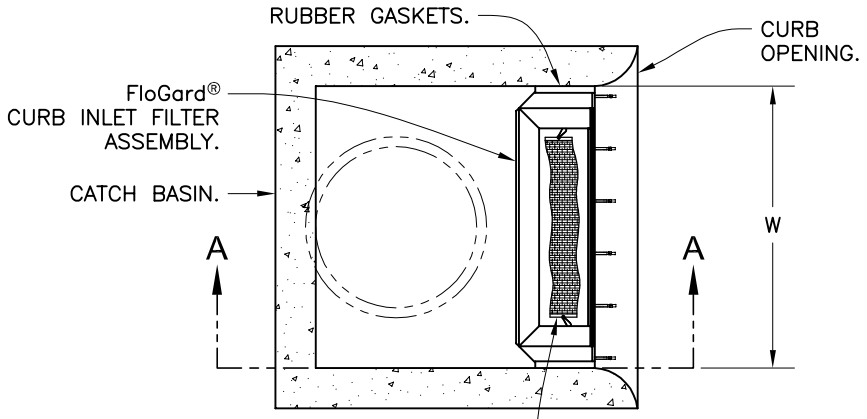
DRAWING NO.	REV	ECO	DATE	
FGP-0001	G	ECO-0142 JPR 7/13/16	JPR 11/3/06	SHEET 2 OF 2

FGP-0002

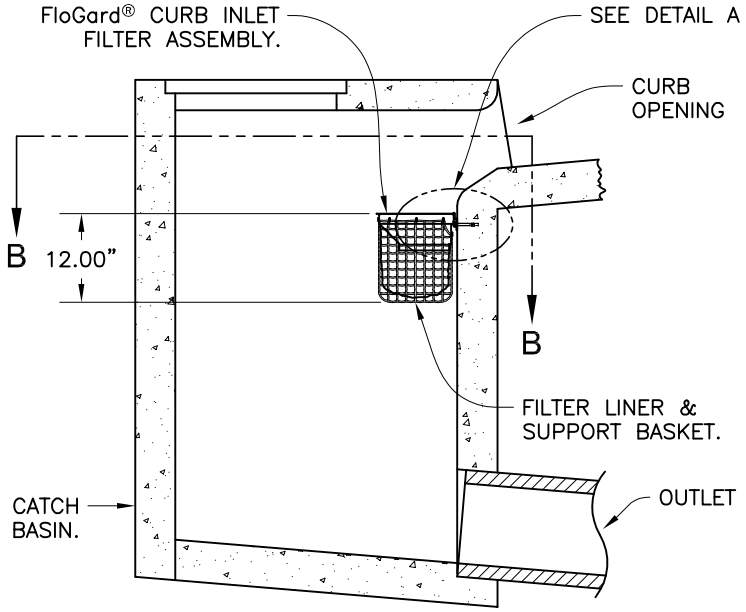


DETAIL A
MOUNTING BRACKET & EXPANSION BOLTS
SEE NOTE 2
SCALE: 6X



SECTION B-B
TOP VIEW
SCALE: 1X

SPECIFIER CHART				
MODEL NO.	Curb Opening Width - W -	Storage Capacity - Cu. Ft. -	Filtered Flow Rate - GPM/CFS -	Bypass Flow Rate - GPM/CFS -
FGP-24CI	2.0' (24")	.95	338 / .75	2,513 / 5.6
FGP-30CI	2.5' (30")	1.20	450 / 1.00	3,008 / 6.7
FGP-36CI	3.0' (36")	1.50	563 / 1.25	3,547 / 7.9
FGP-42CI	3.5' (42")	1.80	675 / 1.50	3,951 / 8.8
FGP-48CI	4.0' (48")	2.10	768 / 1.76	4,445 / 9.9
FGP-5.0CI	5.0' (60")	2.40	900 / 2.00	5,208 / 11.6
FGP-6.0CI	6.0' (72")	3.05	1,126 / 2.51	6,196 / 13.8
FGP-7.0CI	7.0' (84")	3.65	1,350 / 3.01	7,139 / 15.9
FGP-8.0CI	8.0' (96")	4.25	1,576 / 3.51	8,082 / 18.0
FGP-10.0CI	10.0' (120")	4.85	1,800 / 4.01	9,833 / 21.9
FGP-12.0CI	12.0' (144")	6.10	2,252 / 5.02	11,764 / 26.2
FGP-14.0CI	14.0' (168")	7.30	2,700 / 6.02	13,515 / 30.1
FGP-16.0CI	16.0' (192")	8.55	3.152 / 7.02	15,446 / 34.4
FGP-18.0CI	18.0' (216")	9.45	3,490 / 7.78	17,152 / 38.2
FGP-21.0CI	21.0' (252")	10.95	4,050 / 9.02	19,891 / 44.3
FGP-28.0CI	28.0 (336")	14.60	5,400 / 12.03	26,311 / 58.6



SECTION A-A
SIDE VIEW
SCALE: 1X

NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

Inlet
Filtration

FloGard®

Catch Basin Insert Filter

Curb Inlet Style

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DRAWING NO.	REV	ECO	DATE	
FGP-0002	E	ECO-0127 JPR 5/18/15	JPR 1/3/06	SHEET 1 OF 1

Oldcastle Infrastructure™
A CRH COMPANY

FLOGARD+PLUS®
CATCH BASIN INSERT FILTER

Inspection and Maintenance Guide



DRAINAGE PROTECTION SYSTEMS
DPS
A division of
Oldcastle Infrastructure

Water

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed FloGard+Plus Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (wash racks, parking garages, etc.): On a recurring basis (no less than three times per year).

SERVICE PROCEDURES:

1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing FloGard+Plus catch basin inserts).
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc., shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary, and the pouch tethers re-attached to the liner's D-ring.
5. The grate shall be replaced.

REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium will be replaced with new material. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

DPS also has the capability of servicing all manner of storm drain filters, catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined-space trained and certified. Call us at (888) 950-8826 for further information and assistance.

FLOGARD+PLUS®
CATCH BASIN INSERT FILTER

OUR MARKETS



BUILDING STRUCTURES



COMMUNICATIONS



WATER



ENERGY



TRANSPORTATION

GEOSTORAGE UNDERGROUND STORMWATER DETENTION SYSTEM BROCHURE

GeoStorage

UNDERGROUND STORMWATER DETENTION SYSTEM



Leadership in Energy and Environmental Design (LEED)

GeoStorage contributes to satisfying credit achievements of the U.S. Green Building Council's LEED Green Building Rating System™. For example:

1. Reduces truck traffic to the construction site.
2. Reduces the amount of excavation and potential off-site hauling from the construction site.
3. Provides a reusable water supply with a water tight system.

For more information on LEED's rating system, please visit www.usgbc.org.



GeoStorage Corp.
office 732.741.5015
cell 732.865.3635
tsheridan@geostoragecorp.com
www.geostoragecorp.com

GeoStorage is a registered trademark of GeoStorage Corp.
GeoStorage Systems are patent protected by U.S. patent no. 7,473,055 B2. Other foreign patents also exist.

HydroCAD® Stormwater Modeling System *Supported Product*

GeoStorage

UNDERGROUND STORMWATER DETENTION SYSTEM



The Next Generation in Stormwater Management Technology

www.geostoragecorp.com

GEOSTORAGE UNDERGROUND STORMWATER MANAGEMENT TECHNOLOGY

Traditional Systems Versus GeoStorage® Systems



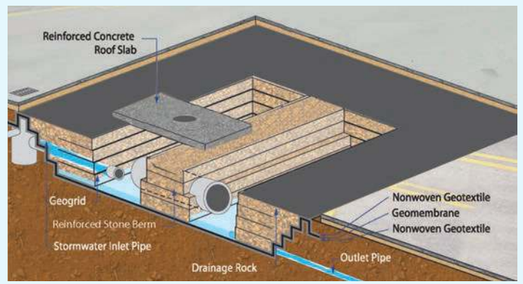
Pipes and pipe arches comprise most traditional underground storm water detention systems. Flexible plastic and metal pipes require a compacted structural backfill above, below and around the pipe resulting in additional costs and a large footprint.

GeoStorage systems utilize AASHTO (American Association of State Highway and Transportation Officials) standards to design a large, deep underground storage chamber. Reinforced walls and piers are constructed with open graded stone to eliminate pore pressures and provide additional storage capacity. The efficiency of GeoStorage reduces costs and the size of the excavation. This patented system also provides a large open chamber that enables easy access for inspection and maintenance.

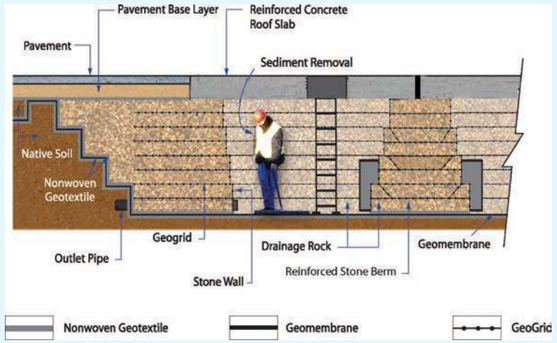
GeoStorage Redefines Stormwater Management

All land development projects require a stormwater management design. A surface holding pond is the most common stormwater detention system used to capture and control the increase in peak runoff associated with large storm events. GeoStorage is installed beneath parking lots, streets and parks to maximize land usage and lower development costs. The GeoStorage Liner system can be designed for detention or recharge applications.

HOW GEOSTORAGE WORKS









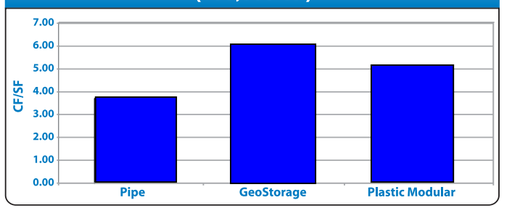
Performance Analysis

GeoStorage not only offers substantial savings when compared to traditional systems, it features inherent properties and benefits that improve overall performance and provide maximum design flexibility.

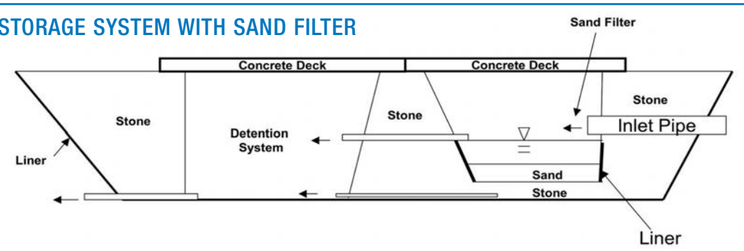
PROJECT ADVANTAGES		
✓	COST	Substantial savings over traditional detention and retention systems.
✓	SIZE	Requires smaller footprint than traditional systems as shown below in land efficiency chart.
✓	DURABILITY	Constructed with a reinforced concrete roof, stone and geosynthetic products that have been tested to withstand landfill leachate.
✓	STORMWATER QUALITY	Allows for cost effective inclusion of a sand filter (see below).
✓	MAINTENANCE	Large and open chambers allow for easy access and maintenance.
✓	FLEXIBILTY	Capacity is a function of height and pier placement. These parameters can be adjusted to fit the required depth and footprint.
✓	INSTALLATION RATE	Installed faster than traditional systems.
✓	LOAD CAPACITY	Designed with ASSHTO HS-20 loading. Passenger vehicle or other loading conditions offer significant savings.

SITE CONDITIONS THAT INCREASE ADVANTAGES	
+	Stormwater Treatment Required
+	Cut Sites-Off Site Hauling Required
+	Tight Sites
+	Rock Excavation
+	Low Leakage Requirements
+	Surface Loads <HS-20

LAND EFFICIENCY (100,000 CF)



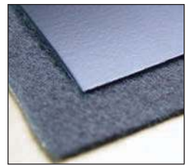
GEOSTORAGE SYSTEM WITH SAND FILTER



APPLICATIONS

GeoStorage can be used in:

- Commercial Property
- Residential Property
- Industrial Development
- Infrastructure
- Airports
- Schools
- Sports Facilities


Liner

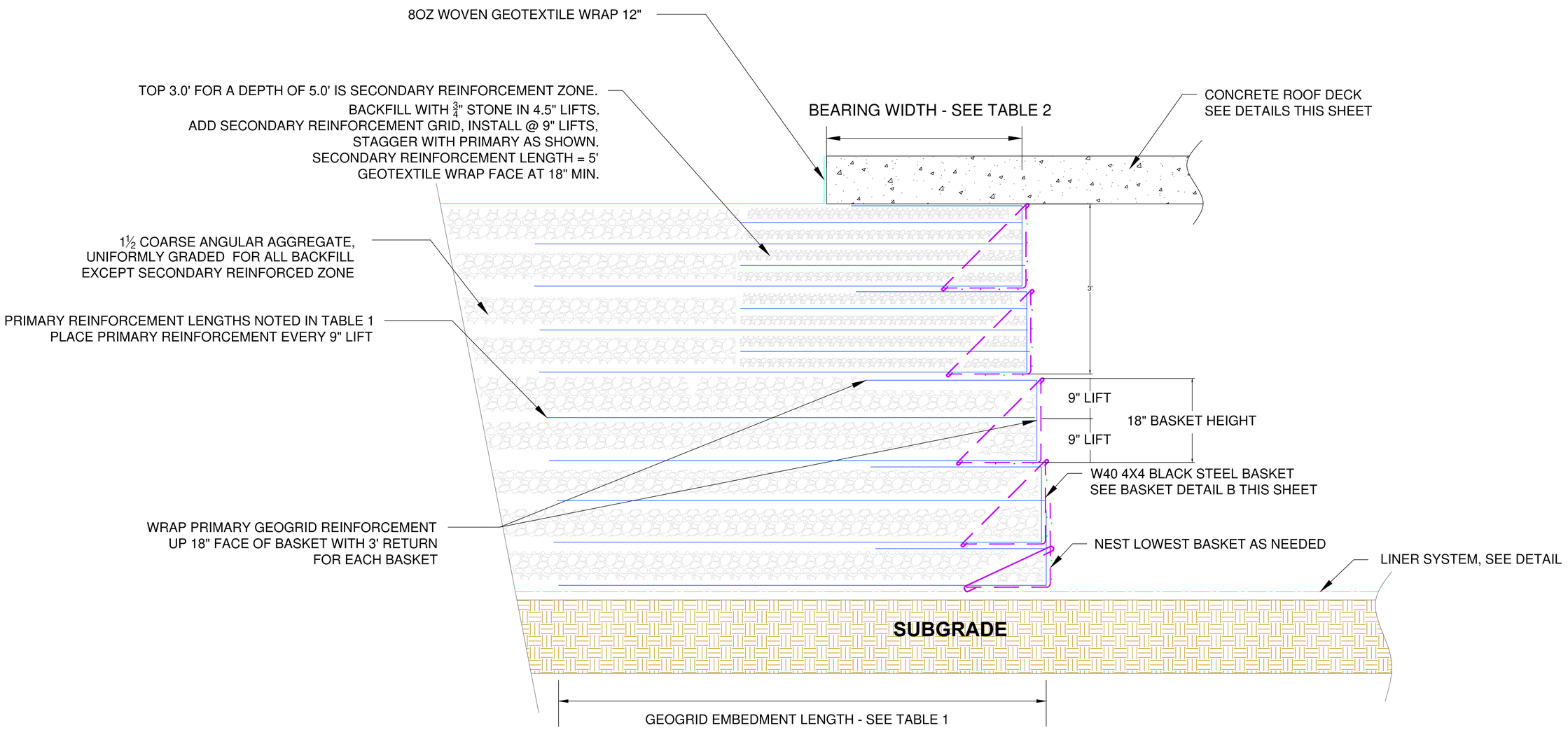

Stonewall


Roof

DETAIL B

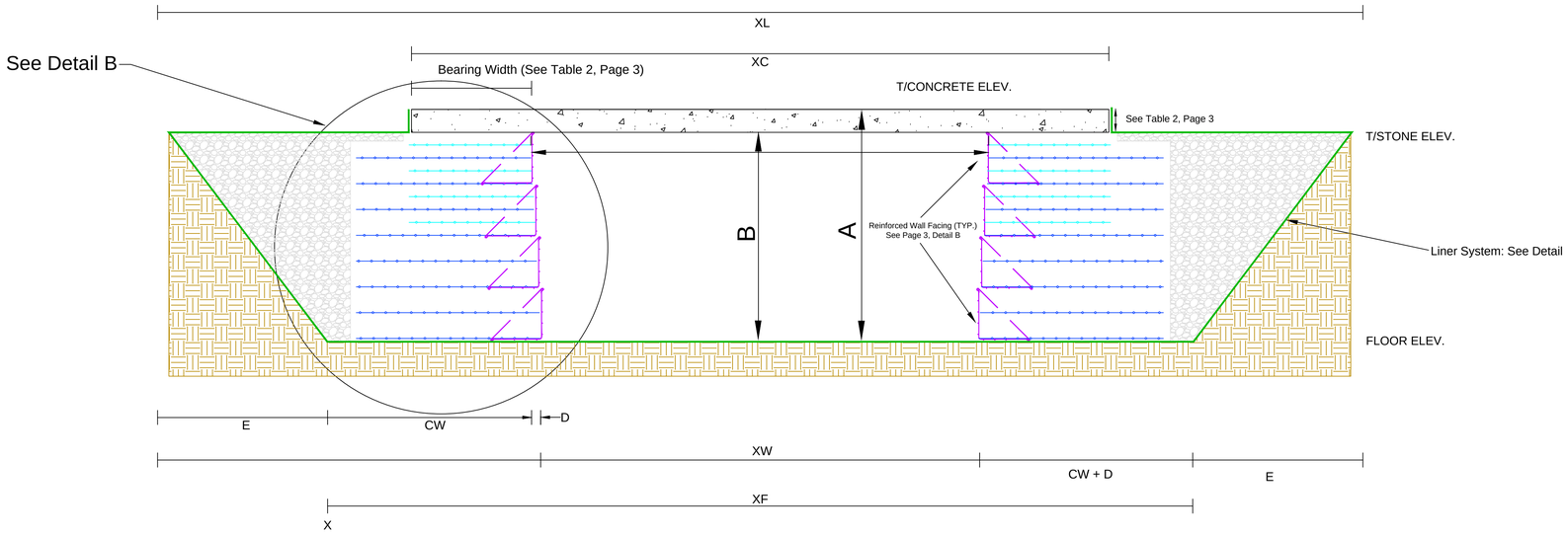
TYPICAL LOAD BEARING WALL CONSTRUCTION

NOT TO SCALE



GeoStorage® Elevation View

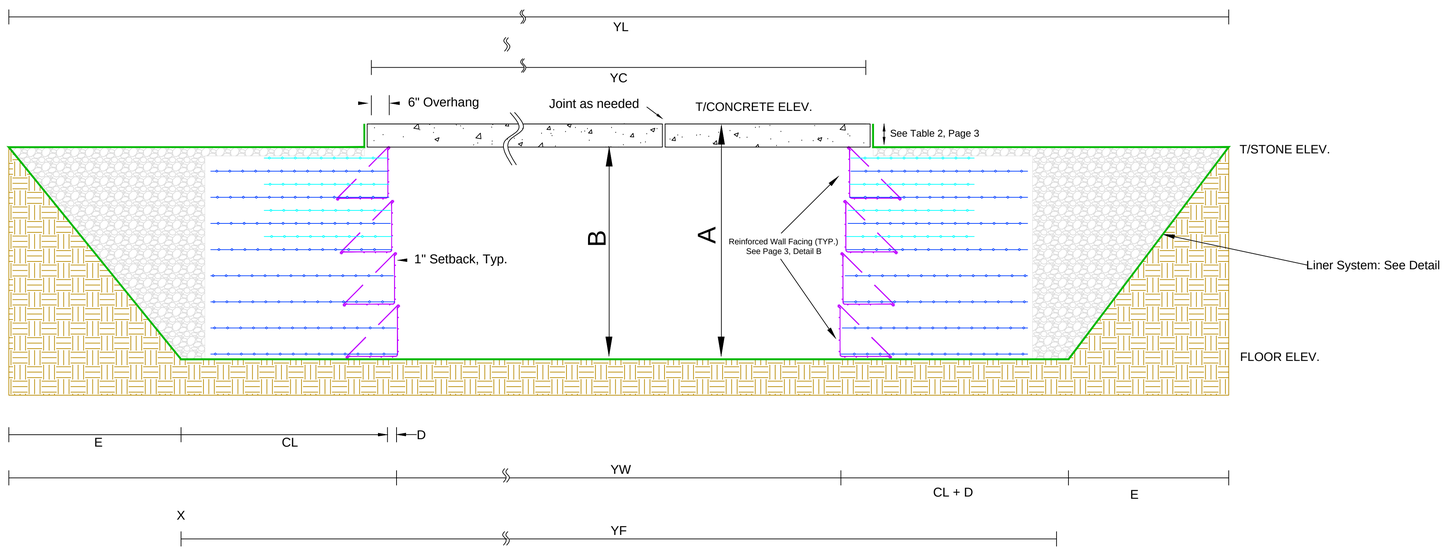
Section A



LEGEND

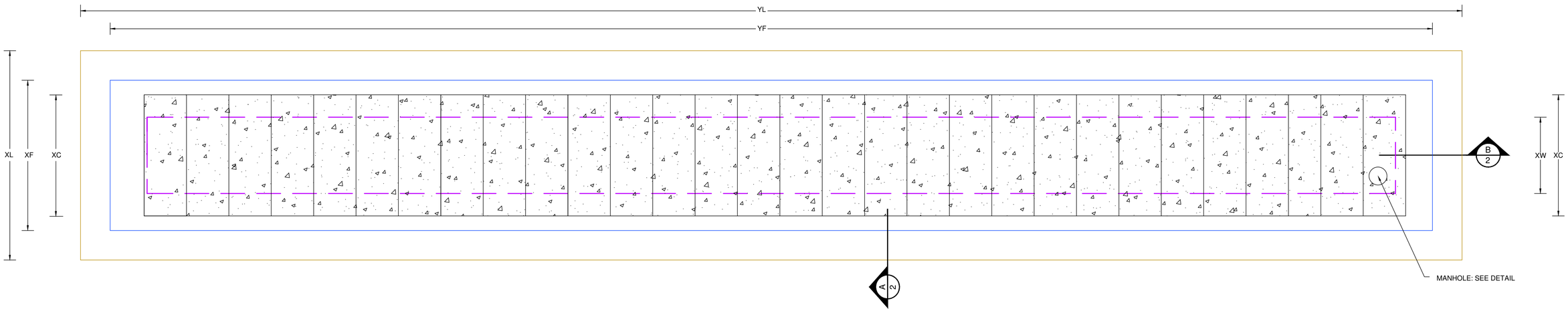
- Open Chamber
- Stone Backfill
- Limits of Excavation
- Precast Concrete Roof Deck
- Reinforced Walls

Section B



GeoStorage® Single Chamber

PLAN VIEW



LEGEND

- TOE OF LINER SLOPE
- TOP OF LINER SLOPE
- TOE OF STONE WALL/PIER
- FEET - LIMITS CONCRETE PAD
- CONCRETE PAD
- ? / X - DETAIL OR SECTION DRAWING NUMBER

BMP FACT SHEET—INF-7:

UNDERGROUND INFILTRATION

INF-7: Underground Infiltration

Underground infiltration is a vault or chamber with an open bottom that used to store runoff and percolate into the subsurface. A number of vendors offer proprietary infiltration products that allow for similar or enhanced rates of infiltration and subsurface storage while offering durable prefrabricated structures. There are many varieties of proprietary infiltration BMPs that can be used for roads and parking lots, parks and open spaces, single and multi-family residential, or mixed-use and commercial uses.

Also known as:

- *Infiltration vault*
- *Recharge vault*



Underground Infiltration

Source: http://www.contech-cpi.com

Feasibility Screening Considerations

- Infiltration bains shall pass infeasible screening criteria to be considered for use.
- Underground infiltration galleries pose a potential risk of groundwater contamination; pretreatment should be used.

Opportunity Criteria

- Soils are adequate for infiltration or can be amended to provide an adequate infiltration rate.
- Appropriate for sites with limited surface space.
- Can be placed beneath roads, parking lots, parks, and athletic fields.
- Potential for groundwater contamination can be mitigated through isolation of pollutant sources, pretreatment of inflow, and/or demonstration of adequate treatment capacity of underlying soils.
- Infiltration is into native soil, or depth of engineered fill is ≤ 5 feet from the bottom of the facility to native material and infiltration into fill is approved by a geotechnical professional.
- Tributary area land uses include mixed-use and commercial, sngle-family and multi-family, roads and parking lots, and parks and open spaces. High pollutant land uses should not be tributary to infiltration BMPs.

OC-Specific Design Criteria and Considerations

- ☐ Placement of BMPs should observe geotechnical recommendations with respect to geological hazards (e.g. landslides, liquefaction zones, erosion, etc.) and set-backs (e.g., foundations, utilities, roadways, etc.)
- ☐ Minimum separation to mounded seasonally high groundwater of 10 feet shall be observed.
- ☐ Minimum pretreatment should be provided upstream of the infiltration facility, and water bypassing pretreatment should not be directed to the facility.
- ☐ Underground infiltration should not be used for drainage areas with high sediment production potential unless preceded by full treatment control with a BMP effective for sediment removal.
- ☐ Design infiltration rate should be determined as described **in Appendix VII**.
- ☐ Inspection ports or similar design features shall be provided to verify continued system performance and identify need for major maintenance.

☐ For infiltration facilities beneath roads and parking areas, structural requirements should meet H-20 load requirements.

Computing Underground Infiltration Device Size

Underground infiltration devices vary by design and by proprietary designs. The sizing method selected for use must be based on the BMP type it most strongly resembles.

- For underground infiltration devices with open pore volume (e.g., vaults, crates, pipe sections, etc), sizing will be most similar to infiltration basins.
- For underground infiltration devices with pore space (e.g., aggregate reservoirs), sizing will be most similar to permeable pavement.

Additional References for Design Guidance

- Los Angeles Unified School District (LAUSD) Stormwater Technical Manual, Chapter 5: **http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm_Water_Technical_Manual_2009-opt-red.pdf?version_id=76975850**

BMP FACT SHEET—INF-1: INFILTRATION BASIN (INCLUDED FOR SIZING STANDARDS REGARDING UNDERGROUND INFILTRATION ONLY)

XIV.3. Infiltration BMP Fact Sheets (INF)

INF-1: Infiltration Basin Fact Sheet

An infiltration basin consists of an earthen basin constructed in naturally pervious soils (Type A or B soils) with a flat bottom. An energy dissipating inlet must be provided, along with an emergency spillway to control excess flows. An optional relief underdrain may be provided to drain the basin if standing water conditions occur. A forebay settling basin or separate treatment control measure must be provided as pretreatment. An infiltration basin retains the stormwater quality design volume in the basin and allows the retained runoff to percolate into the underlying soils in 72 hours or less. The bottom of an infiltration basin is typically vegetated with dryland grasses or irrigated turf grass; however other types of vegetation are permissible if they can survive periodic inundation and long inter-event dry periods.

Feasibility Screening Considerations

- Infiltration bains shall pass infeasibility screening criteria to be considered for use
- Infiltration basins pose a potential risk of groundwater contamination if underlying soils have very high permeability and low pollutant assimilation capacity; pretreatment should always be provided.
- Evaporation tends to be minor, therefore increases in infiltration compared to natural conditions may result.
- The potential for groundwater mounding should be evaluated if depth to seasonally high groundwater (unmounded) is less than 15 feet.

Also known as:

- *Recharge basins*
- *Infiltration pond*



Infiltration Basin

Source: Pennsylvania Stormwater BMP Manual

Opportunity Criteria

- Soils are adequate for infiltration or can be amended to provide an adequate infiltration rate.
- Typically need 2-5 percent of drainage area available for infiltration.
- Space available for pretreatment (biotreatment or treatment control BMP as described below).
- Potential for groundwater contamination can be mitigated through isolation of pollutant sources, pretreatment of inflow, and/or demonstration of adequate treatment capacity of underlying soils.
- Infiltration is into native soil, or
- The depth of engineered fill is ≤ 5 feet from the bottom of the facility to native material and infiltration into fill is approved by a geotechnical professional.
- Tributary area land uses include mixed-use and commercial, sngle-family and multi-family, roads and parking lots, and parks and open spaces. Basins can be integrated into parks and open spaces. High pollutant land uses should not be tributary to infiltration BMPs.

OC-Specific Design Criteria and Considerations

☐ Placement of BMPs shall observe geotechnical recommendations with respect to geological hazards (e.g. landslides, liquefaction zones, erosion, etc.) and set-backs (e.g., foundations,

utilities, roadways, etc.)

- ☐ For facilities with tributary area less than 5 acres, minimum separation to mounded seasonally high groundwater of 5 feet shall be observed.
- ☐ For facilities with tributary area greater than 5 acres, minimum separation to mounded seasonally high groundwater of 10 feet shall be observed.
- ☐ Minimum pretreatment (settling forebay or separate BMP) should be provided upstream of the infiltration basin, and water bypassing pretreatment should not be directed to the infiltration basin.
- ☐ If a settling forebay is used, forebay should have a volume equal to 25% of facility volume and have a minimum length to width ratio of 2:1
- ☐ Infiltration basins should not be used for drainage areas with high sediment production potential unless preceded by full treatment control with a BMP effective for sediment removal.
- ☐ Side-slopes should be no steeper than 3H:1V.
- ☐ Design infiltration rate should be determined consistent with guidance contained in **Appendix VII**.
- ☐ Energy dissipators should be provided at inlet and outlet to prevent erosion.
- ☐ An overflow device must be provided if basin is on-line.
- ☐ A minimum freeboard of one foot should be provided above the overflow device (for an on-line basin) or the outlet (for an off-line basin).
- ☐ Infiltration basin bottom must be as flat as possible.
- ☐ Basin length to width ratio should be a minimum of 2:1 L:W.

Simple Sizing Method for Infiltration Basins

If the Simple DCV Sizing Method is used to size an infiltration basin, the user calculates the DCV and designs the BMP geometry required to draw down the DCV in 48 hours. The sizing steps are as follows:

Step 1: Determine Infiltration Basin DCV

Calculate the DCV using the Simple Design Capture Volume Sizing Method described in **Appendix III.3.1**.

Step 2: Determine the 48-hour Depth

The depth of water that can be drawn down in 48 hours can be calculated using the following equation:

$d_{48} = K_{DESIGN} \times 4$

Where:

d_{48} = basin 48-hour drawdown depth, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See **Appendix VII**)

This is the maximum depth of the basin below the overflow device to achieve drawdown in 48 hours.

Step 3: Calculate the Required Infiltrating Area

The required infiltrating area (i.e. basin area at mid ponding depth) can be calculated using the following equation:

$A = DCV / (d_P)$

Where:

A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)

DCV = design capture volume, cu-ft (see Step 1)

d_P = ponding depth, ft (should be equal to or less than d_{48})

Capture Efficiency Method for Infiltration Basins

If BMP geometry has already been defined and deviates from the 48 hour drawdown time, the designer can use the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs (See **Appendix III.3.2**) to determine the fraction of the DCV that must be provided to manage 80 percent of average annual runoff volume. This method accounts for drawdown time different than 48 hours.

Step 1: Determine the drawdown time associated with the selected basin geometry

$DD = (d_P / K_{DESIGN}) \times 12$

Where:

DD = time to completely drain infiltration basin ponding depth, hours

d_P = ponding depth below overflow device, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See **Appendix VII**)

Step 2: Determine the Required Adjusted DCV for this Drawdown Time

Use the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs (**Appendix III.3.2**) to calculate the fraction of the DCV the basin must hold to achieve 80 percent capture of average annual stormwater runoff volume based on the basin drawdown time calculated above.

Step 3: Determine the Basin Infiltrating Area Needed

The required infiltrating area (i.e. basin bottom) can be calculated using the following equation:

$A = DCV/ ((d_P)$

Where:

A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)

DCV = design capture volume, adjusted for drawdown time, cu-ft (see Step 1)

d_P = ponding depth, ft

If the area required is greater than the selected basin area, adjust surface area or adjust ponding depth and recalculate required area until the required area is achieved.

Configuration for Use in a Treatment Train

- Infiltration basins may be preceeded in a treatment train by HSCs in the drainage area, which would reduce the required design volume of the basins.
- Infiltration basins must be preceeded by some form of pretreatment, which may be biotreatment or a treatment control BMP; if an approved biotreatment BMP is used as pretreatment, the overflow from the infiltration basin may be considered “biotreated” for the purposes of meeting the LID requirements.
- The overflow or bypass from an infiltration basin can be routed to a downstream biotreatment BMP and/or a treatment control BMP if additional control is required to achieve LID or treatment control requirements.

Additional References for Design Guidance

- CASQA BMP Handbook for New and Redevelopment:
  http://www.cabmphandbooks.com/Documents/Development/TC-11.pdf
- SMC LID Manual (pp 139):
  http://www.lowimpactdevelopment.org/guest75/pub/All_Projects/SoCal_LID_Manual/SoCalLID_Manual_FINAL_040910.pdf
- Los Angeles County Stormwater BMP Design and Maintenance Manual, Chapter 6:
  http://dpw.lacounty.gov/DES/design_manuals/StormwaterBMPDesignandMaintenance.pdf
- City of Portland Stormwater Management Manual (Basin, page 2-57)
  http://www.portlandonline.com/bes/index.cfm?c=47954&a=202883
- San Diego County LID Handbook Appendix 4 (Factsheet 2):
  http://www.sdcounty.ca.gov/dplu/docs/LID-Appendices.pdf

STATE WATER RESOURCES CONTROL BOARD'S CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES (UPDATED MAY 2021)

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES (Updated May 2021)

Trash Provisions

In accordance with the Trash Provisions[1], all trash treatment control devices (Devices) installed after December 2, 2015 shall meet the Full Capture System definition[2] and be certified by the State Water Resources Control Board (State Water Board) Executive Director, or designee, prior to installation. The Devices included on this list are either: 1) new Devices certified by the State Water Board, or 2) grandfathered Devices from a list maintained by the San Francisco Regional Water Board prior to the adoption of the Trash Amendments. All new Device installations shall be designed according to the following criteria:

1. Appropriately sized to treat not less than the peak flowrate resulting from a 1-year, 1-hour storm event (design storm) or at least the same peak flows from the corresponding storm drain;
2. Do not bypass trash below the design storm under maximum operational loading conditions; and
3. Trap all particles that are 5 mm or greater up to the design flow[3] or at least the same peak flows from the corresponding storm drain; and do not have a

[1] Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, And Estuaries of California adopted by the State Water Board.

[2] A Full Capture System is a treatment control, or series of treatment controls, including but not limited to, a multi-benefit project or a low-impact development control that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either: of not less than the peak flow rate, Q, resulting from a one-year, one-hour storm in the subdrainage area, or b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain.

[3] The region specific one-year, one-hour storm (or design flow) may be obtained from the National Oceanic and Atmospheric Precipitation Estimates. https://www.weather.gov/media/owp/oh/hdsc/docs/Atlas14_Volume6.pdf

diversion structure present upstream such that a portion of the peak flow is not treated to trap all particles 5 mm or greater.

Vector Control Accessibility

According to the California Health and Safety Code[4], Landowners in California are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes. Mosquito vector control districts have substantial authority to access public and private property, inspect known or suspected sources of mosquitoes, abate mosquito sources, and charge the landowner for work performed and/or charge fees if a landowner is unwilling or unable to address a mosquito source arising from their property.

Depending on the its design, certain Devices may impede the mosquito vector control district's ability to (1) visually inspect the Device and/or storm vault for mosquito breeding, and (2) apply the appropriate chemical treatment. Moreover, some devices may create a habitat for mosquitoes. Prior to installation of any certified Device, the local mosquito vector control district should be contacted to ensure the installation conforms to the District's visual inspection, treatment, and vector breeding minimizing guidelines. The Mosquito Vector Control Association of California Review Team may also be contacted via email at: (Trashtreatment@mvcac.org).

New Device Certification or Fact Sheet Update

To apply for certification of a new Device, or to update a grandfathered Device fact sheet, the Device owner shall submit an application/fact sheet in accordance with the *Trash Treatment Control Device Certification and Fact Sheet Update Requirements.* Upon determining that a Device application is complete and meets the definition of a trash full capture system and is approved by the Mosquito Vector Control Association of California, the Executive Director Designee will place the Device on the State Water Board's *Certified Full Capture System List of Trash Treatment Control Devices*. This list will also identify updates to grandfathered Device fact sheets that satisfy the requirements.

The *Trash Treatment Control Device Certification and Fact Sheet Update Requirements* is found on the Trash Implementation Program webpage (https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html).

Listing of any Device does not constitute an endorsement by the State Water Board. The Executive Director reserves the right to de-certify and remove any Device from this list that does not satisfy the requirements of the Trash Provisions, such as but not limited to when a Device is discontinued or is not approved by Mosquito Vector Control Association of California Review Team.

[4] Health & Safety Code sections 2001- 4(d); 2002; 2060 (b) and Health & Safety Code sections 2060-2067, 100170, and 100175.

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

To obtain a copy of the applications or fact sheets listed in Table 1 or Table 2 below, or to address questions regarding certification please contact Leo Cosentini at (916) 341-5524 or email address (leo.cosentini@waterboards.ca.gov)

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

TABLE 1 - CATCH BASIN INSERTS AND OTHER DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
AbTech, Industries Internet site (https://www.abtechindustries.com/)	Ultra Urban Filter Curb Opening and Drop-In	Application 25 05/1/20	4/8/20
Advanced Drainage Systems, Inc. FLEXSTORM Division internet site (http://www.inletfilters.com/)	FLEXSTORM Full Trash Capture Inserts	Application 3 03/15/18	None
Advanced Drainage Systems, Inc. FLEXSTORM Division internet site (http://www.inletfilters.com/)	FLEXSTORM Connector Pipe Screen	ADS-1 Not Updated	None
Bio Clean® Environmental Services, Inc. Internet site (http://www.biocleanenvironmental.com/products/)	Curb Inlet and Grate Inlet Filters	Application 4 03/15/18	None
Bio Clean® Environmental Services, Inc. Internet site (http://www.biocleanenvironmental.com/products/)	Modular Connector Pipe Trash Screen	BC-3 Updated 4/30/20	3/10/20
BrightWater™ Internet site (www.wearebrightwater.com/)	Connector Pipe Screen	Application 29 12/28/20	11/19/20
BrightWater™ Internet site (www.wearebrightwater.com/)	Curb Inlet Filter	Application 26 6/30/20	4/17/20
CleanWay® Environmental Partners, Inc. Internet site (http://Cleanwayusa.com/)	CleanWay Curb Inlet Filtration System	Application 7 03/15/18	None

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
CleanWay® Environmental Partners, Inc. Internet site (http://Cleanwayusa.com/)	CleanWay Drop Inlet	Application 8 03/15/18	None
Coanda Inc. Internet site (http://www.coanda.com/)	Coanda Trash Screen and Debris Fence	COA-1 No Update	None
Ecology Control Industries Internet site (http://www.ecologycontrol.com/)	Debris Dam - Catch Basin Insert for Curb Inlet Design	ECI-1 Updated 06/17/20	04/29/20
Enviropod International: A Stormwater360 Group Company Internet site (https://www.enviropod.com/products/enviropod-littatrap-full-capture/)	Enviropod® LittaTrap™ Full Capture	Application 27 10/15/20	07/20/20
Filtrexx Sustainable Technologies Internet site (https://www.filtrexx.com/en/products/stormexx/)	StormExx® Clean	Application 16 08/10/18 Updated 11/25/19	12/06/19
Frog Creek Partners, LLC Internet site (https://frogcreek.partners/)	Gutter Bin® Channel Filtration System & Mundus Bag® Water Filter	Application 22 06/26/19	04/19/19
Frog Creek Partners, LLC Internet site (https://frogcreek.partners/)	Gutter Bin® Eco Drop Inlet Filter (DIF & DIF-C) & Mundus Bag® Water Filter	Application 24 02/18/20	12/06/19

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
Frog Creek Partners, LLC Internet site (https://frogcreek.partners/)	Gutter Bin® Eco Curb Inlet Filter & Mundus Bag® Water Filter	Application 23 02/18/20	10/11/19
G2 Construction, Inc. Internet site (http://www.g2construction.com/products/)	G2 CPS-Mod™ and Removable CPS-Mod™ Screen	Application 18 06/26/19	03/15/19
G2 Construction, Inc. Internet site (http://www.g2construction.com/products/)	G2 Grated Inlet Trash Screen	Application 19 06/26/19	04/10/19
Inventive Resources, Inc. Internet site (http://www.IRIproducts.com/)	Water Decontaminator	Application 2 03/15/18	4/20/20
Oldcastle Infrastructure™ Internet site (https://oldcastleinfrastructure.com/brands/)	Flo Guard Curb Inlet Basket	OI-1 No Update	04/30/21
Oldcastle Infrastructure™ Internet site (https://oldcastleinfrastructure.com/brands/)	Flo Guard Grate Inlet Basket	OI-2 No Update	04/30/21
Oldcastle Infrastructure™ Internet site (https://oldcastleinfrastructure.com/brands/)	Flo Guard Outlet Trash Screen	OI-3 Updated 11/29/19	12/06/19

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
Revel Environmental Manufacturing, Inc. Internet site (http://www.remfilters.com/)	**Triton™ Bioflex Inlet Trash Guard Catchbasin Polyester Fiber Mesh Trash Filter Insert**	**REM-1** **No Update**	**None**
Revel Environmental Manufacturing, Inc. Internet site (http://www.remfilters.com/)	**Triton™ Crescent Pipe Screen**	**Application 12** **07/10/18**	**03/15/19**
Revel Environmental Manufacturing, Inc. Internet site (http://www.remfilters.com/)	**Triton Perf-Full Trash Capture Insert**	**Application 13** **07/10/18**	**03/15/19**
Safe Drain Stormwater Holdings Inc. Internet site (http://www.safedrainusa.com/)	**Storm Vector Guard**	**Application 30** **02/11/21**	**12/17/20**
Stormtek Internet site (https://swimsclean.com/stormtek/) [formerly Advanced Solutions]	**Stormtek ST3 & STEG Catchbasin Connector Pipe**	**AS-1, A1S-2** **No Update**	**None**
United Stormwater, Inc. Internet site (http://www.unitedstormwater.com/)	**Connector Pipe Trash Screen**	**USW-1** **No Update**	**None**

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

TABLE 2 - HIGH FLOW CAPACITY TRASH DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
AquaShield™, Inc. Internet site (http://www.aquashieldinc.com/-aqua-swirl.html)	Aqua-Swirl® Stormwater Treatment System	Application 1 08/04/17 Updated 11/06/20	12/03/20
BaySaver Technologies® LLC/Advanced Drainage Systems Inc. Internet site (https://baysaver.com/products/barracuda/)	Barracuda Hydrodynamic Separator	Application 21 06/26/19	03/15/19
Bio Clean® Environmental Services, Inc. Internet site (http://www.biocleanenvironmental.com/products/)	Debris Separating Baffle Box	Application 6 03/15/18	07/28/20
Bio Clean® Environmental Services, Inc. Internet site (http://www.biocleanenvironmental.com/products/)	BioClean DeflectiveScreening Device	Application 20 06/26/19	07/28/20
Bio Clean® Environmental Services, Inc. Internet site (http://www.biocleanenvironmental.com/products/)	Modular Wetland System®	Application 15 07/10/18	03/15/19
Contech® Construction Products Internet site (http://www.conteches.com/products/stormwater-management/treatment/cds/)	Continuous Deflective Separator Hydrodynamic Separator	CCP-1HF No Update	None

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
Jensen® Stormwater Systems Internet site (http://www.jensenengineeredsystems.com/)	**Jensen® Deflective Separators**	**Application 5** **03/15/18**	**12/06/19**
Hydro International® Internet site (https://www.hydro-int.com/)	**Downstream Defender (In-Line and Off-Line Configurations)**	**Application 14** **07/10/18**	**03/16/20**
Hydro International® Internet site (https://www.hydro-int.com/)	**First Defense® High-Capacity Full Trash Capture Device**	**Application 28** **10/30/20**	**08/20/20**
Hydro International® Internet site (https://www.hydro-int.com/)	**Hydro Up-Flo Filter®**	**Application 11** **07/18/18**	**03/16/20**
Hydro International® Internet site (https://www.hydro-Int.com/)	**Hydro DryScreen**	**Application 10** **07/10/18** **Updated 05/05/21**	**04/29/21**
Oldcastle Infrastructure™ Internet site (https://oldcastleinfrastructure.com/brands/)	**FloGard® NetTech**	**OI-11HF** **Updated 12/08/20**	**12/03/20**

CERTIFIED FULL CAPTURE SYSTEM LIST OF TRASH TREATMENT CONTROL DEVICES

Owner / Website	Full Capture System Trash Device Brand Name	Date Application Certified or Fact Sheet Updated	Date Vector Control Accessibility Verified
Oldcastle Infrastructure™ Internet site (https://oldcastleinfrastructure.com/brands/)	**Nutrient Separating Baffle Box®**	**Application 17** **10/12/18** **Updated 07/21/20**	**05/01/20**
Roscoe Moss Company Internet site (https://roscoemoss.com/products/stormwater-gross-solids-removal-device/)	**Storm Flo® Trash Screen – Linear Radial Gross Solids Removal Device**	**RMC-1HF** **No Update**	**None**
StormTrap® Modular Concrete Stormwater Management Internet site (http://stormtrap.com/)	**Inline Netting Trash Trap – Inline Pipe Net with Trash Screen**	**FCT-1HF** **No Update**	**None**
StormTrap® Modular Concrete Stormwater Management Internet site (http://stormtrap.com/)	**End of Pipe Netting Trash Trap –End of Pipe Net with Trash Screen**	**FCT-2HF** **No Update**	**None**
StormTrap® Modular Concrete Stormwater Management Internet site (http://stormtrap.com/)	**SiteSaver®**	**Application 9**	**03/18/21**

Section VII Educational Materials

Education Materials			
Residential Material (http://www.ocwatersheds.com)	**Check If Applicable**	**Business Material (http://www.ocwatersheds.com)**	**Check If Applicable**
The Ocean Begins at Your Front Door	X	Tips for the Automotive Industry	
Tips for Car Wash Fund-raisers		Tips for Using Concrete and Mortar	
Tips for the Home Mechanic	X	Tips for the Food Service Industry	
Homeowners Guide for Sustainable Water Use	X	Proper Maintenance Practices for Your Business	
Household Tips	X	**Other Material**	**Check If Attached**
Proper Disposal of Household Hazardous Waste	X		
Recycle at Your Local Used Oil Collection Center (North County)	X		
Recycle at Your Local Used Oil Collection Center (Central County)			
Recycle at Your Local Used Oil Collection Center (South County)			
Tips for Maintaining a Septic Tank System			
Responsible Pest Control	X		
Sewer Spill	X		
Tips for the Home Improvement Projects	X		
Tips for Horse Care			
Tips for Landscaping and Gardening	X		
Tips for Pet Care	X		
Tips for Pool Maintenance			
Tips for Residential Pool, Landscape and Hardscape Drains			
Tips for Projects Using Paint	X		

APPENDIX A

EDUCATIONAL MATERIALS

- .....The Ocean Begins at Your Front Door
- .....Tips for the Home Mechanic
- .....Homeowners Guide for Sustainable Water Use
- .....Household Tips
- .....Proper Disposal of Household Hazardous Waste
- .....Recycle at Your Local Used Oil Collection Center (North County)
- .....Responsible Pest Control
- .....Sewage Spill
- .....Tips for Home Improvement Projects
- .....Tips for Landscape and Gardening
- .....Tips for Pet Care
- .....Tips for Projects Using Paint

The Ocean Begins at Your Front Door



Follow these simple steps to help reduce water pollution:

Household Activities

- Do not rinse spills with water. Use dry cleanup methods such as applying cat litter or another absorbent material, sweep and dispose of in the trash. Take items such as used or excess batteries, oven cleaners, automotive fluids, painting products and cathode ray tubes, like TVs and computer monitors, to a Household Hazardous Waste Collection Center (HHWCC).
- For a HHWCC near you call (714) 834-6752 or visit www.oclandfills.com.
- Do not hose down your driveway, sidewalk or patio to the street, gutter or storm drain. Sweep up debris and dispose of it in the trash.

Automotive

- Take your vehicle to a commercial car wash. Car washing in the community is not allowed.
  Monitor your vehicles for leaks and place a pan under leaks. Keep your vehicles well maintained to stop and prevent leaks.
- Never pour oil or antifreeze in the street, gutter or storm drain. Recycle these substances at a service station, a waste oil collection center or used oil recycling center. For the nearest Used Oil Collection Center call 1-800-CLEANUP or visit www.1800cleanup.org.

Pool Maintenance - N/A - No Pools

- Pool and spa water must be dechlorinated and free of excess acid, alkali or color to be allowed in the street, gutter or storm drain.
- When it is not raining, drain dechlorinated pool and spa water directly into the sanitary sewer.
- Some cities may have ordinances that do not allow pool water to be disposed of in the storm drain. Check with your city.

Landscape and Gardening

- Do not over-water. Water your lawn and garden by hand to control the amount of water you use or set irrigation systems to reflect seasonal water needs. If water flows off your yard onto your driveway or sidewalk, your system is over-watering. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of waste by composting, hauling it to a permitted landfill, or as green waste through your city's recycling program.
- Follow directions on pesticides and fertilizer, (measure, do not estimate amounts) and do not use if rain is predicted within 48 hours.
- Take unwanted pesticides to a HHWCC to be recycled. For locations and hours of HHWCC, call (714) 834-6752 or visit www.oclandfills.com.

Trash

- Place trash and litter that cannot be recycled in securely covered trash cans.
- Whenever possible, buy recycled products.
- Remember: Reduce, Reuse, Recycle.

Pet Care

- Always pick up after your pet. Flush waste down the toilet or dispose of it in the trash. Pet waste, if left outdoors, can wash into the street, gutter or storm drain.
- If possible, bathe your pets indoors. If you must bathe your pet outside, wash it on your lawn or another absorbent/permeable surface to keep the washwater from entering the street, gutter or storm drain.
- Follow directions for use of pet care products and dispose of any unused products at a HHWCC.

Common Pollutants

Home Maintenance

- Detergents, cleaners and solvents
- Oil and latex paint
- Swimming pool chemicals
- Outdoor trash and litter

Lawn and Garden

- Pet and animal waste
- Pesticides
- Clippings, leaves and soil
- Fertilizer

Automobile

- Oil and grease
- Radiator fluids and antifreeze
- Cleaning chemicals
- Brake pad dust

The Ocean Begins at Your Front Door



Never allow pollutants to enter the street, gutter or storm drain!

Did You Know?

- Most people believe that the largest source of water pollution in urban areas comes from specific sources such as factories and sewage treatment plants. In fact, the largest source of water pollution comes from city streets, neighborhoods, construction sites and parking lots. This type of pollution is sometimes called “non-point source” pollution.
- There are two types of non-point source pollution: stormwater and urban runoff pollution.
- Stormwater runoff results from rainfall. When rainstorms cause large volumes of water to rinse the urban landscape, picking up pollutants along the way.
- Urban runoff can happen any time of the year when excessive water use from irrigation, vehicle washing and other sources carries trash, lawn clippings and other urban pollutants into storm drains.

Where Does It Go?

- Anything we use outside homes, vehicles and businesses – like motor oil, paint, pesticides, fertilizers and cleaners – can be blown or washed into storm drains.
- A little water from a garden hose or rain can also send materials into storm drains.
- Storm drains are separate from our sanitary sewer systems; unlike water in sanitary sewers (from sinks or toilets), water in storm drains is not treated before entering our waterways.

Sources of Non-Point Source Pollution

- Automotive leaks and spills.
- Improper disposal of used oil and other engine fluids.
- Metals found in vehicle exhaust, weathered paint, rust, metal plating and tires.
- Pesticides and fertilizers from lawns, gardens and farms.
- Improper disposal of cleaners, paint and paint removers.
- Soil erosion and dust debris from landscape and construction activities.
- Litter, lawn clippings, animal waste, and other organic matter.
- Oil stains on parking lots and paved surfaces.



The Effect on the Ocean



Non-point source pollution can have a serious impact on water quality in Orange County. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade recreation areas such as beaches, harbors and bays.

Stormwater quality management programs have been developed throughout Orange County to educate and encourage the public to protect water quality, monitor runoff in the storm drain system, investigate illegal dumping and maintain storm drains.

Support from Orange County residents and businesses is needed to improve water quality and reduce urban runoff pollution. Proper use and disposal of materials will help stop pollution before it reaches the storm drain and the ocean.



For More Information

Orange County Stormwater Program

California Environmental Protection Agency
www.calepa.ca.gov

- **Air Resources Board**
  www.arb.ca.gov
- **Department of Pesticide Regulation**
  www.cdpr.ca.gov
- **Department of Toxic Substances Control**
  www.dtsc.ca.gov
- **Integrated Waste Management Board**
  www.ciwmb.ca.gov
- **Office of Environmental Health Hazard Assessment**
  www.oehha.ca.gov
- **State Water Resources Control Board**
  www.waterboards.ca.gov

Earth 911 - Community-Specific Environmental Information 1-800-cleanup or visit www.1800cleanup.org

Health Care Agency's Ocean and Bay Water Closure and Posting Hotline
(714) 433-6400 or visit www.ocbeachinfo.com

Integrated Waste Management Dept. of Orange County (714) 834-6752 or visit www.oclandfills.com for information on household hazardous waste collection centers, recycling centers and solid waste collection

O.C. Agriculture Commissioner
(714) 447-7100 or visit www.ocagcomm.com

Stormwater Best Management Practice Handbook
Visit www.cabmphandbooks.com

UC Master Gardener Hotline
(714) 708-1646 or visit www.uccemg.com

The Orange County Stormwater Program has created and moderates an electronic mailing list to facilitate communications, take questions and exchange ideas among its users about issues and topics related to stormwater and urban runoff and the implementation of program elements. To join the list, please send an email to ocstormwaterinfo-join@list.ocwatersheds.com

Aliso Viejo	(949)	425-2535
Anaheim Public Works Operations	(714)	765-6860
Brea Engineering	(714)	990-7666
Buena Park Public Works	(714)	562-3655
Costa Mesa Public Services	(714)	754-5323
Cypress Public Works	(714)	229-6740
Dana Point Public Works	(949)	248-3584
Fountain Valley Public Works	(714)	593-4441
Fullerton Engineering Dept.	(714)	738-6853
Garden Grove Public Works	(714)	741-5956
Huntington Beach Public Works	(714)	536-5431
Irvine Public Works	(949)	724-6315
La Habra Public Services	(562)	905-9792
La Palma Public Works	(714)	690-3310
Laguna Beach Water Quality	(949)	497-0378
Laguna Hills Public Services	(949)	707-2650
Laguna Niguel Public Works	(949)	362-4337
Laguna Woods Public Works	(949)	639-0500
Lake Forest Public Works	(949)	461-3480
Los Alamitos Community Dev.	(562)	431-3538
Mission Viejo Public Works	(949)	470-3056
Newport Beach, Code & Water Quality Enforcement	(949)	644-3215
Orange Public Works	(714)	532-6480
Placentia Public Works	(714)	993-8245
Rancho Santa Margarita	(949)	635-1800
San Clemente Environmental Programs	(949)	361-6143
San Juan Capistrano Engineering	(949)	234-4413
Santa Ana Public Works	(714)	647-3380
Seal Beach Engineering	(562)	431-2527 x317
Stanton Public Works	(714)	379-9222 x204
Tustin Public Works/Engineering	(714)	573-3150
Villa Park Engineering	(714)	998-1500
Westminster Public Works/Engineering	(714)	898-3311 x446
Yorba Linda Engineering	(714)	961-7138
Orange County Stormwater Program	(877)	897-7455

Orange County 24-Hour
Water Pollution Problem Reporting Hotline
1-877-89-SPILL (1-877-897-7455)

On-line Water Pollution Problem Reporting Form
www.ocwatersheds.com

Printed on Recycled Paper

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, not properly disposing of used oil is illegal and can lead to fines. If you pour or drain oil onto driveways, sidewalks or streets, it can be washed into the storm drain.

Help prevent water pollution by taking your used oil and oil filters to a used oil collection center. Most major automotive maintenance centers will accept up to five gallons of used motor oil at no cost. For a list of locations, please visit www.cleanup.org.



For more information, please call the **Orange County Stormwater Program** at **1-877-89-SPILL (1-877-897-7455)** or visit **www.ocwatersheds.com.**

For information about the proper disposal of household hazardous waste, call the **Household Waste Hotline** at **1-877-89-SPILL (1-877-897-7455)** or visit **www.oclandfills.com.**

For additional information about the nearest oil recycling center, call the **Used Oil Program** at **1-800-CLEANUP** or visit **www.cleanup.org.**

RECYCLE USED OIL

emc/rev9/08

Help Prevent Ocean Pollution:

Tips for the Home Mechanic



PROJECT Pollution PREVENTION

The Ocean Begins at Your Front Door

Tips for the Home Mechanic

WORK SITE

- Locate the storm drains on or near your property. Do not allow used oil or any materials to flow into these drains.
- Examine your home for sources of pollution.
- Perform automotive projects under cover and in a controlled area to prevent stormwater runoff.
- Sweep or vacuum your automotive workspace regularly
- Use a damp mop to clean work areas. Never hose down surfaces into the street, gutter or storm drain.



- Pour mop water into a sink or toilet. Never dispose of water in a parking lot, street, gutter or storm drain.

PREVENT LEAKS AND SPILLS

- Keep absorbent materials such as rags and/or cat litter in the work area
- Empty drip pans into a labeled, seal container before they are full
- Wipe up any spills or repair leaks as they happen. Don't let them sit.
- Place large pans under any wrecked cars until all fluids are drained.
- Promptly dispose of collected fluids into a hazardous waste drum or deliver them to an oil recycling center. Used oil recycling locations can be found at http://www.ochealthinfo.com/regulatory/usedoil.htm

CLEANING SPILLS

- Clean up spills immediately by using absorbent material such as rags, cat litter or sand. If the material spilled is hazardous, dispose of the rag, litter or sand in the same manner as hazardous waste. If the material spill is non-hazardous, dispose of it in the trash.



- Immediately report spills that have entered the street, gutter or storm drain to the County's 24-Hour Water Pollution Problem Reporting Hotline at 1-877-89-SPILL (1-877-897-7455) or visit www.ocwatersheds.com to fill out an incident report.
- Report emergencies to 911.

VEHICLE FLUID MANAGEMENT

- Vehicle fluids are hazardous waste and must be stored and disposed of in accordance with all local, state and federal laws.
- Designate an area to drain vehicle fluids away from storm drains and sanitary drains.
- When possible, drain vehicle fluids indoors or within covered areas, and only over floors that are constructed of a non-porous material such as concrete. Asphalt and dirt floors absorb spilled or leaked fluids, making the cleanup extremely difficult.



PROJECT Pollution PREVENTION

The Pollution Solution

Several residential activities can result in water pollution. Among these activities are car washing and hosing off driveways and sidewalks. Both activities can waste water and result in excess runoff. Water conservation methods described in this pamphlet can prevent considerable amounts of runoff and conserve water. By taking your car to a commercial car wash and by sweeping driveways and sidewalks, you can further prevent the transport of pollutants to Orange County waterways. Here are some of the common pollutants for which you can be part of the solution:

1 Pesticides and Fertilizer



- **Pollution:** The same pesticides that are designed to be toxic to pests can have an equally lethal impact on our marine life. The same fertilizer that promotes plant growth in lawns and gardens can also create nuisance algae blooms, which remove oxygen from the water and clog waterways when it decomposes.

- **Solution:** Never use pesticides or fertilizer within 48 hours of an anticipated rainstorm. Use only as much as is directed on the label and keep it off driveways and sidewalks.

2 Dirt and Sediment

- **Pollution:** Dirt or sediment can impede the flow of the stormwater and negatively impact stream habitat as it travels through waterways and deposits downstream. Pollutants can attach to sediment, which can then be transported through our waterways.

- **Solution:** Protect dirt stockpiles by covering them with tarps or secure plastic sheets to prevent wind or rain from allowing dirt or sediment to enter the storm drain system.

3 Metals

- **Pollution:** Metals and other toxins present in car wash water can harm important plankton, which forms the base of the aquatic food chain.

- **Solution:** Take your car to a commercial car wash where the wash water is captured and treated at a local wastewater treatment plant.

DID YOU KNOW?

Did you know that most of the pollution found in our waterways is not from a single source, but from a "non-point" source meaning the accumulation of pollution from residents and businesses throughout the community

4 Pet Waste

- **Pollution:** Pet waste carries bacteria through our watersheds and eventually will be washed out to the ocean. This can pose a health risk to swimmers and surfers.

- **Solution:** Pick up after your pets!

5 Trash and Debris



- **Pollution:** Trash and debris can enter waterways by wind, littering and careless maintenance of trash receptacles. Street sweeping collects some of this trash; however, much of what isn't captured ends up in our storm drain system where it flows untreated out to the ocean.

- **Solution:** Don't litter and make sure trash containers are properly covered. It is far more expensive to clean up the litter and trash that ends up in our waterways than it is to prevent it in the first place. Come out to one of Orange County's many locations for Coastal and Inner-Coastal Cleanup Day, which is held in September.

6 Motor Oil / Vehicle Fluids

- **Pollution:** Oil and petroleum products from our vehicles are toxic to people, wildlife and plants.



- **Solution:** Fix any leaks from your vehicle and keep the maintenance up on your car. Use absorbent material such as cat litter on oil spills, then sweep it up and dispose of it in the trash. Recycle used motor oil at a local Household Hazardous Waste Collection Center.



A TEAM EFFORT

The Orange County Stormwater Program has teamed with the Municipal Water District of Orange County (MWDOC) and the University of California Cooperative Extension Program (UCCE) to develop this pamphlet.

Low Impact Development (LID) and sustainable water use prevents water pollution and conserves water for drinking and reuse. Reducing your water use and the amount of water flowing from your home protects the environment and saves you money.

Thank you for making water protection a priority!

For more information, please visit www.ocwatersheds.com/publiced/

www.mwdoc.com

www.uccemg.com



To report a spill, call the Orange County 24-Hour Water Pollution Prevention Reporting Hotline at 1-877-89-SPILL \(1-877-897-7455)

Special Thanks to
The City of Los Angeles Stormwater Program for the use of its artwork

The Metropolitan Water District of Southern California for the use of the California-Friendly Plant and Native Habitat photos



Homeowners Guide for Sustainable Water Use

Low Impact Development, Water Conservation & Pollution Prevention



The Ocean Begins at Your Front Door







RUNOFF, RAINWATER AND REUSE

Where Does Water Runoff Go?

Stormwater, or water from rainfall events, and runoff from outdoor water use such as sprinklers and hoses flows from homes directly into catch basins and the storm drain system. After entering the storm drain, the water flows untreated into streams, rivers, bays and ultimately the Pacific Ocean. Runoff can come from lawns, gardens, driveways, sidewalks and roofs. As it flows over hard, impervious surfaces, it picks up pollutants. Some pollutants carried by the water runoff include trash, pet waste, pesticides, fertilizer, motor oil and more.

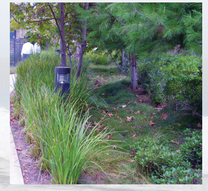




Water Conservation

Pollution not only impairs the water quality for habitat and recreation, it can also reduce the water available for reuse. Runoff allowed to soak into the ground is cleaned as it percolates through the soil, replenishing depleted groundwater supplies. Groundwater provides at least 50% of the total water for drinking and other indoor household activities in north and central Orange County. When land is covered with roads, parking lots, homes, etc., there is less land to take in the water and more hard surfaces over which the water can flow.

In Orange County, 60-70% of water used by residents and businesses goes to irrigation and other outdoor uses. Reusing rainwater to irrigate our lawn not only reduces the impact of water pollution from runoff, but it also is a great way to conserve our precious water resources and replenish our groundwater basin.



What is Low Impact Development (LID)?

Low Impact Development (LID) is a method of development that seeks to maintain the natural hydrologic character of an area. LID provides a more sustainable and pollution-preventative approach to water management.

New water quality regulations require implementation of LID in larger new developments and encourage implementation of LID and other sustainable practices in existing residential areas. Implementing modifications to your lawn or garden can reduce pollution in our environment, conserve water and reduce your water bill.



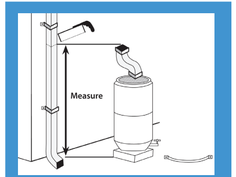
Permeable pavement allows water runoff to infiltrate through the soil and prevents most pollutants from reaching the storm drain system.

OPTIONS FOR RAINWATER HARVESTING AND REUSE

Rainwater harvesting is a great way to save money, prevent pollution and reduce potable water use. To harvest your rainwater, simply redirect the runoff from roofs and downspouts to rain barrels. Rain gardens are another option; these reduce runoff as well as encourage infiltration.

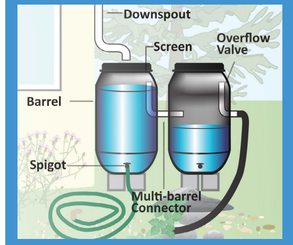
Downspout Disconnection/Redirection

Disconnecting downspouts from pipes running to the gutter prevents runoff from transporting pollutants to the storm drain. Once disconnected, downspouts can be redirected to rain gardens or other vegetated areas, or be connected to a rain barrel.



Rain Barrels

Rain barrels capture rainwater flow from roofs for reuse in landscape irrigation. Capacity of rain barrels needed for your home will depend on the amount of roof area and rainfall received. When purchasing your rain barrel, make sure it includes a screen, a spigot to siphon water for use, an overflow tube to allow for excess water to run out and a connector if you wish to connect multiple barrels to add capacity of water storage.



Mosquito growth prevention is very important when installing a rain barrel. The best way to prevent mosquito breeding is to eliminate entry points by ensuring all openings are sealed tightly. If these methods are unsuccessful, products are available to kill mosquito larvae, but that are harmless to animals and humans. Regular application of these products is essential. Please visit the Orange County Vector Control website for more information at www.ocvcd.org/mosquitoes3.php.

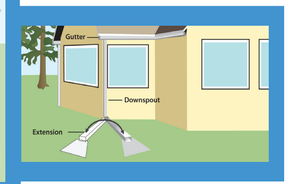




Rain Gardens

Rain gardens allow runoff to be directed from your roof downspout into a landscaped area. Vegetation and rocks in the garden will slow the flow of water to allow for infiltration into the soil. Plants and soil particles will absorb pollutants from the roof runoff. By utilizing a native plant palate, rain gardens can be maintained all year with minimal additional irrigation. These plants are adapted to the semi-arid climate of Southern California, require less water and can reduce your water bill.

Before modifying your yard to install a rain garden, please consult your local building and/or planning departments to ensure your garden plan follows pertinent building codes and ordinances. Besides codes and ordinances, some home owner associations also have guidelines for yard modifications. If your property is in hill areas or includes engineered slopes, please seek professional advice before proceeding with changes.



For information on how to disconnect a downspout or to install and maintain a rain barrel or rain garden at your home, please see the Los Angeles Rainwater Harvesting Program, A Homeowner's "How-To" Guide, November 2009 at www.larainwaterharvesting.org/

OTHER WATER CONSERVATION AND POLLUTION PREVENTION TECHNIQUES

Native Vegetation and Maintenance

"California Friendly" plants or native vegetation can significantly reduce water use. These plants often require far less fertilizers and pesticides, which are two significant pollutants found in Orange County waterways. Replacing water "thirsty" plants and grass types with water efficient natives is a great way to save water and reduce the need for potentially harmful pesticides and fertilizer.

Please see the California Friendly Garden Guide produced by the Metropolitan Water District of Southern California and associated Southern California Water Agencies for a catalog of California friendly plants and other garden resources at www.bewaterwise.com/Gardensoft.

Weed Free Yards

Weeds are water thieves. They often reproduce quickly and rob your yard of both water and nutrients. Weed your yard by hand if possible. If you use herbicides to control the weeds, use only the amount recommended on the label and never use it if rain is forecast within the next 48 hours.



Soil Amendments

Soil amendments such as green waste (e.g. grass clippings, compost, etc.) can be a significant source of nutrients and can help keep the soil near the roots of plants moist. However, they can cause algal booms if they get into our waterways, which reduces the amount of oxygen in the water and impacts most aquatic organisms. It is important to apply soil amendments more than 48 hours prior to predicted rainfall.

IRRIGATE EFFICIENTLY



Water runoff from sprinklers left on too long will carry pollutants into our waterways.

Smart Irrigation Controllers

Smart Irrigation Controllers have internal clocks as well as sensors that will turn off the sprinklers in response to environmental changes. If it is raining, too windy or too cold, the smart irrigation control sprinklers will automatically shut off.

Check with your local water agency for available rebates on irrigation controllers and smart timers.

- Aim your sprinklers at your lawn, not the sidewalk – By simply adjusting the direction of your sprinklers you can save water, prevent water pollution from runoff, keep your lawn healthy and save money.
- **Set a timer for your sprinklers** – lawns absorb the water they need to stay healthy within a few minutes of turning on the sprinklers. Time your sprinklers; when water begins running off your lawn, you can turn them off. Your timer can be set to water your lawn for this duration every time.
- **Water at Sunrise** – Watering early in the morning will reduce water loss due to evaporation. Additionally, winds tend to die down in the early morning so the water will get to the lawn as intended.
- **Water by hand** – Instead of using sprinklers, consider watering your yard by hand. Hand-watering ensures that all plants get the proper amount of water and you will prevent any water runoff, which wastes water and carries pollutants into our waterways.
- **Fix leaks** - Nationwide, households waste one trillion gallons of water a year to leaks – that is enough water to serve the entire state of Texas for a year. If your garden hose is leaking, replace the nylon or rubber hose washer and ensure a tight connection. Fix broken sprinklers immediately.

Do your part to prevent water pollution in our creeks, rivers, bays and ocean.

Clean beaches and healthy creeks, rivers, bays, and ocean are important to Orange County. However, many common household activities can lead to water pollution if you're not careful.

Remember the Water in Your Storm Drain is Not Treated BEFORE It Enters Our Waterways

Litter, oil, chemicals and other substances that are left on your yard or driveway can be blown or washed into storm drains that flow to the ocean. Over-watering your lawn and washing your car can also flush materials into the storm drains. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated.

You would never pour soap, fertilizers or oil into the ocean, so don't let them enter streets, gutters or storm drains. Follow the easy tips in this brochure to help prevent water pollution.

For more information, please call the **Orange County Stormwater Program** at **1-877-89-SPILL** (1-877-897-7455) or visit **www.ocwatersheds.com**

To report a spill, call the **Orange County 24-Hour Water Pollution Problem Reporting Hotline 1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while performing everyday household activities. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

GENUINE RECYCLED PAPER
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RECYCLE USED OIL

Help Prevent Ocean Pollution:

Household Tips



The Ocean Begins at Your Front Door

PROJECT Pollution PREVENTION

Pollution Prevention

Household Activities

- **Do not rinse spills with water!** Sweep outdoor spills and dispose of in the trash. For wet spills like oil, apply cat litter or another absorbent material, then sweep and bring to a household hazardous waste collection center (HHWCC).
- Securely cover trash cans.
- Take household hazardous waste to a household hazardous waste collection center.
- Store household hazardous waste in closed, labeled containers inside or under a cover.
- Do not hose down your driveway, sidewalk or patio. Sweep up debris and dispose of in trash.
- Always pick up after your pet. Flush waste down the toilet or dispose of in the trash.
- Bathe pets indoors or have them professionally groomed.

Household Hazardous Wastes include:

- ▲ **Batteries**
- ▲ **Paint thinners, paint strippers and removers**
- ▲ **Adhesives**
- ▲ **Drain openers**
- ▲ **Oven cleaners**
- ▲ **Wood and metal cleaners and polishes**
- ▲ **Herbicides and pesticides**
- ▲ **Fungicides/wood preservatives**
- ▲ **Automotive fluids and products**
- ▲ **Grease and rust solvents**
- ▲ **Thermometers and other products containing mercury**
- ▲ **Fluorescent lamps**
- ▲ **Cathode ray tubes, e.g. TVs, computer monitors**
- ▲ **Pool and spa chemicals**

Gardening Activities

- Follow directions on pesticides and fertilizers, (measure, do not estimate amounts) and do not use if rain is predicted within 48 hours.
- Water your lawn and garden by hand to control the amount of water you use. Set irrigation systems to reflect seasonal water needs. If water flows off your yard and onto your driveway or sidewalk, your system is over-watering.
- Mulch clippings or leave them on the lawn. If necessary, dispose in a green waste container.
- Cultivate your garden often to control weeds.

Washing and Maintaining Your Car

- Take your car to a commercial car wash. Car washing in the community is not allowed.
- Shake floor mats into a trash can or vacuum to clean.
- Monitor vehicles for leaks and place pans under leaks. Keep your car well maintained to stop and prevent leaks.
- Use cat litter or other absorbents and sweep to remove any materials deposited by vehicles. Contain sweepings and dispose of at a HHWCC.
- Perform automobile repair and maintenance under a covered area and use drip pans or plastic sheeting to keep spills and waste material from reaching storm drains.
- **Never pour oil or antifreeze in the street, gutter or storm drains.** Recycle these substances at a service station, HHWCC, or used oil recycling center. For the nearest Used Oil Collection Center call 1-800-CLEANUP or visit www.ciwmb.ca.gov/UsedOil.

For locations and hours of Household Hazardous Waste Collection Centers in Anaheim, Huntington Beach, Irvine and San Juan Capistrano, call (714)834-6752 or visit www.oclandfills.com.



Do your part to prevent water pollution in our creeks, rivers, bays and ocean.

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, not properly disposing of household hazardous waste can lead to water pollution. Batteries, electronics, paint, oil, gardening chemicals, cleaners and other hazardous materials cannot be thrown in the trash. They also must never be poured or thrown into yards, sidewalks, driveways, gutters or streets. Rain or other water could wash the materials into the storm drain and eventually into our waterways and the ocean. In addition, hazardous waste must not be poured in the sanitary sewers (sinks and toilets).

NEVER DISPOSE OF HOUSEHOLD HAZARDOUS WASTE IN THE TRASH, STREET, GUTTER, STORM DRAIN OR SEWER.

For more information, please call the **Orange County Stormwater Program** at **1-877-89-SPILL** (1-877-897-7455) or visit **www.ocwatersheds.com**

To Report Illegal Dumping of Household Hazardous Waste call 1-800-69-TOXIC

To report a spill, call the **Orange County 24-Hour Water Pollution Problem Reporting Hotline 1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

RECYCLE USED OIL

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Help Prevent Ocean Pollution:

Proper Disposal of Household Hazardous Waste



The Ocean Begins at Your Front Door

PROJECT Pollution PREVENTION

ORANGE COUNTY

Pollution Prevention

Leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients are considered to be "household hazardous waste" or "HHW." HHW can be found throughout your home, including the bathroom, kitchen, laundry room and garage.

WHEN POSSIBLE, USE NON-HAZARDOUS OR LESS-HAZARDOUS PRODUCTS.

Disposal of HHW down the drain, on the ground, into storm drains, or in the trash is illegal and unsafe.

Proper disposal of HHW is actually easy. Simply drop them off at a Household Hazardous Waste Collection Center (HHWCC) for free disposal and recycling. Many materials including anti-freeze, latex-based paint, motor oil and batteries can be recycled. Some centers have a "Stop & Swap" program that lets you take partially used home, garden, and automobile products free of charge. There are four HHWCCs in Orange County:

Anaheim:.....1071 N. Blue Gum St
Huntington Beach:.....17121 Nichols St
Irvine:..... 6411 Oak Canyon
San Juan Capistrano:... 32250 La Pata Ave

Centers are open Tuesday-Saturday, 9 a.m.-3 p.m. Centers are closed on rainy days and major holidays. For more information, call **(714) 834-6752** or visit **www.oclandfills.com.**

Common household hazardous wastes

- Batteries
- Paint and paint products
- Adhesives
- Drain openers
- Household cleaning products
- Wood and metal cleaners and polishes
- Pesticides
- Fungicides/wood preservatives
- Automotive products (antifreeze, motor oil, fluids)
- Grease and rust solvents
- Fluorescent lamps
- Mercury (thermometers & thermostats)
- All forms of electronic waste including computers and microwaves
- Pool & spa chemicals
- Cleaners
- Medications
- Propane (camping & BBQ)
- Mercury-containing lamps
- Television & monitors (CRTs, flatscreens)

Tips for household hazardous waste

- Never dispose of HHW in the trash, street, gutter, storm drain or sewer.
- Keep these materials in closed, labeled containers and store materials indoors or under a cover.
- When possible, use non-hazardous products.
- Reuse products whenever possible or share with family and friends.
- Purchase only as much of a product as you'll need. Empty containers may be disposed of in the trash.
- HHW can be harmful to humans, pets and the environment. Report emergencies to 911.





Did you know that just one quart of oil can pollute 250,000 gallons of water?

A clean ocean and healthy creeks, rivers, bays and beaches are important to Orange County. However, not properly disposing of used oil can lead to water pollution. If you pour or drain oil onto driveways, sidewalks or streets, it can be washed into the storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering the ocean. Help prevent water pollution by taking your used oil to a used oil collection center.

Included in this brochure is a list of locations that will accept up to five gallons of used motor oil at no cost. Many also accept used oil filters. Please contact the facility before delivering your used oil. This listing of companies is for your reference and does not constitute a recommendation or endorsement of the company.

Please note that used oil filters may not be disposed of with regular household trash. They must be taken to a household hazardous waste collection or recycling center in Anaheim, Huntington Beach, Irvine or San Juan Capistrano. For information about these centers, visit www.oclandfills.com.

Please do not mix your oil with other substances!

For more information, please call the Orange County Stormwater Program at 1-877-89-SPILL (1-877-897-7455) or visit www.watersheds.com.

For information about the proper disposal of household hazardous waste, call the Household Waste Hotline at (714) 834-6752 or visit www.oclandfills.com.

RECYCLE USED OIL

For additional information about the nearest oil recycling center, call the Used Oil Program at 1-800-CLEANUP or visit www.cleanup.org.

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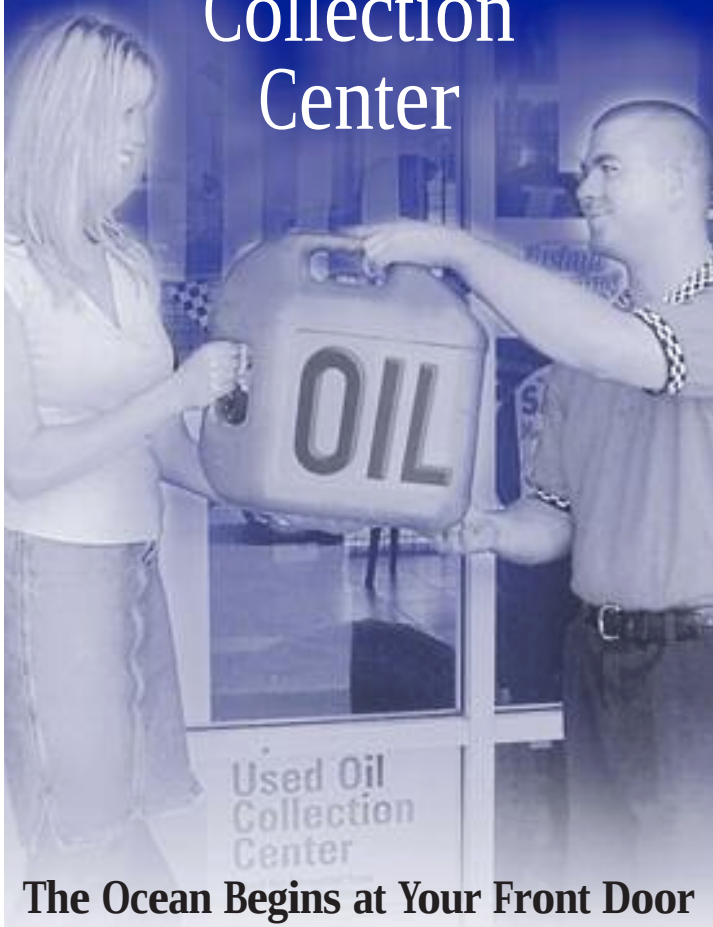
Help Prevent Ocean Pollution:

Recycle at Your Local Used Oil Collection Center



The Ocean Begins at Your Front Door

PROJECT Pollution PREVENTION

NORTH COUNTY

Used Oil Collection Centers

Anaheim

All Seasons Tire and Auto Center, Inc.
817 S Brookhurst St., Anaheim, CA 92804
(714)772-6090( )
CIWMB#: 30-C-03177

AutoZone #3317
423 N Anaheim Blvd., Anaheim, CA 92805
(714)776-0787( )
CIWMB#: 30-C-05263

AutoZone #5226
2145 W Lincoln Ave., Anaheim, CA 92801
(714)533-6599( )
CIWMB#: 30-C-04604

Bedard Automotive
3601 E Miraloma Ave., Anaheim, CA 92806
(714)528-1380( )
CIWMB#: 30-C-02205

Classic Chevrolet
1001 Weir Canyon Rd., Anaheim, CA 92807
(714)283-5400( )
CIWMB#: 30-C-05223

Econo Lube N' Tune #4
3201 W Lincoln Ave., Anaheim, CA 92801
(714)821-0128( )
CIWMB#: 30-C-01485

EZ Lube Inc - Savi Ranch #43
985 N Weir Canyon Rd., Anaheim, CA 92807
(714)556-1312( )
CIWMB#: 30-C-06011

Firestone Store #71C7
1200 S Magnolia Ave., Anaheim, CA 92804
(949)598-5520( )
CIWMB#: 30-C-05743

Great Western Lube Express
125 N Brookhurst St., Anaheim, CA 92801
(714)254-1300( )
CIWMB#: 30-C-05542

HR Pro Auto Service Center
3180 W Lincoln Ave., Anaheim, CA 92801
(714)761-4343( )
CIWMB#: 30-C-05927

Ira Newman Automotive Services
1507 N State College Blvd., Anaheim, CA 92806
(714)635-2392( )
CIWMB#: 30-C-01482

Jiffy Lube #1028
2400 W Ball Rd., Anaheim, CA 92804
(714)761-5211( )
CIWMB#: 30-C-00870

Jiffy Lube #1903
2505 E Lincoln Ave., Anaheim, CA 92806
(714)772-4000( )
CIWMB#: 30-C-05511

Jiffy Lube #2340
2181 W Lincoln Ave., Anaheim, CA 92801
(714)533-1000( )
CIWMB#: 30-C-04647

Kragen Auto Parts #1303
1088 N State College Blvd., Anaheim, CA 92806
(714)956-7351( )
CIWMB#: 30-C-03438

Kragen Auto Parts #1399
2245 W Ball Rd., Anaheim, CA 92804
(714)490-1274( )
CIWMB#: 30-C-04094

Kragen Auto Parts #1565
2072 Lincoln Ave., Anaheim, CA 92806
(714)502-6992( )
CIWMB#: 30-C-04078

Kragen Auto Parts #1582
3420 W Lincoln Ave., Anaheim, CA 92801
(714)828-7977( )
CIWMB#: 30-C-04103

Pep Boys #613
10912 Katella Ave., Anaheim, CA 92804
(714)638-0863( )
CIWMB#: 30-C-01756

Pep Boys #663
3030 W Lincoln Anaheim, CA 92801
(714)826-4810( )
CIWMB#: 30-C-03417

Pep Boys #809
8205 E Santa Ana Cyn Rd., Anaheim, CA 92808
(714)974-0105( )
CIWMB#: 30-C-03443

Pick Your Part
1235 S Beach Blvd., Anaheim, CA 92804
(714)527-1645( )
CIWMB#: 30-C-03744

PK Auto Performance
3106 W. Lincoln Ave., Anaheim, CA 92801
(714)826-2141( )
CIWMB#: 30-C-05628

Quick Change Lube and Oil
2731 W Lincoln Ave., Anaheim, CA 92801
(714)821-4464( )
CIWMB#: 30-C-04363

Saturn of Anaheim
1380 S Auto Center Dr., Anaheim, CA 92806
(714)648-2444( )
CIWMB#: 30-C-06332

Sun Tech Auto Service
105 S State College Blvd., Anaheim, CA 92806
(714)956-1389( )
CIWMB#: 30-C-06455

Vonic Truck Services
515 S Rose St., Anaheim, CA 92805
(714)533-3333( )
CIWMB#: 30-C-01142

Anaheim Hills

Anaheim Hills Car Wash & Lube
5810 E La Palma Ave., Anaheim Hills, CA 92807
(714)777-6605( )
CIWMB#: 30-C-01387

Brea

Firestone Store #27A9
891 E Imperial Hwy., Brea, CA 92821
(714)529-8404( )
CIWMB#: 30-C-01221

Oil Can Henry's
230 N Brea Blvd., Brea, CA 92821
(714)990-1900( )
CIWMB#: 30-C-04273

Buena Park

Firestone Store #71F7
6011 Orangethorpe Buena Park, CA 90620
(714)670-7912( )
CIWMB#: 30-C-01218

Firestone Store #71T8
8600 Beach Blvd., Buena Park, CA 90620
(714)827-5300( )
CIWMB#: 30-C-02121

Kragen Auto Parts #1204
5303 Beach Blvd., Buena Park, CA 90621
(714)994-1320( )
CIWMB#: 30-C-02623

Cypress

AutoZone #5521
5471 Lincoln Ave., Cypress, CA 90630
(714)995-4644( )
CIWMB#: 30-C-00836

Big O Tires
6052 Cerritos Ave., Cypress, CA 90630
(714)826-6334( )
CIWMB#: 30-C-04245

Econo Lube N' Tune #213
5497 Cerritos Ave., Cypress, CA 90630
(714)761-0456( )
CIWMB#: 30-C-06240

Jiffy Lube #851
4942 Lincoln Ave., Cypress, CA 90630
(626)965-9689( )
CIWMB#: 30-C-06182

M & N Coastline Auto & Tire Service
4005 Ball Rd., Cypress, CA 90630
(714)826-1001( )
CIWMB#: 30-C-04387

Masterlube #103
5904 Lincoln Cypress, CA 90630
(714)826-2323( )
CIWMB#: 30-C-01071

Masterlube #104
5971 Ball Rd., Cypress, CA 90630
(714)220-1555( )
CIWMB#: 30-C-04682

Metric Motors of Cypress
6042 Cerritos Ave., Cypress, CA 90630
(714)821-4702( )
CIWMB#: 30-C-05157

Fullerton

AutoZone #2898
146 N. Raymond Ave., Fullerton, CA 92831
(714)870-9772( )
CIWMB#: 30-C-04488

AutoZone #5522
1801 Orangethorpe W. Fullerton, CA 92833
(714)870-8286( )
CIWMB#: 30-C-06062

AutoZone #5523
102 N Euclid Fullerton, CA 92832
(714)870-8286( )
CIWMB#: 30-C-04755

EZ Lube #17
4002 N Harbor Blvd., Fullerton, CA 92835
(714)871-9980( )
CIWMB#: 30-C-03741

Firestone Store #27EH
1933 N Placentia Ave., Fullerton, CA 92831
(714)993-7100( )
CIWMB#: 30-C-02122

Fox Service Center
1018 W Orangethorpe Fullerton, CA 92833
(714)879-1430( )
CIWMB#: 30-C-02318

Fullerton College Automotive Technology
321 E Chapman Ave., Fullerton, CA 92832
(714)992-7275( )
CIWMB#: 30-C-03165

Kragen Auto Parts #0731
2978 Yorba Linda Fullerton, CA 92831
(714)996-4780( )
CIWMB#: 30-C-02628

Kragen Auto Parts #4133
904 W Orangethorpe Ave., Fullerton, CA 92832
(714)526-3570( )
CIWMB#: 30-C-06256

Pep Boys #642
1530 S Harbor Blvd., Fullerton, CA 92832
(714)870-0700( )
CIWMB#: 30-C-01755

Sunnyside 76 Car Care Center
2701 N Brea Blvd., Fullerton, CA 92835
(714)256-0773( )
CIWMB#: 30-C-01381

Garden Grove

76 Pro Lube Plus
9001 Trask Ave., Garden Grove, CA 92844
(714)393-0590( )
CIWMB#: 30-C-05276

AutoZone #5527
13190 Harbor Blvd., Garden Grove, CA 92843
(714)636-5665( )
CIWMB#: 30-C-04760

David Murray Shell
12571 Vly View St., Garden Grove, CA 92845
(714)898-0170( )
CIWMB#: 30-C-00547

Express Lube & Wash
8100 Lampson Ave., Garden Grove, CA 92841
(909)316-8261( )
CIWMB#: 30-C-06544

Firestone Store #7180
10081 Chapman Ave., Garden Grove, CA 92840
(714)530-4630( )
CIWMB#: 30-C-01224

Firestone Store #71W3
13961 Brookhurst St., Garden Grove, CA 92843
(714)590-2741( )
CIWMB#: 30-C-03690

Jiffy Lube #1991
13970 Harbor Blvd., Garden Grove, CA 92843
(714)554-0610( )
CIWMB#: 30-C-05400

Kragen Auto Parts #1251
13933 N Harbor Blvd., Garden Grove, CA 92843
(714)554-3780( )
CIWMB#: 30-C-02663

Kragen Auto Parts #1555
9851 Chapman Ave., Garden Grove, CA 92841
(714)741-8030( )
CIWMB#: 30-C-04079

Nissan of Grarden Grove
9670 Trask Ave., Garden Grove, CA 92884
(714)537-0900( )
CIWMB#: 30-C-06553

Toyota of Garden Grove
9444 Trask Ave., Garden Grove, CA 92844
(714)895-5595( )
CIWMB#: 30-C-06555

La Habra

AutoZone #5532
1200 W Imperial Hwy., La Habra, CA 90631
(562)694-5337( )
CIWMB#: 30-C-04784

Burch Ford
201 N Harbor Blvd., La Habra, CA 90631
(562)691-3225( )
CIWMB#: 30-C-05179

Firestone Store #2736
1071 S Beach Blvd., La Habra, CA 90631
(562)691-1731( )
CIWMB#: 30-C-01169

Kragen Auto Parts #1569
1621 W Whittier Blvd., La Habra, CA 90631
(562)905-2538( )
CIWMB#: 30-C-04076

Pep Boys #997
125 W Imperial Hwy., La Habra, CA 90631
(714)447-0601( )
CIWMB#: 30-C-04026

SpeeDee Oil Change & Tune-Up
1580 W Imperial Hwy., La Habra, CA 90631
(562)697-3513( )

Los Alamitos

Jiffy Lube #1740
3311 Katella Ave., Los Alamitos, CA 90720
(562)596-1827( )
CIWMB#: 30-C-03529

Midway City

Bolsa Transmission
8331 Bolsa Ave., Midway City, CA 92655
(714)799-6158( )
CIWMB#: 30-C-05768

Placentia

Advanced Auto & Diesel
144 S Bradford Placentia, CA 92870
(714)996-8222( )
CIWMB#: 30-C-06242

Castner's Auto Service
214 S. Bradford Ave., Placentia, CA 92870
(714)528-1311( )
CIWMB#: 30-C-06452

Econo Lube N' Tune
100 W Chapman Ave., Placentia, CA 92870
(714)524-0424( )
CIWMB#: 30-C-06454

Fairway Ford
1350 E Yorba Linda Blvd., Placentia, CA 92870
(714)524-1200( )
CIWMB#: 30-C-01863

Seal Beach

M & N Coastline Auto & Tire Service
12239 Seal Beach Blvd., Seal Beach, CA 90740
(714)826-1001( )
CIWMB#: 30-C-04433

Seal Beach Chevron
12541 Seal Beach Blvd., Seal Beach, CA 90740
(949)495-0774(14)
CIWMB#: 30-C-06425

Stanton

AutoZone #2806
11320 Beach Blvd., Stanton, CA 90680
(714)895-7665( )
CIWMB#: 30-C-04563

Joe's Auto Clinic
11763 Beach Blvd., Stanton, CA 90680
(714)891-7715( )
CIWMB#: 30-C-03253

Kragen Auto Parts #1742
11951 Beach Blvd., Stanton, CA 90680
(714)799-7574( )
CIWMB#: 30-C-05231

Scher Tire #20
7000 Katella Ave., Stanton, CA 90680
(714)892-9924( )
CIWMB#: 30-C-05907

USA 10 Minute Oil Change
8100 Lampson Ave., Stanton, CA 92841
(714)373-4432( )
CIWMB#: 30-C-05909

Westminster

AutoZone #5543
6611 Westminster Blvd., Westminster, CA 92683
(714)898-2898( )
CIWMB#: 30-C-04964

AutoZone #5544
8481 Westminster Blvd., Westminster, CA 92683
(714)891-3511( )
CIWMB#: 30-C-04966

City of Westminster Corporate Yard
14381 Olive St., Westminster, CA 92683
(714)895-2876(292)
CIWMB#: 30-C-02008

Honda World
13600 Beach Blvd., Westminster, CA 92683
(714)890-8900( )
CIWMB#: 30-C-03639

Jiffy Lube #1579
6011 Westminster Blvd., Westminster, CA 92683
(714)899-2727( )
CIWMB#: 30-C-02745

John's Brake & Auto Repair
13050 Hoover St., Westminster, CA 92683
(714)379-2088( )
CIWMB#: 30-C-05617

Kragen Auto Parts #0762
6562 Westminster Blvd., Westminster, CA 92683
(714)898-0810( )
CIWMB#: 30-C-02590

Midway City Sanitary District
14451 Cedarwood St., Westminster, CA 92683
(714)893-3553( )
CIWMB#: 30-C-01626

Pep Boys #653
15221 Beach Blvd., Westminster, CA 92683
(714)893-8544( )
CIWMB#: 30-C-03415

Yorba Linda

AutoZone #5545
18528 Yorba Linda Blvd., Yorba Linda, CA 92886
(714)970-8933( )
CIWMB#: 30-C-04971

Econo Lube N' Tune
22270 La Palma Ave., Yorba Linda, CA 92887
(714)692-8394( )
CIWMB#: 30-C-06513

EZ Lube Inc. #41
17511 Yorba Linda Blvd., Yorba Linda, CA 92886
(714)556-1312( )
CIWMB#: 30-C-05739

Firestone Store #27T3
18500 Yorba Linda Blvd., Yorba Linda, CA 92886
(714)779-1966( )
CIWMB#: 30-C-01222

Jiffy Lube #1532
16751 Yorba Linda Blvd., Yorba Linda, CA 92886
(714)528-2800( )
CIWMB#: 30-C-03777

Mike Schultz Import Service
4832 Eureka Ave., Yorba Linda, CA 92886
(714)528-4411( )
CIWMB#: 30-C-04313

This information was provided by the County of Orange Integrated Waste Management Department and the California Integrated Waste Management Board (CIWMB).



Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities such as pest control can lead to water pollution if you're not careful. Pesticide treatments must be planned and applied properly to ensure that pesticides do not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump pesticides into the ocean, so don't let it enter the storm drains. Pesticides can cause significant damage to our environment if used improperly. If you are thinking of using a pesticide to control a pest, there are some important things to consider.

For more information,
please call
University of California Cooperative
Extension Master Gardeners at
(714) 708-1646
or visit these Web sites:
www.uccemg.org
www.ipm.ucdavis.edu

For instructions on collecting a specimen sample visit the Orange County Agriculture Commissioner's website at:
http://www.ocagcomm.com/ser_lab.asp

To report a spill, call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
at 1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

Information From:
Cheryl Wilen, Area IPM Advisor; Darren Haver, Watershed Management Advisor; Mary Louise Flint, IPM Education and Publication Director; Pamela M. Geisel, Environmental Horticulture Advisor; Carolyn L. Unruh, University of California Cooperative Extension staff writer. Photos courtesy of the UC Statewide IPM Program and Darren Haver.

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Help Prevent Ocean Pollution:

Responsible Pest Control



Tips for Pest Control

Key Steps to Follow:

Step 1: Correctly identify the pest (insect, weed, rodent, or disease) and verify that it is actually causing the problem.



Three life stages of the common lady beetle, a beneficial insect.

This is important because beneficial insects are often mistaken for pests and sprayed with pesticides needlessly.

Consult with a Certified Nursery Professional at a local nursery or garden center or send a sample of the pest to the Orange County Agricultural Commissioner's Office.

Determine if the pest is still present – even though you see damage, the pest may have left.

Step 2: Determine how many pests are present and causing damage.



Small pest populations may be controlled more safely using non-pesticide techniques. These include removing food sources, washing off leaves with a strong stream of water, blocking entry into the home using caulking and replacing problem plants with ones less susceptible to pests.

Integrated Pest Management (IPM) usually combines several least toxic pest control methods for long-term prevention and management of pest problems without harming you, your family, or the environment.

UC CE University of California Cooperative Extension

Step 3: If a pesticide must be used, choose the least toxic chemical.

Obtain information on the least toxic pesticides that are effective at controlling the target pest from the UC Statewide Integrated Pest Management (IPM) Program's Web site at www.ipm.ucdavis.edu.

Seek out the assistance of a Certified Nursery Professional at a local nursery or garden center when selecting a pesticide. Purchase the smallest amount of pesticide available.

Apply the pesticide to the pest during its most vulnerable life stage. This information can be found on the pesticide label.

Step 4: Wear appropriate protective clothing.

Follow pesticide labels regarding specific types of protective equipment you should wear. Protective clothing should always be washed separately from other clothing.

Step 5: Continuously monitor external conditions when applying pesticides such as weather, irrigation, and the presence of children and animals.

Never apply pesticides when rain is predicted within the next 48 hours. Also, do not water after applying pesticides unless the directions say it is necessary.

Apply pesticides when the air is still; breezy conditions may cause the spray or dust to drift away from your targeted area.

In case of an emergency call 911 and/or the regional poison control number at (714) 634-5988 or (800) 544-4404 (CA only).

For general questions you may also visit www.calpoison.org.

Step 6: In the event of accidental spills, sweep up or use an absorbent agent to remove any excess pesticides. Avoid the use of water.

Be prepared. Have a broom, dust pan, or dry absorbent material, such as cat litter, newspapers or paper towels, ready to assist in cleaning up spills.

Contain and clean up the spill right away. Place contaminated materials in a doubled plastic bag. All materials used to clean up the spill should be properly disposed of according to your local Household Hazardous Waste Disposal site.

Step 7: Properly store and dispose of unused pesticides.



Purchase Ready-To-Use (RTU) products to avoid storing large concentrated quantities of pesticides.

Store unused chemicals in a locked cabinet.

Unused pesticide chemicals may be disposed of at a Household Hazardous Waste Collection Center.

Empty pesticide containers should be triple rinsed prior to disposing of them in the trash.

Household Hazardous Waste Collection Center
(714) 834-6752
www.oclandfills.com

PROJECT Pollution PREVENTION

Sewage Spill Regulatory Requirements

Allowing sewage to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse cities or public agencies for clean-up efforts.

Here are the pertinent codes, fines, and agency contact information that apply.

Orange County Stormwater Program
24 Hour Water Pollution Reporting Hotline
1-877-89-SPILL (1-877-897-7455)

- County and city water quality ordinances prohibit discharges containing pollutants.

Orange County Health Care Agency Environmental Health
(714) 433-6419

California Health and Safety Code, Sections 5410-5416

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
  - must immediately notify the local health agency of the discharge.
  - shall reimburse the local health agency for services that protect the public's health and safety (water-contact receiving waters).
  - who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between $500–$1,000) and/or imprisonment for less than one year.

Regional Water Quality Control Board
Santa Ana Region (951) 782-4130
San Diego Region (858) 467-2952

- Requires the prevention, mitigation, response to and reporting of sewage spills.

California Office of Emergency Services
(800) 852-7550

California Water Code, Article 4, Chapter 4, Sections 13268-13271
California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters **shall immediately notify the Office of Emergency Services.**
- Any person who fails to provide the notice required by this section is **guilty of a misdemeanor** and shall be punished by a fine (less than $20,000) and/or imprisonment for not more than one year.

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Sewage Spill
Reference Guide

Your Responsibilities as a Private Property Owner

Residences
Businesses
Homeowner/Condominium Associations
Federal and State Complexes
Military Facilities



Orange County Sanitation District

Health Care Agency
Environmental Health

PROJECT Pollution PREVENTION
www.ocwatersheds.com

This brochure was designed courtesy of the Orange County Sanitation District (OCSD). For additional information, call (714) 962-2411, or visit their website at www.ocsd.com

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors.

Structure problems caused by tree roots in the lines, broken/cracked pipes, missing or broken cleanout caps or undersized sewers can cause blockages.

Infiltration and inflow (I/I) impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately**:

Control and minimize the spill. Keep spills contained on private property and out of gutters, storm drains and public waterways by shutting off or not using the water.

Use sandbags, dirt and/or plastic sheeting to prevent sewage from entering the storm drain system.

Clear the sewer blockage. Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.

Always notify your city sewer/public works department or public sewer district of sewage spills. If the spill enters the storm drains also notify the Health Care Agency. In addition, if it exceeds 1,000 gallons notify the Office of Emergency Services. Refer to the numbers listed in this brochure.



Overflowing cleanout pipe located on private property

You Could Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse cities or public agencies for clean-up and enforcement efforts. See Regulatory Codes & Fines section for pertinent codes and fines that apply.

What to Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas.

Look for:

- Drain backups inside the building.
- Wet ground and water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains.
- Unusual odorous wet areas: sidewalks, external walls or ground/landscape around a building.

Caution

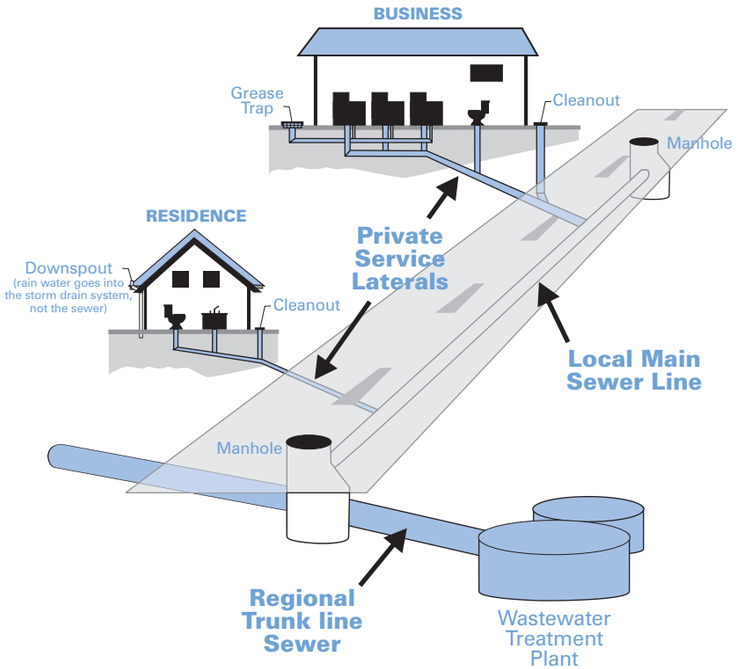
Keep people and pets away from the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria. Call your local health care agency listed on the back for more information.

If You See a Sewage Spill Occurring, Notify Your City Sewer/Public Works Department or Public Sewer District IMMEDIATELY!

How a Sewer System Works

A property owner's sewer pipes are called service laterals and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer (including the area under the street). These laterals are the responsibility of the property owner and must be maintained by the property owner. Many city agencies have adopted ordinances requiring maintenance of service laterals. Check with your city sewer/local public works department for more information.

Operation and maintenance of **local and regional sewer lines** are the responsibility of the city sewer/public works departments and public sewer districts.



How You Can Prevent Sewage Spills

1. **Never put grease down garbage disposals, drains or toilets.**
2. **Perform periodic cleaning to eliminate grease, debris and roots in your service laterals.**
3. **Repair any structural problems in your sewer system and eliminate any rainwater infiltration/inflow leaks into your service laterals.**



Preventing Grease Blockages

The drain is not a dump! Recycle or dispose of grease properly and never pour grease down the drain.

Homeowners should mix fats, oils and grease with absorbent waste materials such as paper, coffee grounds, or kitty litter and place it in the trash. Wipe food scraps from plates and pans and dump them in the trash.

Restaurants and commercial food service establishments should always use "Kitchen Best Management Practices." These include:

- Collecting all cooking grease and liquid oil from pots, pans and fryers in covered grease containers for recycling.
- Scraping or dry-wiping excess food and grease from dishes, pots, pans and fryers into the trash.
- Installing drain screens on all kitchen drains.
- Having spill kits readily available for cleaning up spills.
- Properly maintaining grease traps or interceptors by having them serviced regularly. Check your local city codes.

Orange County Agency Responsibilites

- **City Sewer/Public Works Departments—** Responsible for protecting city property and streets, the local storm drain system, sewage collection system and other public areas.
- **Public Sewer/Sanitation District—** Responsible for collecting, treating and disposing of wastewater.
- **County of Orange Health Care Agency—** Responsible for protecting public health by closing ocean/bay waters and may close food-service businesses if a spill poses a threat to public health.
- **Regional Water Quality Control Boards—** Responsible for protecting State waters.
- **Orange County Stormwater Program—** Responsible for preventing harmful pollutants from being discharged or washed by stormwater runoff into the municipal storm drain system, creeks, bays and the ocean.

You Could Be Liable for Not Protecting the Environment

Local and state agencies have legal jurisdiction and enforcement authority to ensure that sewage spills are remedied.

They may respond and assist with containment, relieving pipe blockages, and/or clean-up of the sewage spill, especially if the spill is flowing into storm drains or onto public property.

A property owner may be charged for costs incurred by these agencies responding to spills from private properties.



Report Sewage Spills!

City Sewer/Public Works Departments

Aliso Viejo	(949) 425-2500
Anaheim	(714) 765-6860
Brea	(714) 990-7691
Buena Park	(714) 562-3655
Costa Mesa	(949) 645-8400
Cypress	(714) 229-6760
Dana Point	(949) 248-3562
Fountain Valley	(714) 593-4600
Fullerton	(714) 738-6897
Garden Grove	(714) 741-5375
Huntington Beach	(714) 536-5921
Irvine	(949) 453-5300
Laguna Beach	(949) 497-0765
Laguna Hills	(949) 707-2650
Laguna Niguel	(949) 362-4337
Laguna Woods	(949) 639-0500
La Habra	(562) 905-9792
Lake Forest	(949) 461-3480
La Palma	(714) 690-3310
Los Alamitos	(562) 431-3538
Mission Viejo	(949) 831-2500
Newport Beach	(949) 644-3011
Orange	(714) 532-6480
Orange County	(714) 567-6363
Placentia	(714) 993-8245
Rancho Santa Margarita	(949) 635-1800
San Clemente	(949) 366-1553
San Juan Capistrano	(949) 443-6363
Santa Ana	(714) 647-3380
Seal Beach	(562) 431-2527
Stanton	(714) 379-9222
Tustin	(714) 962-2411
Villa Park	(714) 998-1500
Westminster	(714) 893-3553
Yorba Linda	(714) 961-7170

Public Sewer/Water Districts

Costa Mesa Sanitary District	(714) 393-4433/ (949) 645-8400
El Toro Water District	(949) 837-0660
Emerald Bay Service District	(949) 494-8571
Garden Grove Sanitary District	(714) 741-5375
Irvine Ranch Water District	(949) 453-5300
Los Alamitos/Rossmoor Sewer District	(562) 431-2223
Midway City Sanitary District (Westminster)	(714) 893-3553
Moulton Niguel Water District	(949) 831-2500
Orange County Sanitation District	(714) 962-2411
Santa Margarita Water District	(949) 459-6420
South Coast Water District	(949) 499-4555
South Orange County Wastewater Authority	(949) 234-5400
Sunset Beach Sanitary District	(562) 493-9932
Trabuco Canyon Sanitary District	(949) 858-0277
Yorba Linda Water District	(714) 777-3018

Other Agencies

Orange County Health Care Agency	(714) 433-6419
Office of Emergency Services	(800) 852-7550



Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities can lead to water pollution if you're not careful. Home improvement projects and work sites must be maintained to ensure that building materials do not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump building materials into the ocean, so don't let them enter the storm drains. Follow these tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

To report a spill,
call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
at **1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while performing home improvement projects. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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Help Prevent Ocean Pollution:

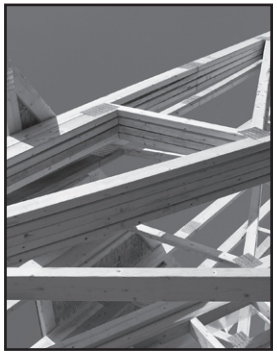
Tips for Home Improvement Projects



Tips for Home Improvement Projects

Home improvement projects can cause significant damage to the environment. Whether you hire a contractor or work on the house yourself, it is important to follow these simple tips while renovating, remodeling or improving your home:

General Construction



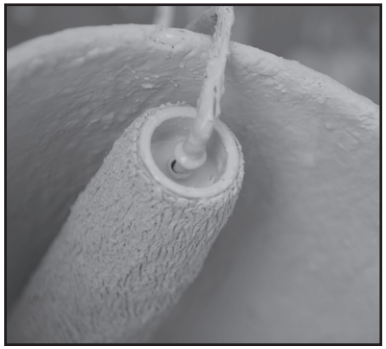
- Schedule projects for dry weather.
- Keep all construction debris away from the street, gutter and storm drain.
- Store materials under cover with temporary roofs or plastic sheets to eliminate or reduce the possibility that rainfall, runoff or wind will carry materials from the project site to the street, storm drain or adjacent properties.

Building Materials

- Never hose materials into a street, gutter or storm drain.
- Exposed piles of construction material should not be stored on the street or sidewalk.
- Minimize waste by ordering only the amount of materials needed to complete the job.
- Do not mix more fresh concrete than is needed for each project.
- Wash concrete mixers and equipment in a designated washout area where the water can flow into a containment area or onto dirt.
- Dispose of small amounts of dry excess materials in the trash. Powdery waste, such as dry concrete, must be properly contained within a box or bag prior to disposal. Call your local trash hauler for weight and size limits.

Paint

- Measure the room or object to be painted, then buy only the amount needed.
- Place the lid on firmly and store the paint can upside-down in a dry location away from the elements.
- Tools such as brushes, buckets and rags should never be washed where excess water can drain into the street, gutter or storm drain. All tools should be rinsed in a sink connected to the sanitary sewer.
- When disposing of paint, never put wet paint in the trash.
- Dispose of water-based paint by removing the lid and letting it dry in the can. Large amounts must be taken to a Household Hazardous Waste Collection Center (HHWCC).



- Oil-based paint is a household hazardous waste. All leftover paint should be taken to a HHWCC.
- For HHWCC locations and hours, call **(714) 834-6752** or visit **www.oclandfills.com**.

Erosion Control

- Schedule grading and excavation projects for dry weather.
- When temporarily removing soil, pile it in a contained, covered area where it cannot spill into the street, or obtain the required temporary encroachment or street closure permit and follow the conditions instructed by the permit.
- When permanently removing large quantities of soil, a disposal location must be found prior to excavation. Numerous businesses are available to handle disposal needs. For disposal options, visit **www.ciwmb.ca.gov/SWIS**.
- Prevent erosion by planting fast-growing annual and perennial grasses. They will shield and bind the soil.

Recycle

- Use a construction and demolition recycling company to recycle lumber, paper, cardboard, metals, masonry (bricks, concrete, etc.), carpet, plastic, pipes (plastic, metal and clay), drywall, rocks, dirt and green waste.



- For a listing of construction and demolition recycling locations in your area, visit **www.ciwmb.ca.gov/recycle.**

Spills

- Clean up spills immediately by using an absorbent material such as cat litter, then sweep it up and dispose of it in the trash.
- Immediately report spills that have entered the street, gutter or storm drain to the County's 24-Hour Water Pollution Problem Reporting Hotline at **(714) 567-6363** or visit **www.ocwatersheds.com** to fill out an incident reporting form.

PROJECT Pollution PREVENTION



Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities can lead to water pollution if you're not careful. Fertilizers, pesticides and other chemicals that are left on yards or driveways can be blown or washed into storm drains that flow to the ocean. Overwatering lawns can also send materials into storm drains. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never pour gardening products into the ocean, so don't let them enter the storm drains. Follow these easy tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

UCCE Master Gardener Hotline:
(714) 708-1646

To report a spill,
call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while landscaping or gardening. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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Help Prevent Ocean Pollution:

Tips for Landscape & Gardening



The Ocean Begins at Your Front Door

PROJECT Pollution PREVENTION

Tips for Landscape & Gardening

Never allow gardening products or polluted water to enter the street, gutter or storm drain.

General Landscaping Tips

- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Prevent erosion of slopes by planting fast-growing, dense ground covering plants. These will shield and bind the soil.
- Plant native vegetation to reduce the amount of water, fertilizers, and pesticide applied to the landscape.



- Never apply pesticides or fertilizers when rain is predicted within the next 48 hours.

Garden & Lawn Maintenance

- Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro spray systems. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling it through your city's program.



- Use slow-release fertilizers to minimize leaching, and use organic fertilizers.
- Read labels and use only as directed. Do not over-apply pesticides or fertilizers. Apply to spots as needed, rather than blanketing an entire area.
- Store pesticides, fertilizers and other chemicals in a dry covered area to prevent exposure that may result in the deterioration of containers and packaging.



- Rinse empty pesticide containers and re-use rinse water as you would use the product. Do not dump rinse water down storm drains. Dispose of empty containers in the trash.
- When available, use non-toxic alternatives to traditional pesticides, and use pesticides specifically designed to control the pest you are targeting. For more information, visit **www.ipm.ucdavis.edu**.
- If fertilizer is spilled, sweep up the spill before irrigating. If the spill is liquid, apply an absorbent material such as cat litter, and then sweep it up and dispose of it in the trash.
- Take unwanted pesticides to a Household Hazardous Waste Collection Center to be recycled. Locations are provided below.

Household Hazardous Waste Collection Centers

Anaheim:	1071 N. Blue Gum St.
Huntington Beach:	17121 Nichols St.
Irvine:	6411 Oak Canyon
San Juan Capistrano:	32250 La Pata Ave.

For more information, call (714) 834-6752 or visit www.oclandfills.com



Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities can lead to water pollution if you're not careful. Pet waste and pet care products can be washed into the storm drains that flow to the ocean. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never put pet waste or pet care products into the ocean, so don't let them enter the storm drains. Follow these easy tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

To report a spill,
call the
Orange County 24-Hour Water Pollution Problem Reporting Hotline
1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while caring for your pet. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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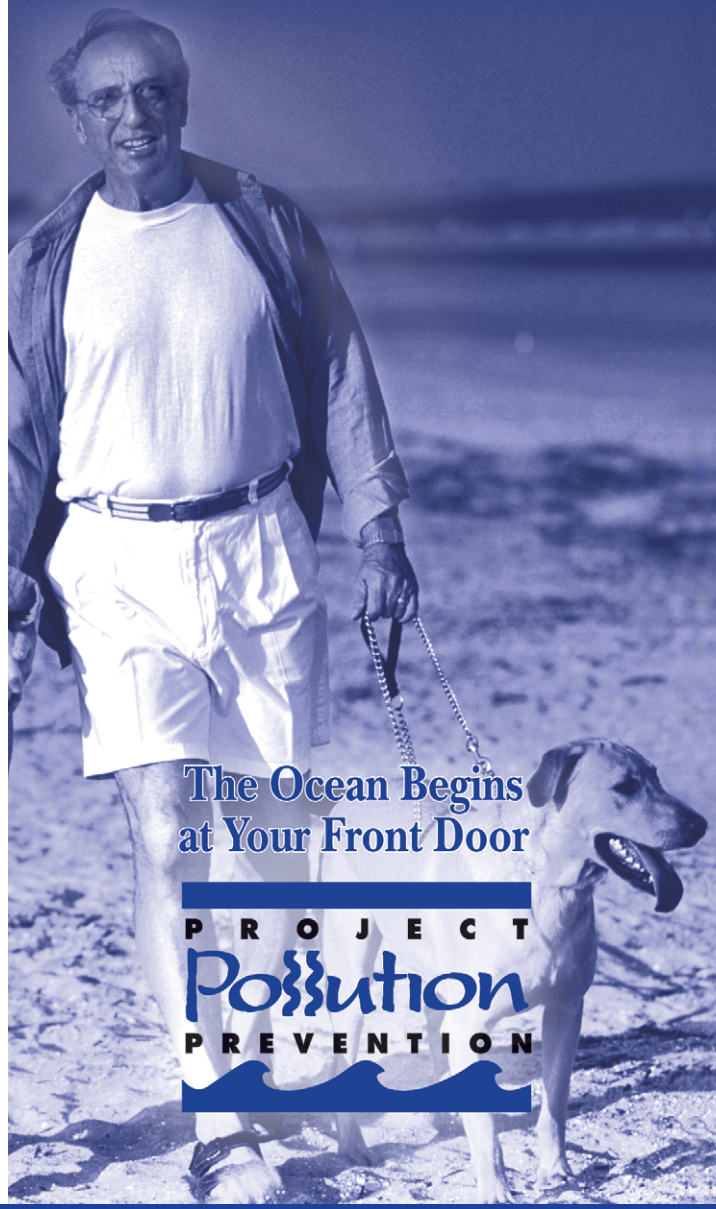
Help Prevent Ocean Pollution:

Tips for Pet Care



Tips for Pet Care

Never let any pet care products or washwater run off your yard and into the street, gutter or storm drain.

Washing Your Pets

Even biodegradable soaps and shampoos can be harmful to marine life and the environment.

- If possible, bathe your pets indoors using less-toxic shampoos or have your pet professionally groomed. Follow instructions on the products and clean up spills.

- If you bathe your pet outside, wash it on your lawn or another absorbent/ permeable surface to keep the washwater from running into the street, gutter or storm drain.



Flea Control

- Consider using oral or topical flea control products.

- If you use flea control products such as shampoos, sprays or collars, make sure to dispose of any unused products at a Household Hazardous Waste Collection Center. For location information, call **(714) 834-6752**.



Why You Should Pick Up After Your Pet

It's the law! Every city has an ordinance requiring you to pick up after your pet. Besides being a nuisance, pet waste can lead to water pollution, even if you live inland. During rainfall, pet waste left outdoors can wash into storm drains. This waste flows directly into our waterways and the ocean where it can harm human health, marine life and the environment.



As it decomposes, pet waste demands a high level of oxygen from water. This decomposition can contribute to killing marine life by reducing the amount of dissolved oxygen available to them.



Have fun with your pets, but please be a responsible pet owner by taking care of them and the environment.

- Take a bag with you on walks to pick up after your pet.

- Dispose of the waste in the trash or in a toilet.

PROJECT Pollution PREVENTION



Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities such as painting can lead to water pollution if you're not careful. Paint must be used, stored and disposed of properly to ensure that it does not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump paint into the ocean, so don't let it enter the storm drains. Follow these easy tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

To report a spill,
call the
Orange County 24-Hour Water Pollution Problem Reporting Hotline
at **1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while using, storing and disposing of paint. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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Help Prevent Ocean Pollution:

Tips for Projects Using Paint



Tips for Projects Using Paint

Paint can cause significant damage to our environment. Whether you hire a contractor or do it yourself, it is important to follow these simple tips when purchasing, using, cleaning, storing and disposing of paint.

Purchasing Paint

- Measure the room or object to be painted, then buy only the amount needed.
- Whenever possible, use water-based paint since it usually does not require hazardous solvents such as paint thinner for cleanup.

Painting

- Use only one brush or roller per color of paint to reduce the amount of water needed for cleaning.
- Place open paint containers or trays on a stable surface and in a position that is unlikely to spill.
- Always use a tarp under the area or object being painted to collect paint drips and contain spills.

Cleaning

- Never clean brushes or rinse paint containers in the street, gutter or storm drain.
- For oil-based products, use as much of the paint on the brushes as possible. Clean brushes with thinner. To reuse thinner, pour it through a fine filter (e.g. nylon, metal gauze or filter paper) to remove solids such as leftover traces of paint.
- For water-based products, use as much of the paint on the brushes as possible, then rinse in the sink.
- Collect all paint chips and dust. Chips and dust from marine paints or paints containing lead, mercury or tributyl tin are hazardous waste. Sweep up and dispose of at a Household Hazardous Waste Collection Center (HHWCC).

Storing Paint

- Store paint in a dry location away from the elements.
- Store leftover water-based paint, oil-based paint and solvents separately in original or clearly marked containers.
- Avoid storing paint cans directly on cement floors. The bottom of the can will rust much faster on cement.
- Place the lid on firmly and store the paint can upside-down to prevent air from entering. This will keep the paint usable longer. Oil-based paint is usable for up to 15 years. Water-based paint remains usable for up to 10 years.

Alternatives to Disposal

- Use excess paint to apply another coat, for touch-ups, or to paint a closet, garage, basement or attic.
- Give extra paint to friends or family. Extra paint can also be donated to a local theatre group, low-income housing program or school.
- Take extra paint to an exchange program such as the **"Stop & Swap"** that allows you to drop off or pick up partially used home care products free of charge. **"Stop & Swap"** programs are available at most HHWCCs.
- For HHWCC locations and hours, call **(714) 834-6752** or visit **www.oclandfills.com**.



Disposing of Paint

- Never put wet paint in the trash.

For water-based paint:

- If possible, brush the leftover paint on cardboard or newspaper. Otherwise, allow the paint to dry in the can with the lid off in a well-ventilated area protected from the elements, children and pets. Stirring the paint every few days will speed up the drying.
- Large quantities of extra paint should be taken to a HHWCC.
- Once dried, paint and painted surfaces may be disposed of in the trash. When setting a dried paint can out for trash collection, leave the lid off so the collector will see that the paint has dried.

For oil-based paint:

- Oil-based paint is a household hazardous waste. All leftover paint should be taken to a HHWCC.

Aerosol paint:

- Dispose of aerosol paint cans at a HHWCC.

Spills

- Never hose down pavement or other impermeable surfaces where paint has spilled.
- Clean up spills immediately by using an absorbent material such as cat litter. Cat litter used to clean water-based paint spills can be disposed of in the trash. When cleaning oil-based paint spills with cat litter, it must be taken to a HHWCC.
- Immediately report spills that have entered the street, gutter or storm drain to the County's 24-Hour Water Pollution Problem Reporting Hotline at **(714) 567-6363** or visit **www.ocwatersheds.com** to fill out an incident reporting form.

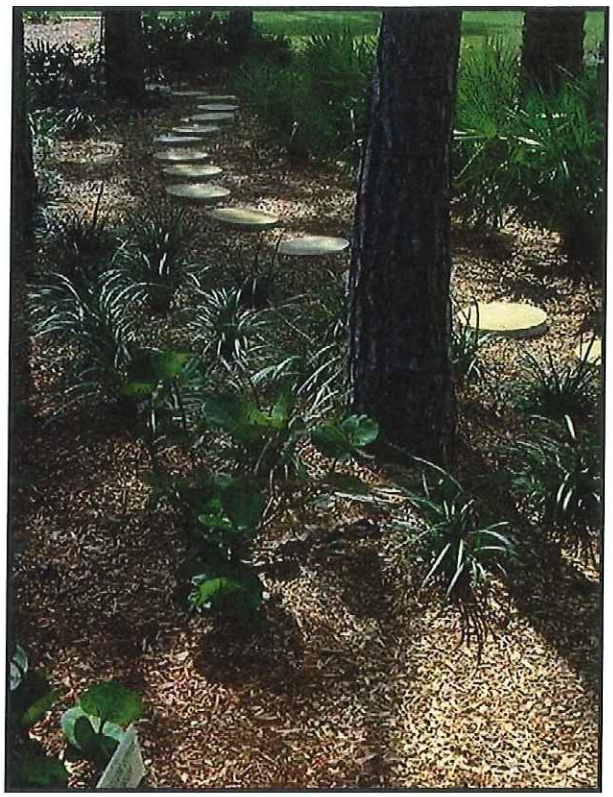
PROJECT Pollution PREVENTION

APPENDIX B

POST CONSTRUCTION BMP FACT SHEETS

- .....SD-10 Site Design & Landscape Planning
- .....SD-12 Efficient Irrigation
- .....SD-13 Storm Drain Signage
- .....SD-32 Trash Storage Areas
- .....R-1 Automobile Repair and Maintenance
- .....R-3 Automobile Parking
- .....R-4 Home and Garden Care Activities
- .....R-5 Disposal of Pet Wastes
- .....R-6 Disposal of Green Wastes
- .....R-7 Household Hazardous Waste
- .....R-8 Water Conservation
- .....FP-3 Roads, Streets, and Highways Operation and Maintenance
- .....FP-5 Solid Waste Handling
- .....FP-6 Water and Sewer Utility Operation and Maintenance
- .....DF-1 Drainage Facility Operation and Maintenance

Site Design & Landscape Planning SD-10



Design Objectives

- ✓ Maximize Infiltration
- ✓ Provide Retention
- ✓ Slow Runoff
- ✓ Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.

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SD-10 Site Design & Landscape Planning

Designing New Installations

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.

- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Conserve Natural Areas during Landscape Planning

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.

- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.

- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.

- Promote natural vegetation by using parking lot islands and other landscaped areas.

- Preserve riparian areas and wetlands.

Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.

- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

Protection of Slopes and Channels during Landscape Design

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface, since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

SD-10 Site Design & Landscape Planning

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Efficient Irrigation SD-12



Design Objectives

- ✓ Maximize Infiltration
- ✓ Provide Retention
- ✓ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Designing New Installations

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

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- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
  - Using mulches (such as wood chips or bar) in planter areas without ground cover to minimize sediment in runoff
  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Storm Drain Signage SD-13



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- ☑ Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Waste materials dumped into storm drain inlets can have severe impacts on receiving and ground waters. Posting notices regarding discharge prohibitions at storm drain inlets can prevent waste dumping. Storm drain signs and stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets.

Approach

The stencil or affixed sign contains a brief statement that prohibits dumping of improper materials into the urban runoff conveyance system. Storm drain messages have become a popular method of alerting the public about the effects of and the prohibitions against waste disposal.

Suitable Applications

Stencils and signs alert the public to the destination of pollutants discharged to the storm drain. Signs are appropriate in residential, commercial, and industrial areas, as well as any other area where contributions or dumping to storm drains is likely.

Design Considerations

Storm drain message markers or placards are recommended at all storm drain inlets within the boundary of a development project. The marker should be placed in clear sight facing toward anyone approaching the inlet from either side. All storm drain inlet locations should be identified on the development site map.

Designing New Installations

The following methods should be considered for inclusion in the project design and show on project plans:

- Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the project area with prohibitive language. Examples include "NO DUMPING

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– DRAINS TO OCEAN" and/or other graphical icons to discourage illegal dumping.

- Post signs with prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

Note - Some local agencies have approved specific signage and/or storm drain message placards for use. Consult local agency stormwater staff to determine specific requirements for placard types and methods of application.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. If the project meets the definition of "redevelopment", then the requirements stated under " designing new installations" above should be included in all project design plans.

Additional Information

Maintenance Considerations

- Legibility of markers and signs should be maintained. If required by the agency with jurisdiction over the project, the owner/operator or homeowner's association should enter into a maintenance agreement with the agency or record a deed restriction upon the property title to maintain the legibility of placards or signs.

Placement

- Signage on top of curbs tends to weather and fade.

- Signage on face of curbs tends to be worn by contact with vehicle tires and sweeper brooms.

Supplemental Information

Examples

- Most MS4 programs have storm drain signage programs. Some MS4 programs will provide stencils, or arrange for volunteers to stencil storm drains as part of their outreach program.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Trash Storage Areas SD-32

Description

Trash storage areas are areas where a trash receptacle (s) are located for use as a repository for solid wastes. Stormwater runoff from areas where trash is stored or disposed of can be polluted. In addition, loose trash and debris can be easily transported by water or wind into nearby storm drain inlets, channels, and/or creeks. Waste handling operations that may be sources of stormwater pollution include dumpsters, litter control, and waste piles.

Approach

This fact sheet contains details on the specific measures required to prevent or reduce pollutants in stormwater runoff associated with trash storage and handling. Preventative measures including enclosures, containment structures, and impervious pavements to mitigate spills, should be used to reduce the likelihood of contamination.

Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- Collect and Convey

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Design requirements for waste handling areas are governed by Building and Fire Codes, and by current local agency ordinances and zoning requirements. The design criteria described in this fact sheet are meant to enhance and be consistent with these code and ordinance requirements. Hazardous waste should be handled in accordance with legal requirements established in Title 22, California Code of Regulation.

Wastes from commercial and industrial sites are typically hauled by either public or commercial carriers that may have design or access requirements for waste storage areas. The design criteria in this fact sheet are recommendations and are not intended to be in conflict with requirements established by the waste hauler. The waste hauler should be contacted prior to the design of your site trash collection areas. Conflicts or issues should be discussed with the local agency.

Designing New Installations

Trash storage areas should be designed to consider the following structural or treatment control BMPs:

- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater.
- Make sure trash container areas are screened or walled to prevent off-site transport of trash.

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- Use lined bins or dumpsters to reduce leaking of liquid waste.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Pave trash storage areas with an impervious surface to mitigate spills.
- Do not locate storm drains in immediate vicinity of the trash storage area.
- Post signs on all dumpsters informing users that hazardous materials are not to be disposed of therein.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Additional Information

Maintenance Considerations

The integrity of structural elements that are subject to damage (i.e., screens, covers, and signs) must be maintained by the owner/operator. Maintenance agreements between the local agency and the owner/operator may be required. Some agencies will require maintenance deed restrictions to be recorded of the property title. If required by the local agency, maintenance agreements or deed restrictions must be executed by the owner/operator before improvement plans are approved.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.



R-1
AUTOMOBILE REPAIR AND MAINTENANCE

Automobile repair and maintenance activities have the potential to contribute directly to storm drain systems primarily through spills or the dumping of waste fluids being conveyed to the storm drain. Automotive fluids, such as oils, greases, and solvents, are hydrocarbon based, and may contain metals, chlorinated hydrocarbons, and other toxic compounds. Removal of caked dirt and grime from an automobile increases the sediment load to the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	
Foaming Agents	
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	
Other	

Think before conducting automobile repair and maintenance activities. Remember - The ocean starts at your front door.

Required Activities

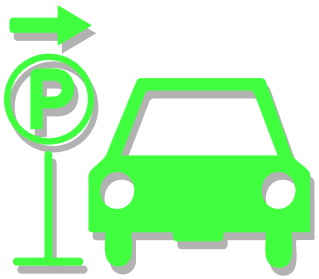


- Recycle used oil and antifreeze by taking them to service stations and other recycling centers. Never pour oil in storm drains or other areas.
- Do not perform repair and maintenance activities during rain events.
- Immediately clean up and contain any spills. Dispose of all waste and adsorbent materials properly.
- Store hazardous materials and wastes (including, but not limited to, fluids, solvents, parts containing fluids, batteries) indoors, under cover, or in watertight containers.
- Perform automobile maintenance and repairs over impervious surfaces such as concrete, so spills and waste material should be readily cleaned up. Use drip pans, plastic sheeting, etc. to contain spills and waste material.
- Dispose of cleaning solvents at the designated hazardous waste center.

Recommended Activities

- Conduct auto repair activities at a commercial repair facility
- Perform automobile repair and maintenance activities under a covered area.
- Do not buy fluids containing target pollutants (e.g. degreasers containing PERC).
- Monitor parked or stored vehicles and equipment for leaks and place pans under leaks to collect fluids for proper disposal or recycling.

For additional information contact:
County of Orange, OC Watershed
Main: (714) 955-0600 Water Pollution Discharge Hotline 1-877-89-SPILL
or visit our website at: www.ocwatersheds.com



R-3
AUTOMOBILE PARKING

Parked automobiles may contribute pollutants to the storm drain because poorly maintained vehicles may leak fluids containing hydrocarbons, metals, and other pollutants. In addition, heavily soiled automobiles may drop clods of dirt onto the parking surface, contributing to the sediment load when runoff is present. During rain events, or wash-down activities, the pollutants may be carried into the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	
Foaming Agents	
Metals	X
Hydrocarbons	X
Hazardous Materials	x
Pesticides and Herbicides	
Other	

Think before parking your car. Remember - The ocean starts at your front door.

Required Activities

- If required, vehicles have to be removed from the street during designated street sweeping/cleaning times.
- If the automobile is leaking, place a pan or similar collection device under the automobile, until such time as the leak may be repaired.
- Use dry cleaning methods to remove any materials deposited by vehicles (e.g. adsorbents for fluid leaks, sweeping for soil clod deposits).

Recommended Activities

- Park automobiles over permeable surfaces (e.g. gravel, or porous cement).
- Limit vehicle parking to covered areas.
- Perform routine maintenance to minimize fluid leaks, and maximize fuel efficiency.

For additional information contact:
County of Orange, OC Watershed
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or visit our website at: www.ocwatersheds.com



R-4
HOME AND GARDEN CARE ACTIVITIES

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	x
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	
Other	x

HOME CARE

Many hazardous materials may be used in and around residences during routine maintenance activities (such as: oils, paints, cleaners, bleaches, pesticides, glues, solvents, and other products). Improper or excessive use of these products can increase the potential for pollutants to be transported to the storm drain by runoff. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting home care activities. Remember - The ocean starts at your front door.

Required Activities

- Clean out painting equipment in an area where the waste can be contained and properly disposed of (latex – sewer, oil based – household hazardous waste center).
- Rinse off cement mixers and cement laden tools in a contained washout area. Dispose of dried concrete waste in household trash.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers. Dispose of them at a household hazardous waste center.
- Household wash waters (e.g. washer machine effluent, mop water, etc.) must be disposed of in the sanitary sewer.
- Pool and spa water may be discharged to the storm drain if residual chlorine is less than 0.1 mg/L, the pH is between 6.5 and 8.5, and the water is free from any unusual coloration. (Call 714-834-6107 to obtain information on a pool drain permit). Pool filter media must be contained and disposed of properly.

Recommended Activities

- Only purchase the types and amounts of materials needed.
- Share unused portions of products with neighbors or community programs (latex paint)

For additional information contact:
County of Orange, OC Watershed
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or visit our website at: www.ocwatersheds.com

GARDEN CARE

Garden activities may contribute pollutants via soil erosion, green waste, fertilizer and pesticide use. Plant and garden care activities such as landscape maintenance, fertilization, and pesticide application have the potential to discharge significant quantities of pollutants to the storm drain system. Nonvegetated surfaces may allow for significant erosion leading to high sediment loads. Other pollutants such as pesticides may adsorb onto the soil particles and be transported off site. Excess fertilizer and pesticide pollutants from over application may be carried to the storm drain by dissolving in irrigation runoff or rainwater. Green wastes may also contain organic matter and may have adsorbed fertilizers and pesticides.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	
Pesticides and Herbicides	x
Other	x

Excessive irrigation is often the most significant factor in home and garden care activities. Pollutants may dissolve in irrigation water and then be transported to the storm drain, or particles and materials coated with fertilizers and pesticides may be suspended in the irrigation flow and carried to the storm drain. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting garden care activities. Remember - The ocean starts at your front door.

Required Activities

- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Minimize the use of pesticides and fertilizers. Read the labels and follow directions to avoid improper use. Do not apply chemicals if it is windy or about to rain.
- Properly clean up and dispose of spills of gardening chemicals, fertilizes, or soils. If possible, return the spilled material to the container for future use.
- Lawn and garden care products must be stored in closed labeled containers, in covered areas, or off-ground and under protective tarps.
- Household hazardous waste must be properly disposed at a household hazardous waste center.
- Cover nonvegetated surfaces to prevent erosion.

Recommended Activities

- Utilize xeroscaping and use of drought and insect resistant landscaping.
- Cultivate garden often to control weeds
- Use integrated pest management (IPM). Planting pest repelling plants (e.g. Marigolds) or using pest eating insects (e.g. ladybugs) may reduce the need for pesticides.
- Do not leave food (human or pet) outside overnight
- Remove fruit and garden waste

For additional information contact:
County of Orange, OC Watershed
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or visit our website at: www.ocwatersheds.com



R-5
DISPOSAL OF PET WASTES

Pet wastes left in the environment may introduce solids, bacteria, and nutrients to the storm drain. The type and quantity of waste will dictate the proper disposal method. Small quantities of waste are best disposed with regular trash or flushed down a toilet. Large quantities of wastes from herbivore animals may be composted for subsequent use or disposal to landfill.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	
Pesticides and Herbicides	
Other	

Pick up after your pet! It's as easy as 1-2-3. 1) Bring a bag. 2) Clean it up. 3) Dispose of it properly (toilet or trash). The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before you dispose of any pet wastes. Remember - The ocean starts at your front door.

Required Activities

- All pet wastes must be picked up and properly disposed of. Pet waste should be disposed of in the regular trash, flushed down a toilet, or composted as type and quantities dictate.
- Properly dispose of unused flea control products (shampoo, sprays, or collars).
- Manure produced by livestock in uncovered areas should be removed at least daily for composting, or storage in water-tight container prior to disposal. Never hose down to stream or storm drain. Composting or storage areas should be configured and maintained so as not to allow contact with runoff. Compost may be donated to greenhouses, nurseries, and botanical parks. Topsoil companies and composting centers may also accept composted manure.
- Line waste pits or trenches with an impermeable layer, such as thick plastic sheeting.
- When possible, allow wash water to infiltrate into the ground, or collect in an area that is routed to the sanitary sewer.
- Confine livestock in fenced in areas except during exercise and grazing times. Restrict animal access to creeks and streams, preferably by fencing.

For additional information contact:
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- Install gutters that will divert roof runoff away from livestock areas.

Recommended Activities

- In order to properly dispose of pet waste, carry bags, pooper-scooper, or equivalent to safely pick up pet wastes while walking with pets.

- Bathe pets indoors and use less toxic shampoos. When possible, have pets professionally groomed.

- Properly inoculate your pet in order to maintain their health and reduce the possibility of pathogens in pet wastes.

- Maintain healthy and vigorous pastures with at least three inches of leafy material.

- Consider indoor feeding of livestock during heavy rainfall, to minimize manure exposed to potential runoff.

- Locate barns, corrals, and other high use areas on portions of property that either drain away from or are located distant form nearby creeks or storm drains.

For additional information contact:
County of Orange, OC Watershed
Main: (714) 955-0600/ 24hr Water Pollution Discharge Hotline 1-877-89-SPILL
or visit our website at: www.ocwatersheds.com



R-6
DISPOSAL OF GREEN WASTES

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	x
Pesticides and Herbicides	x
Other	

Green wastes entering the storm drain may clog the system creating flooding problems. Green wastes washed into receiving waters create an oxygen demand as they are decomposed, reducing the available oxygen for aquatic life. Pesticide and nutrient residues may be carried to the receiving water with the green wastes. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before disposing of any green wastes – Remember - The ocean starts at your front door.

Required Activities

- Green wastes can not be disposed of in the street, gutter, public right-of-way, storm drain, or receiving water. Dispose of green wastes as a part of the household trash. If the quantities are too large, arrange a pick up with the local waste hauler.

- After conducting yard or garden activities sweep the area and properly dispose of the clippings and waste. Do not sweep or blow out into the street or gutter.

Recommended Activities

- Utilize a commercial landscape company to conduct the landscape activities and waste disposal.

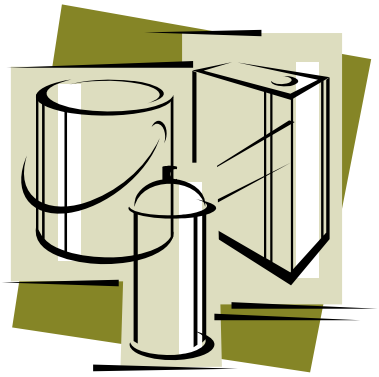
- Utilize native plants and drought tolerant species to reduce the water use and green waste produced.

- Use a lawn mower that has a mulcher so that the grass clippings remain on the lawn and do not have to be collected and disposed of.

- Compost materials in a designated area within the yard.

- Recycle lawn clippings and greenery waste through local programs if available.

For additional information contact:
County of Orange, OC Watershed
Main: (714) 955-0600/ 24hr Water Pollution Discharge Hotline 1-877-89-SPILL
or visit our website at: www.ocwatersheds.com



R-7
HOUSEHOLD HAZARDOUS WASTE

Household hazardous wastes (HHW) are defined as waste materials which are typically found in homes or similar sources, which exhibit characteristics such as: corrosivity, ignitability, reactivity, and/or toxicity, or are listed as hazardous materials by EPA.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	
Nutrients	
Bacteria	
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	x
Other	x

List of most common HHW products:
- Drain openers
- Oven cleaners
- Wood and metal cleaners and polishes
- Automotive oil and fuel additives
- Grease and rust solvents
- Carburetor and fuel injection cleaners
- Starter fluids
- Batteries
- Paint Thinners
- Paint strippers and removers
- Adhesives
- Herbicides
- Pesticides
- Fungicides/wood preservatives

Many types of waste can be recycled, however options for each waste type are limited. Recycling is always preferable to disposal of unwanted materials. All gasoline, antifreeze, waste oil, and lead-acid batteries can be recycled. Latex and oil-based paint can be reused, as well as recycled. Materials that cannot be reused or recycled should be disposed of at a properly permitted landfill.

Think before disposing of any household hazardous waste. Remember - The ocean starts at your front door.

RECYCLE USED OIL

Required Activities

- Dispose of HHW at a local collection facility. Call (714) 834-6752 for the household hazardous waste center closest to your area.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.

Recommended Activities

- Use non-hazardous or less-hazardous products.
- Participate in HHW reuse and recycling. Call (714) 834-6752 for the participating household hazardous waste centers.

The California Integrated Waste Management Board has a Recycling Hotline (800) 553-2962, that provides information and recycling locations for used oil.

For additional information contact:
County of Orange, OC Watershed
Main: (714) 955-0600/ 24hr Water Pollution Discharge Hotline 1-877-89-SPILL
or visit our website at: www.ocwatersheds.com



R-8
WATER CONSERVATION

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	x
Other	x

Excessive irrigation and/or the overuse of water is often the most significant factor in transporting pollutants to the storm drain system. Pollutants from a wide variety of sources including automobile repair and maintenance, automobile washing, automobile parking, home and garden care activities and pet care may dissolve in the water and be transported to the storm drain. In addition, particles and materials coated with fertilizers and pesticides may be suspended in the flow and be transported to the storm drain.

Hosing off outside areas to wash them down not only consumes large quantities of water, but also transports any pollutants, sediments, and waste to the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before using water. Remember - The ocean starts at your front door.

Required Activities

- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Do not hose off outside surfaces to clean, sweep with a broom instead.

Recommended Activities

- Fix any leaking faucets and eliminate unnecessary water sources.
- Use xeroscaping and drought tolerant landscaping to reduce the watering needs.
- Do not over watering lawns or gardens. Over watering wastes water and promotes diseases.
- Use a bucket to re-soak sponges/rags while washing automobiles and other items outdoors. Use hose only for rinsing.
- Wash automobiles at a commercial car wash employing water recycling.

For additional information contact:
County of Orange, OC Watershed
Main: (714) 955-0600/ 24hr Water Pollution Discharge Hotline 1-877-89-SPILL
or visit our website at: www.ocwatersheds.com



FP-3

ROADS, STREETS, AND HIGHWAYS OPERATION AND MAINTENANCE

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

1. **Sweeping & Cleaning**
2. **Street Repair & Maintenance**
3. **Bridge and Structure Maintenance**

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

Pollution prevention measures that should be consider and the minimum required and optional model procedures for each performance standard are provided below.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measure for roads, streets, and highways operation and maintenance include:

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Sweeping & Cleaning

Sweeping Frequency and Timing

- ✓ Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of streets.
- ✓ Perform street cleaning during dry weather if possible.
- ✓ Avoid wet cleaning or flushing of streets, and utilize dry methods where possible.
- ✓ If flushing of a street is absolutely necessary, sweep and remove debris before flushing. Do not let wash water enter storm drain inlets. Collect wash water and direct to a dirt or vegetated area, pump into a vacuum truck and dispose of properly.

OPTIONAL:

- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc.

Equipment Operation and Selection

- ✓ Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced as needed with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- ✓ Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- ✓ Clean sweepers at a wash rack that drains to the sanitary sewer. The wash rack area should be covered and bermed and wash water should drain to a clarifier prior to entering the sanitary sewer.
- ✓ Regularly inspect vehicles and equipment for leaks, and repair immediately.

> → *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

OPTIONAL:

- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).

Management of Material Removed by Sweeping

- ✓ Dispose of street sweeping debris and dirt at a landfill.
- ✓ Do not store swept material along the side of the street or near a storm drain inlet.
- ✓ If dewatering of saturated materials is necessary it should be conducted in a designated area away from storm drain inlets and the water contained for proper disposal.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

- ✓ If authorized by the local sanitation agency, water may be discharged to the sanitary sewer only after passing through a clarifier. As an alternative, dewatering can be conducted in a containment area in which saturated materials are placed on a tarp and allowed to dry. Dry debris is then disposed of properly.
- ✓ Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).

Maximize Access for Sweepers

- ✓ Keep accurate operation logs to track program.
- ✓ Properly maintain and operate equipment; which will increase efficiency.
- ✓ Sweeping should be conducted as close to the curb line as possible.

OPTIONAL:

- Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
- Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
- Develop and distribute flyers notifying residents of street sweeping schedules.

2. Repair and Maintenance

Pavement Marking

- ✓ Develop paint handling procedures for proper use, storage, and disposal of paints.
- ✓ Transfer and load paint and hot thermoplastic away from storm drain inlets.
- ✓ Street or hand sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.
- ✓ Replace paints containing lead and tributyltin with less toxic alternatives.
- ✓ Use water based paints. Clean application equipment in a sink that is connected to the sanitary sewer.
- ✓ Properly store leftover paints if they are to be kept for the next job, or dispose of properly.
- ✓ See *Spill Control procedure sheet* for guidance on the proper cleanup of paint spills.

Concrete Installation and Repair

- ✓ Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Only mix what is needed for the job.
- ✓ Wash concrete trucks off site or in designated areas on site, such that there is no discharge of concrete wash water into storm drain inlets, open ditches, streets, or other stormwater conveyance structures.

- ✓ Store concrete materials under cover, away from drainage areas.
- ✓ Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- ✓ When washing poured concrete areas to remove fine particles and expose the aggregate, contain the wash water for proper disposal; do not discharge water to the storm drain system.
- ✓ Do not allow excess concrete to be dumped on-site, except in designated areas.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each nearby or appropriate storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small on-site vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.

Patching, Resurfacing, and Surface Sealing

- ✓ Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ Where applicable, cover and seal each nearby or appropriate storm drain inlet (with waterproof material, plastic or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered man holes and storm drain inlets when the job is complete.
- ✓ Use only as much water as necessary for dust control, to avoid runoff.
- ✓ Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.
- ✓ Prior to a rain event or at the completion of a project, sweep the project area by hand or with a street sweeper.

Equipment Cleaning, Maintenance, and Storage

Also see Equipment Repair & Maintenance procedure sheet.

- ✓ Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mudjacking equipment at the end of each day. If equipment can be cleaned and materials reapplied at the job site, do so in compliance with the laws and regulations. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

- ✓ If refueling or repairing vehicles and equipment must be done on-site, conduct the activity away from storm drain inlets and watercourses.
- ✓ Place drip pans or absorbent materials under heavy equipment when not in use.
- ✓ Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

OPTIONAL:

- Conduct cleaning at a corporation or maintenance yard if possible.
- When practical, perform major equipment repairs at the corporation yard.

→ *In addition to the procedures above, review and apply general procedures outlined for Minor Construction activities when conducting street, road, and highway repair and maintenance activities.*

3. Bridge and Structure Maintenance

Painting and Paint Removal

- ✓ Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- ✓ Do not transfer or load paint near storm drain inlets or watercourses.
- ✓ Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- ✓ If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- ✓ If the bridge crosses a watercourse, perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters. If sanding, use a sander with a vacuum filter bag.
- ✓ Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of paint at an appropriate household hazardous waste facility.
- ✓ See Spill Control procedure sheet for guidance on the proper cleanup of paint spills.

Graffiti Removal

- ✓ Avoid graffiti abatement activities during rain events.
- ✓ Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up

afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.

- ✓ Note that care should be taken when disposing of waste since it may need to be disposed of as hazardous waste.
- ✓ When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.
- ✓ Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area.
- ✓ If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and collect wash water and dispose of properly.

OPTIONAL:

- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

Guardrail and Fence Repair

- ✓ When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in the *Sidewalk, Plaza, and Fountain Maintenance and Cleaning* procedure sheet.
- ✓ If painting is conducted, follow the *Painting and Paint Removal* procedures above.
- ✓ If graffiti removal is conducted, follow the *Graffiti Removal* procedures above.
- ✓ If construction takes place, see the procedure sheet for *Minor Construction*.
- ✓ Recycle materials whenever possible.

LIMITATIONS:

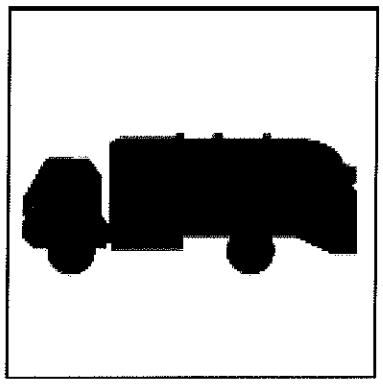
Limitations related to street sweeping may inc lude high equipment costs, the potential inability to restrict parking in urban areas, the need for sweeper operator training, the inability of current sweeper technology to remove oil and grease, and the lack of scientific evidence regarding the expected levels of pollutant removal.

REFERENCES:

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.



FP-5

SOLID WASTE HANDLING

It is important to control litter to eliminate trash and other materials in storm water runoff. Waste reduction is a major component of waste management and should be encouraged through training and public outreach. Management of waste once it is collected may involve reuse, recycling, or proper disposal. Specific solid waste handling activities may include one or more of the following:

1. **Solid Waste Collection**
2. **Waste Reduction and Recycling**
3. **Hazardous Waste Collection**
4. **Litter Control**

Reduce by purchasing only the amount needed.
Reuse products when possible.
Recycle leftover products that are recyclable, and dispose of other wastes safely.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for solid waste handling include:

- Reuse products when possible.
- Recycle leftover products that are recyclable.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Solid Waste Collection

✓ Implement procedures, where applicable, to collect, transport, and dispose of solid waste at appropriate disposal facilities in accordance with applicable federal, state, and local laws and regulations. Optional disposal options include the reuse and recycling of appropriate materials (see following sections).

- ✓ Include properly designed trash storage areas.
- ✓ Regularly inspect solid waste containers for structural damage. Repair or replace damaged containers as necessary.
- ✓ Secure solid waste containers; containers must be closed tightly when not in use.
- ✓ Do not fill waste containers with washout water or any other liquid.
- ✓ Remove all debris from containers prior to cleaning with water. Only clean out containers in a designated area that drains to a washrack that is connected to a sanitary sewer.
- ✓ Minimize spillage/leaking from solid waste containers. For larger solid waste containers (especially compactors) that utilize a hydraulic fluid pump system, regularly inspect and replace faulty pumps or hoses to minimize the potential of releases and spills.

Also see Emergency Spill Response procedure sheet.

- ✓ Ensure that only appropriate solid wastes are disposed of. Certain wastes such as hazardous wastes, appliances, fluorescent bulbs, pesticides, etc. may not be disposed of in solid waste containers.

2. Waste Reduction and Recycling

Although many types of waste can be recycled, recycling options for each waste type may be limited. All gasoline, antifreeze, waste oil, and lead-acid batteries can be recycled. Latex and oil-based paint can be reused, as well as recycled. Materials that cannot be reused or recycled should be disposed of properly.

- ✓ Provide containers for the collection and storage of recyclable materials.
- ✓ Do not mix liquid wastes, this can cause chemical reactions or make recycling impossible and complicate disposal.
- ✓ Recycle used motor oil. Municipalities are required to have a used oil recycling element within their integrated waste management plan.

> *CalRecycle has a Recycling Hotline, (800) RECYCLE, that provides information and recycling locations for used oil.*

3. Hazardous Waste Collection

Household hazardous wastes (HHW) are defined as waste materials which are typically found in homes or similar sources, which exhibit characteristics such as: corrosivity, ignitability, reactivity, and/or toxicity, or are listed as hazardous materials by EPA.

List of most common HHW products:
Drain opener
Oven cleaners
Wood and metal cleaners and polishes
Paint Thinners
Automotive oil and fuel additives
Adhesives
Grease and rust solvents Batteries
Herbicides
Paint strippers and removers Pesticides
Fungicides/wood preservatives
Starter fluids
Carburetor and fuel injection cleaners

✓ Follow proper storage and disposal measures for hazardous waste materials as identified on packaging or Material Safety Data Sheets.

✓ Emergencies related to hazardous waste should be reported to 911

OPTIONAL:

- Identify and promote use of non-hazardous alternatives.
- Promote household hazardous waste (HHW) reuse and recycling.

4. Litter Control

✓ Enforce anti-litter laws.

✓ Provide litter receptacles in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.

✓ Clean out and cover litter receptacles frequently to prevent overflow.

✓ Increase litter control for events generating substantial quantities of litter.

OPTIONAL:

- Post "No Littering" signs
- Place trash receptacles at transit stops and maintain as necessary.
- Participate in and/or organize additional clean-up programs (e.g., "Coastal Clean Up Day", "Pride Days", "Volunteer Connection Days").

REFERENCES:

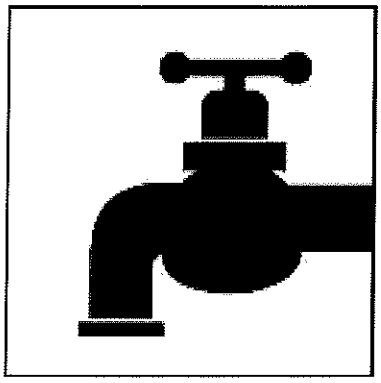
Bay Area Stormwater Management Agencies Association. 1996. *Pollution From Surface Cleaning.*

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Environmental Protection Agency (EPA). *Pollution Prevention and Good Housekeeping for Municipal Operations Storm Water. Pet Waste Collection.* Office of Wastewater Management. Online:

http://www.epa.gov/npdes/menuofbmps/poll_3.htm

Harvard University. 2002. Solid Waste Container Best Management Practices – Fact Sheet On-Line Resources – Environmental Health and Safety.



FP-6

WATER AND SEWER UTILITY OPERATION AND MAINTENANCE

Although the operation and maintenance of public utilities are not considered themselves a chronic source of stormwater pollution, some activities and accidents can result in the discharge of pollutants that can pose a threat to both human health and the quality of receiving waters if they enter the storm drain system. Activities associated with the operation and maintenance of water and sewer utilities to prevent and handle such incidents include the following:

1. **Water Line Maintenance**
2. **Sanitary Sewer Maintenance**
3. **Spill/Leak/Overflow Control, Response, and Containment**

Cities that do not provide maintenance of water and sewer utilities should coordinate with the contracting agency responsible for these activities and ensure that these model procedures are followed.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for water and sewer utility operation and maintenance include:

- Inspect potential non-storm water discharge flow paths and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Water Line Maintenance

Procedures can be employed to reduce pollutants from discharges associated with water utility operation and maintenance activities. Planned discharges may include fire hydrant testing, flushing water supply mains after new construction, flushing lines due to complaints of taste and odor, dewatering mains for maintenance work. Unplanned discharges from treated, recycled water, raw water, and groundwater systems operation and maintenance activities can occur from water main breaks, sheared fire hydrants, equipment malfunction, and operator error.

Planned Discharges

✓ For planned discharges use one of the following options:

- Reuse water for dust suppression, irrigation, or construction compaction
- Discharge to the sanitary sewer system with approval
- Discharge to the storm drain system or to a creek using applicable pollution control measures listed below (this option is ONLY applicable to uncontaminated pumped ground water, water line flushing, fire hydrant testing and flushing, discharges from potable water sources other than water main breaks) and may require a permit from the Regional Water Quality Control Board.

✓ If water is discharged to a storm drain inlet (catch basin), control measures must be put in place to control potential pollutants (i.e. sediment, chlorine, etc.). Examples of some storm drain inlet protection options include:

- Silt fence – appropriate where the inlet drains a relatively flat area.
- Gravel and wire mesh sediment filter – Appropriate where concentrated flows are expected.
- Wooden weir and fabric – use at curb inlets where a compact installation is desired.

✓ Prior to discharge, inspect discharge flow path and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).

✓ Select appropriate pollution control measure(s) considering the receiving system (i.e. curb inlet, drop inlet, culvert, creek, etc.) and ensure that the control device(s) fit properly.

✓ General design considerations for inlet protection devices include the following:

- The device should be constructed such that cleaning and disposal of trapped sediment is made easy, while minimizing interference with discharge activities.
- Devices should be constructed so that any standing water resulting from the discharge will not cause excessive inconvenience or flooding/damage to adjacent land or structures.

✓ The effectiveness of control devices must be monitored during the discharge period and any necessary repairs or modifications made as needed.

OPTIONAL:

- Sediment removal may be enhanced by placing filter fabric, gravel bags, etc. at storm drain inlets.

Unplanned Discharges

✓ Stop the discharge as quickly as possible by turning off water source.

✓ Inspect flow path of the discharged water:

- Control erosion along the flow path.
- Identify areas that may produce significant sediment or gullies, use sandbags to redirect the flow.
- Identify erodible areas which may need to be repaired or protected during subsequent repairs or corrective actions

✓ If repairs or corrective action will cause additional discharges of water, select the appropriate procedures for erosion control, chlorine residual, turbidity, and chemical additives. Prevent potential pollutants from entering the flow path and ensure that no additional discharged water enters storm drain inlets.

2. Sanitary Sewer Maintenance

Applicable to municipalities who own and operated a sewage collection system. Facilities that are covered under this program include sanitary sewer pipes and pump stations owned and operated by the Permittee. The owner of the sanitary sewer facilities is the entity responsible for carrying out this prevention and response program.

Sewer System Cleaning

- ✓ Sewer lines should be cleaned on a regular basis to remove grease, grit, and other debris that may lead to sewer backups.
- ✓ Establish routine maintenance program. Cleaning should be conducted at an established minimum frequency and more frequently for problem areas such as restaurants that are identified
- ✓ Cleaning activities may require removal of tree roots and other identified obstructions.

Preventative and Corrective Maintenance

- ✓ During routine maintenance and inspection note the condition of sanitary sewer structures and identify areas that need repair or maintenance. Items to note may include the following:
  - cracked/deteriorating pipes
  - leaking joints/seals at manhole
  - frequent line plugs
  - line generally flows at or near capacity
  - suspected infiltration or exfiltration
- ✓ Document suggestions and requests for repair and report the information to the appropriate manager or supervisor.
- ✓ Prioritize repairs based on the nature and severity of the problem. Immediate clearing of blockage or repair is required where an overflow is currently occurring or for urgent problems that may cause an imminent overflow (e.g. pump station failures, sewer line ruptures, sewer line blockages). These repairs may be temporary until scheduled or capital improvements can be completed.
- ✓ Review previous sewer maintenance records to help identify "hot spots" or areas with frequent maintenance problems and locations of potential system failure.

3. Spill/Leak/Overflow Control, Response, and Containment

Control

Also see Drainage System procedures sheet

- ✓ Refer to countywide *Illicit Discharge Detection and Elimination Program.* Components of this program include:
  - Investigation/inspection and follow-up
  - Elimination of illicit discharges and connections
  - Enforcement of ordinances
  - Respond to sewage spills

- Facilitate public reporting of illicit discharges and connections. A citizen's hotline for reporting observed overflow conditions should be established to supplement the field screening efforts being conducted by the Principal Permittee.

Response and Containment

- ✓ Establish lead department/agency responsible for spill response and containment. Provide coordination within departments.
- ✓ When a spill, leak, and/or overflow occurs, keep sewage from entering the storm drain system to the maximum extent practicable by covering or blocking storm drain inlets or by containing and diverting the sewage away from open channels and other storm drain facilities (using sandbags, inflatable dams, etc.).
- ✓ If a spill reaches the storm drain notify County of Orange Health Care Agency through Control One at (714) 628-7208.
- ✓ Remove the sewage using vacuum equipment or use other measures to divert it back to the sanitary sewer system.
- ✓ Record required information at the spill site.
- ✓ Perform field tests as necessary to determine the source of the spill.
- ✓ Develop additional notification procedures regarding spill reporting as needed.

LIMITATIONS:

Private property access rights needed to perform testing along storm drain right-of-ways. Requirements of municipal ordinance authority for suspected source verification testing necessary for guaranteed rights of entry.

REFERENCES:

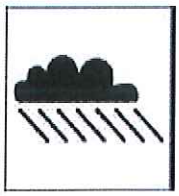
California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: http://ladpw.org/wmd/npdes/public_TC.cfm

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. Water Utility Pollution Prevention Plan.

DF-1
DRAINAGE FACILITY OPERATION AND MAINTENANCE



As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and storm water that may contain certain pollutants. Consequently these pollutants may accumulate in the system and must be removed periodically. In addition, the systems must also be maintained to function properly hydraulically to avoid flooding. Maintaining the system may involve the following activities:

1. Inspection and Cleaning of Stormwater Conveyance Structures
2. Controlling Illicit Connections and Discharges
3. Controlling Illegal Dumping

This list of Model Maintenance Procedures can be utilized as an inspection checklist to determine where better compliance with Designated Minimum Best Management Practices (notated with checkmarks and capital letters) is needed, and to recommend Additional Best Management Practices (notated with bullet points and lower case letters) that may be applicable under certain circumstances, especially where there are certain Pollutant Constituents of Concern. BMPs applicable to certain constituents are notated as:

Bacteria (BACT) *Sediment (SED)* *Nutrients (NUT)* *Oil and Grease (O&G)* *Pesticides (PEST)*
OtherToxic Compounds (TOX) *Trash (TRASH)* *Hydrological Impacts (HYD)* *Any/All or General (ANY)*

Program/Facility Being Inspected: _____

Date: _____ Inspector Name: _____

When completed, the checklist should be attached to the General Inspection Form Cover Sheet and copies should be provided to the Supervisor of the Facility/Program being inspected.

MAINTENANCE PROCEDURES:

1. Inspection and Cleaning of Drainage Facilities

Unsatisfactory	OK
☐ _____	☐
☐ _____	☐
☐ _____	☐
☐ _____	☐
☐ _____	☐
☐ _____	☐
☐ _____	☐

General Guidelines

T 1A. Annually inspect and clean drainage structures as needed.

T 1B. Maintain appropriate records of cleaning and inspections.

T 1C. Properly dispose of removed materials at a landfill or recycling facility.

T 1D. Conduct intermittent supplemental visual inspections during the wet season to determine if there are problem inlets where sediment/trash or other pollutants accumulate, and provide for additional cleanouts as appropriate.

T 1E. Prevent or clean up any discharges that may occur during the course of maintenance and cleaning procedures.

T 1F. Verify that appropriate employees or subcontractors are trained in proper conductance of maintenance activities, including record keeping and disposal.

T 1G. Annually inspect and clean v-ditches as needed, prior to the wet season. On shrub-covered slopes, vegetative debris may be placed on the downhill side of the ditch. Trash should be bagged and disposed at a landfill.

Unsatisfactory / OK	
☐ ☐	**General Guidelines (cont.)** • 1a. Remove trash or debris as needed from open channels. It should be noted that major vegetative debris removal may require other regulatory permits prior to completing the work. (TRASH) • 1b. Consider retrofitting energy dissipaters (e.g. riprap) below culvert outfalls to minimize potential for erosion. (SED) • 1c. Repair any v-ditches that have cracked or displaced in a manner that accelerates erosion. (SED) • 1d. If suspicious conditions appear to exist, test selected samples of the removed wastes for compliance with hazardous waste regulations prior to disposal. (TOX) • 1e. Consider more frequent regular cleaning of selected drainage structures to help address ongoing specific impairments. (SED, BACT, NUT, TRASH) • 1f. Consider structural retrofits to the MS4 to help address ongoing specific impairments (SED, BACT, NUT, TRASH, O&G) • 1g. Consider cleaning out pipes at gradient breaks or other in-pipe debris accumulation points as identified/needed. (ANY, BACT, NUT, TRASH) **Storm Drain Flushing** • 1h. Flushing of storm drains or storm drain inlets should only be done when critically necessary and no other solution is practical. (SED, BACT, TRASH). • 1i. If flushed, to the extent practical the material should be collected (vacuumed), treated with an appropriate filtering device to remove sand and debris and disposed of properly. (SED) **Waste Management** T 1H. Store wastes collected from cleaning activities of the drainage facilities in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain. • 1j. Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device to remove the sand and debris prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not permitted, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream. (SED, TRASH) • 1k. Provide for laboratory analysis of at least one randomly collected sediment (less the debris) sample per year from the storm drain inlet leaning program to ensure that it does not meet the EPA criteria for hazardous waste. If the sample is determined to be hazardous, the sediment must be disposed of as hazardous waste and the source should be investigated. (TOX).

2. Controlling Illicit Connections and Discharges

Unsatisfactory	OK	General Guidelines
☐	☐	T 2A. Report prohibited discharges such as dumping, paint spills, abandoned oil containers, etc. observed during the course of normal daily activities so they can be investigated, contained, and cleaned up.
☐	☐	T 2B. Where field observations and/or monitoring data indicate significant problems, conduct field investigations to detect and eliminate existing illicit connections and improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)). (Refer to Appendices A-10 and A-11.)
☐	☐	T 2C. Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (714) 567-6363.
☐	☐	T 2D. Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.
		Storm Drain Stenciling ("No Dumping—Drains to Ocean")
☐	☐	T 2E. Implement and maintain a storm drain stenciling program.
☐	☐	• 2a. Consider adding the hotline number to the storm drain stencils (BACT, TOX, TRASH).

3. Controlling Illegal Dumping

		Field Investigation
☐	☐	T 3A. Report prohibited discharges such as dumpings observed during the course of normal daily activities so they can be investigated, contained and cleaned up.
☐	☐	T 3B. Conduct field investigations to detect and eliminate improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).
☐	☐	T 3C. Report all observed illegal dumping to the 24-hour water pollution problem reporting hotline (714) 567-6363.
☐	☐	T 3D. Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.
☐	☐	T 3E. If perpetrator can be identified, take appropriate enforcement action.
☐	☐	• 3a. Consider posting "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs could also indicate fines and penalties for illegal dumping. (ANY)

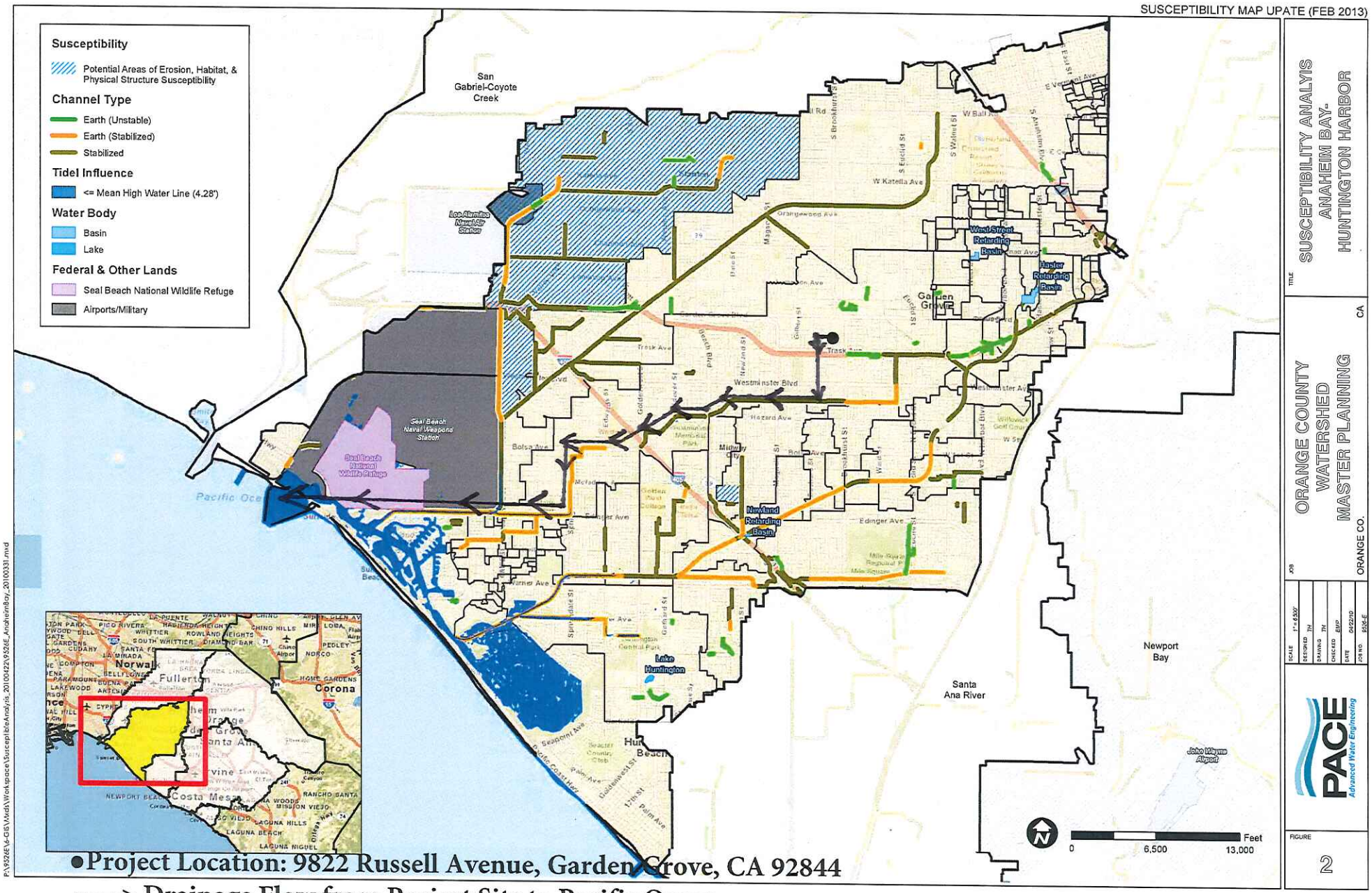
Unsatisfactory	OK	Training/Education/Outreach
☐	☐	T 3F. Verify that appropriate employees and subcontractors are trained to recognize and report illegal dumping.
☐	☐	T 3G. Encourage public reporting of illegal dumping by advertising the 24-hour water pollution problem reporting hotline (714) 567-6363.
☐	☐	• 3b. Take extra steps to educate the public in neighborhoods where illegal dumping has occurred to inform them why illegal dumping is a problem, and that illegal dumping carries a significant financial penalty. (ANY)

LIMITATIONS:

Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.

APPENDIX C

SUSCEPTIBILITY ANALYSIS MAP FOR ANAHEIM BAY-HUNTINGTON HARBOR WATERSHED



●Project Location: 9822 Russell Avenue, Garden Grove, CA 92844

-----> Drainage Flow from Project Site to Pacific Ocean

APPENDIX D

RAINFALL ZONE MAP FOR ORANGE COUNTY

SUBJECT TO FURTHER REVISION

LEGEND

- Orange County Precipitation Stations
- 24 Hour, 85th Percentile Rainfall (Inches)
- 24 Hour, 85th Percentile Rainfall (Inches) - Extrapolated
- City Boundaries

Rainfall Zones

Design Capture Storm Depth (inches)

- 0.65"
- 0.7
- 0.75
- 0.80
- 0.85
- 0.90
- 0.95
- 1.00
- 1.10"

Note: Events defined as 24-hour periods (calendar days) with greater than 0.1 inches of rainfall.
For areas outside of available data coverage, professional judgment shall be applied.

•<----Project Location

0.9
0.9
0.95
0.7
0.7
0.75
0.8
0.85
0.9
0.95
1
1.05
0.65
0.7
0.75

LOS ANGELES COUNTY
ORANGE COUNTY
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY

0 3 6 12 Kilometers
0 1.8 3.6 7.2 Miles

P:\9526E\6-GIS\Mxds\Reports\InfiltrationFeasability_20110215\9526E_FigureXVI-1_RainfallZones_20110215.mxd

● Project Location: 9822 Russell Avenue, Garden Grove, CA 92844

TITLE: RAINFALL ZONES

ORANGE COUNTY
TECHNICAL GUIDANCE
DOCUMENT

JOB: ORANGE CO. CA

SCALE	1" = 1.8 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	04/22/10
JOB NO.	9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-1

APPENDIX E

ALBUS & ASSOCIATES, INC.'S PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT, PROPOSED RESIDENTIAL DEVELOPMENT, 9822 RUSSELL AVENUE, GARDEN GROVE, CALIFORNIA, DATED JULY 1, 2025

July 1, 2025
J.N.: 3341.00

Mr. Chad Brown
Melia Homes
8951 Research Drive
Irvine, California 92618

Subject: Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California

Dear Mr. Brown,

Albus & Associates, Inc. is pleased to present to you our preliminary geotechnical investigation report for the proposed development at the subject site. This report presents the results of our literature review, subsurface exploration, laboratory testing, and engineering analyses. Conclusions relevant to the feasibility of the proposed site development are also presented herein based on the findings of our work.

We appreciate this opportunity to be of service to you. If you have any questions regarding the contents of this report, please do not hesitate to call.

Sincerely,

ALBUS & ASSOCIATES, INC.

David E. Albus
Principal Engineer

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of our work was to evaluate the feasibility of the proposed site development in order to assist you in your land acquisition evaluation and due-diligence review. The scope of our work for this investigation was focused primarily on the geotechnical issues that we expect could have significant fiscal impacts on future site development. While this report is comprehensive for feasibility purposes, it is not intended for final design purposes. As such, additional geotechnical studies may be warranted based on our review of future rough grading plans and foundation plans. The scope of our work for this investigation included the following:

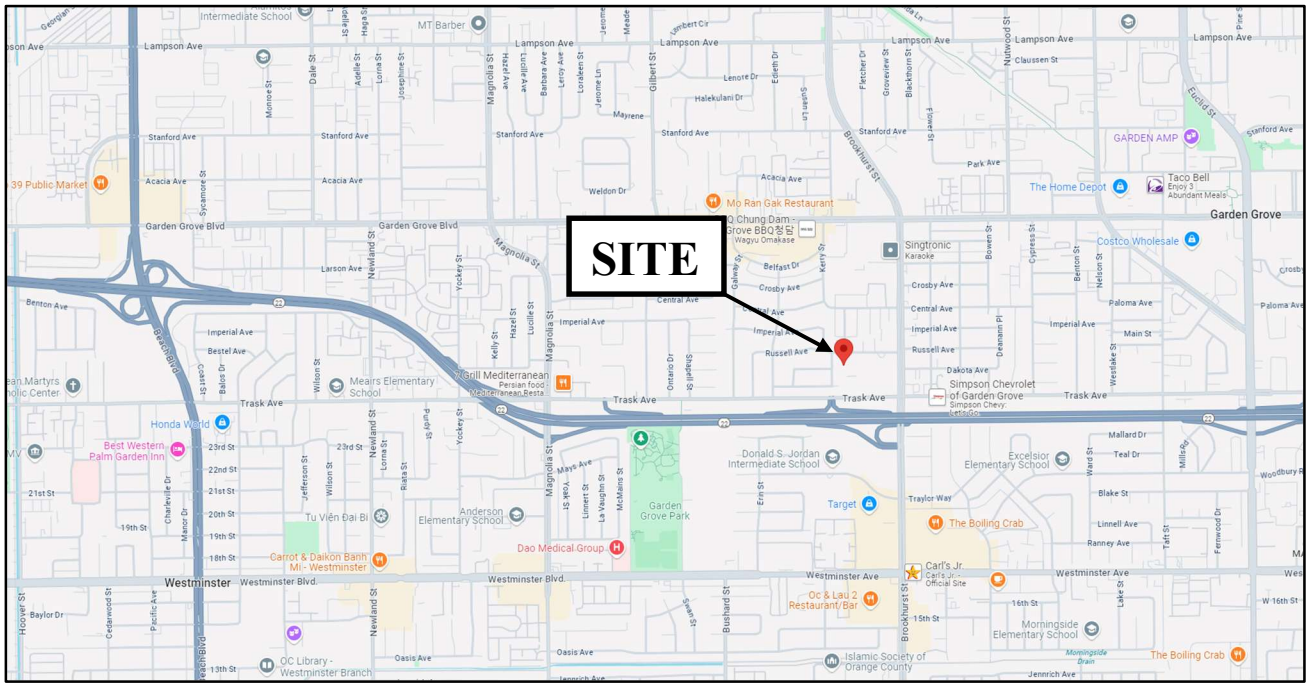
- Review of published geologic and seismic data for the site and surrounding area
- Exploratory drilling and soil sampling
- Laboratory testing of select soil samples
- Engineering analyses of data obtained from our review, exploration, and laboratory testing
- Evaluate site seismicity, liquefaction potential, and settlement potential
- Preparation of this report

1.2 SITE LOCATION AND DESCRIPTION

The property is located at 9822 Russell Avenue within the city of Garden Grove. The site is rectangularly shaped and bordered by Kerry Street to the west, Russel Avenue to the north, residential properties to the south, and Sunnyside Elementary School to the east. The location of the site and its relationship to the surrounding areas are shown on Figure 1, Site Location Map.

The site is currently occupied by a church located within the northwest corner of the site. Additional structures are also present within the northwest portion of the site and appear to be associated with a child day care center. The remainder of the site is covered in asphalt with driveways and parking bays associated with the onsite improvements. Chain link fencing is present along the east and a portion of the south. A masonry block wall is also present along the south property line.

The site is relatively flat with elevations ranging from 70 to 72 feet above Mean Sea Level (based on Google Earth). Drainage is generally directed as sheet flow to either Russell Avenue or to Kerry Street. Site vegetation consists of bushes and moderate sized trees.



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N

FIGURE 1-SITE LOCATION MAP

Proposed Residential Development
9822 Russell Avenue, Garden Grove, California

NOT TO SCALE

1.3 PROPOSED DEVELOPMENT

Review of the conceptual site plan provided suggests the site will be constructed with (26) twenty-six 2-story townhomes at grade within six buildings. Associated interior driveways, parking, underground utilities, and decorative hardscape and landscape areas are also anticipated.

No grading or structural plans were available in preparing this report. However, we anticipate minor cuts and filling of the site will be required to achieve future surface configuration, and we expect future foundation loads will be relatively light.

2.0 INVESTIGATION

2.1 RESEARCH

We have reviewed referenced geologic publications, maps, and historical aerial photos of the vicinity. Data from these sources were utilized for the development of some of our findings and conclusions presented in this report.

A cursory review of the geologic map of Orange County by Morton (1981) in the vicinity of the site suggests the site is underlain by alluvium and colluvium (Qac).

Historical imagery suggests that the site was undeveloped as far back as 1953. By 1963, the site appears to have been developed into its current configuration. The site appears to be relatively unchanged since the date of this proposal.

2.2 SUBSURFACE EXPLORATION

Subsurface exploration for this investigation was completed on June 10, 2025. Three (3) exploratory borings were drilled to depths of approximately 11.5 to 51.5 feet below existing ground surface utilizing a truck-mounted, hollow-stem-auger drill rig. A representative of ***Albus & Associates, Inc.*** logged the exploratory excavation. Visual and tactile identifications were made of the materials encountered, and their descriptions are presented on the Exploration Log in Appendix A.

The CPT soundings were advanced using a 30-ton CPT truck, utilizing an external subcontactor. As the cone is advanced through the soil, direct measurements are obtained and recorded for tip resistance, side resistance and porewater measurements. The relationship between the tip resistance and the side resistance allows for the determination of the general soil type. Following the completion of the CPT soundings, logs are generated that provide a relatively continuous profile of the tip resistance, side resistance, and pore water measurements. Copies of the CPT logs are provided in Appendix A.

Bulk, relatively undisturbed, and Standard Penetration Test (SPT) samples were obtained at selected depths for subsequent laboratory testing. Relatively undisturbed samples were obtained using a 3-inch O.D., 2.5-inch I.D., California split-spoon soil sampler lined with brass rings. SPT samples were obtained using a standard SPT soil sampler. During each sampling interval, the samplers were driven 18 inches with successive drops of a 140-pound automatic hammer falling 30 inches. The number of blows required to advance the sampler was recorded for each six inches of advancement. The total blow count for the lower 12 inches of advancement per soil sample is recorded on the exploration log. Samples were placed in sealed containers or plastic bags and transported to our laboratory for analyses and testing. The borings were backfilled with soil cuttings in a non-compacted state, and asphalt was patched upon completion of drilling.

The approximate locations of the exploratory excavations completed by this firm are shown on the enclosed Geotechnical Map, Plate 1.

2.3 LABORATORY TESTING

Selected samples of representative earth materials from the borings were returned to our laboratory for testing. Tests consisted of USCS classification, in-situ moisture content and dry density, maximum dry density and optimum moisture content, expansion potential, soluble sulfate content, Atterberg limits, consolidation, direct shear, percent passing No. 200 sieve, sieve analysis, and corrosivity testing (pH, chloride, and resistivity). Descriptions of laboratory testing and the test results are presented in Appendix B and on the Exploration Logs in Appendix A.

3.0 SUBSURFACE CONDITIONS

3.1 SUBSOIL CONDITIONS

Artificial fills (Af) were encountered within the upper 2 feet across the site within the areas of our exploration. The fills were predominately sands with silts, damp, and fine- to medium-grained. Site exploration was limited to areas within the existing asphalt due to the existing buildings onsite. We anticipate deeper, localized fills below and surrounding the existing buildings which would have resulted from previous grading activities.

Alluvium (Qal) was encountered below the fills for the maximum depth explored of 51.5 feet. The alluvium consisted of sands with silt, sandy silts, silty sands / sandy silts, and silty sands.

A more detailed description of the interpreted soil profile at each of the boring locations is presented in Appendix A. The stratigraphic descriptions in the logs represent the predominant materials encountered and relatively thin, often discontinuous layers of different material may occur within the major divisions.

3.2 GROUNDWATER

Groundwater was encountered during this firm's subsurface exploration at a depth of 14 feet. The CDMG Special Report 03 suggests that historic high groundwater for the subject site is approximately 13-14 feet.

3.3 FAULTING

Geologic literature and field exploration do not indicate the presence of active faulting within the site. The site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Earthquake Fault Zoning Act. Table 3.1 presents a summary of all the known seismically active faults within 10 miles of the site based on the 2008 National Seismic Hazards Maps.

TABLE 3.1
SUMMARY OF FAULTS

Name	Distance (miles)	Slip Rate (mm/yr.)	Preferred Dip (degrees)	Slip Sense	Rupture Top (km)	Fault Length (km)
San Joaquin hills	5.22	0.5	23	thrust	2	27
Newport-Inglewood, alt 1	6.46	1	88	strike slip	0	65
Newport Inglewood Connected alt 1	6.46	1.3	89	strike slip	0	208
Newport Inglewood Connected alt 2	6.49	1.3	90	strike slip	0	208
Puente Hills (Coyote Hills)	7.25	0.7	26	thrust	2.8	17

4.0 ANALYSES

4.1 SEISMICITY AND SEISMIC DESIGN PARAMETERS

The 2022 CBC requires seismic parameters in accordance with ASCE 7-16. Unless noted otherwise, all section numbers cited in the following refer to the sections in ASCE 7-16.

The site is underlain by soil strata that are susceptible to liquefaction. As such, per item 1 in Section 20.3.1, the project site should be designated Site Class F. However, because the proposed developments are anticipated to have fundamental periods of less than 0.5 seconds, per the same (referenced item) the site is exempted from Site Class F designation. Instead, site class can be designated per Section 20.3. Using weighted average SPT blow count N > 15 (across the upper 100 ft of the soil profile) in Table 20.3-1, Site Class D is assigned. (or: Using weighted average SPT blow count N < 15 (across the upper 100 ft of the soil profile) in Table 20.3-1, Site Class E is assigned.). We used the OSHPD seismic hazard tool to obtain the basic mapped acceleration parameters, including short periods (S_S) and 1-second period (S_1) MCE_R Spectral Response Accelerations. Section 11.4.8 requires site-specific ground hazard analysis for structures on Site Class E with S_S greater than or equal to 1.0 or Site Class D or E with S_1 greater than or equal to 0.2. Based on the mapped values of S_S and S_1 the project site falls within this category, requiring site specific hazard analysis in accordance with Section 21.2.

According to Section 21.2.3 (Supplement 1), the site-specific Risk Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration at any period is the lesser of the probabilistic and the deterministic response accelerations, subject to the exception specified in the same section. The probabilistic response spectrum was developed using the computer program OpenSHA (Field et al., 2013), which implements Method 1 as described on Section 21.2.1.1. Fault Models 3.1 and 3.2 from the Third Uniform California Earthquake Rupture Forecast (UCERF3) were used as the earthquake rupture forecast models for the PSHA. In addition to known fault sources, background seismicity was also included in the PSHA. The ground motion Prediction Equations (GMPEs) selected for use in this analysis are those developed for the Pacific Earthquake Engineering Research Center (PEER) Next

Generation Attenuation (NGA) West 2 project. Four GMPEs - Abrahamson et al. (2014), Boore et al. (2014), Campbell and Bozorgnia (2014), and Chiou and Youngs (2014) were used to perform the analysis.

In accordance with Section 21.2.2 (Supplement 1), the deterministic spectral response acceleration at each period was calculated as the 84th percentile, 5% damped response acceleration, using NGA-West2 GMPE Worksheet. For this, information from at least three causative faults with the greatest contribution per deaggregation analysis were used and the larger acceleration spectrum among these was selected as the deterministic response spectrum. The deterministic spectrum was adjusted per requirements in Section 21.2.2 (Supplement 1) where applicable. Both probabilistic and deterministic spectra were subjected to the maximum direction scale factors specified in Section 21.2 to produce the maximum acceleration spectra.

Design response spectrum was developed by subjecting the site-specific MCE_R response spectrum to the provisions outlined in Section 21.3. This process included comparison with 80% code-based design spectrum determined in accordance with Section 11.4.6. The short period and long period site coefficient (Fa and Fv, respectively) were determined per Section 21.3 in conjunction with Table 11.4-1. Site specific design acceleration parameters (S_{MS}, S_{M1}, S_{DS}, and S_{D1}) were calculated according to Section 21.4.

Per Section 11.2 (definitions on Page 79 of ASCE7-16) for evaluation of liquefaction, lateral spreading, seismic settlements, and other soil-related issues, Maximum Considered Earthquake Geometric Mean (MCE_G) peak ground acceleration PGA_M shall be used. The site-specific PGA_M is calculated per Section 21.5.3, as the lesser of the probabilistic PGA_M (Section 21.5.1) and deterministic PGA_M (Section 21.5.2), but no less than 80% site modified peak ground acceleration, PGA_M, obtained from OSHPD seismic hazard tool. According to Section 21.5.3 of ASCE 7, either mapped or site-specific PGAm may be used for soil related analysis. For this investigation, a mapped PGAm of 0.67 was incorporated into the analysis.

4.2 STATIC SETTLEMENT

Analyses were performed for the potential settlement of the underlying soils encountered during our investigation. The site is predominately granular in nature. As such, analyses of settlement were based on the elastic method using estimated moduli correlated from N_{60} blow counts, as well as consideration from consolidation testing. Two analyses were performed to evaluate settlement of the structures. The first model was based on a conventional shallow strip footing 1.2 feet wide and a wall load of 3,000 plf. The second model was based on a conventional square footing with 3 feet width and a column load of 27 kips. Both models yielded a total settlement of less than 0.5 inches.

4.3 LIQUEFACTION

Engineering research of soil liquefaction potential (Youd, et al., 2001) indicates that generally three basic factors must exist concurrently in order for liquefaction to occur. These factors include:

- A source of ground shaking, such as an earthquake, capable of generating soil mass distortions.
- A relatively loose silty and/or sandy soil.

- A relative shallow groundwater table (within approximately 50 feet below ground surface) or completely saturated soil conditions that will allow positive pore pressure generation.

The liquefaction susceptibility of the onsite subsurface soils was evaluated by analyzing the potential concurrent occurrence of the above-mentioned three basic factors. The liquefaction evaluation for the site was completed under the guidance of Special Publication 117A: Guidelines for Evaluating and Mitigating Seismic Hazards in California (CDMG, 2008).

The liquefaction analyses were based on field and laboratory testing data results from CPT-1 and CPT-2. The liquefaction analyses were performed utilizing the CLiq software by GeoLogismiki which incorporates the methods by NCEER (1998) and Robertson (2009) for the CPT data.

Historic high groundwater was assumed at a depth of 13 feet below the existing ground surface based on our discussion in Section 3.2. Fine-grained soils that do not have a Plasticity Index (PI) less than 12 and field moisture contents greater than 85% of liquid limit (LL) or soils with corrected blow counts greater than 30 per foot were assumed to be not susceptible to liquefaction. Based on our analysis, some layers of granular soils below a depth of 13 feet have factors of safety below 1.3 are prone to liquefaction during the design earthquake event. The results of our liquefaction analyses are presented in Appendix C.

5.0 CONCLUSIONS

5.1 FEASIBILITY OF PROPOSED DEVELOPMENT

From a geotechnical point of view, the proposed site development is considered feasible provided the recommendations presented in this report are incorporated into the design and construction of the project. Furthermore, it is also our opinion that the proposed development will not adversely impact the stability of adjoining properties if grading and construction is performed in accordance with the recommendations presented in this report. Key issues that could have significant impacts on the geotechnical aspects of the proposed site development are discussed in the following sections of this report.

5.2 GEOLOGIC HAZARDS

5.2.1 Ground Rupture

No known active faults are known to project through the subject site, nor do the sites lie within the boundaries of an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. The closest known active fault is the San Joaquin hills fault, located approximately 5.22 miles away. Therefore, the potential for ground rupture due to an earthquake beneath the sites is considered low.

5.2.2 Ground Shaking

The site is situated in a seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. The site lies in relatively close proximity to several seismically active faults; therefore, during the life of the proposed structures, the property will probably experience similar moderate to occasionally high ground shaking from these fault zones, as

well as some background shaking from other seismically active areas of the Southern California region. Design and construction in accordance with the current California Building Code (C.B.C.) requirements are anticipated to adequately address potential ground shaking. Potential ground accelerations have been estimated for the site and are presented in Section 4.1 of this report.

5.2.3 Liquefaction

Based on our analyses, liquefaction may occur below the site during periods of strong ground motion. Our analyses indicate liquefaction could lead to a total seismic settlement (saturated and dry) of the ground surface of up to approximately 5.5 inches due to seismic consolidation during liquefaction. Given this condition, differential settlement due to seismic settlement would likely be on the order of half of the total seismic settlement or approximately 2.75 inches over 30 feet or approximately 0.01L.

Based on the State of California Special Publication 117A, hazards from liquefaction should be mitigated to the extent required to reduce seismic risk to "acceptable levels". The acceptable level of risk means, "that level that provides reasonable protection of the public safety" [California Code of Regulations Title 14, Section 3721 (a)]. The use of well-reinforced foundations, such as post-tensioned slabs, grade beams with structural slabs, or mat foundations, have been proven to adequately provide basal support for similar structures during comparable liquefaction events. Further, ASCE 7-16, Section 12.13.9.2 allows for use of properly designed foundations for mitigation of seismic settlement. Since the estimated differential settlement is less than 0.015L, structural mitigation is permitted. Specific recommendations for mitigation of differential seismic settlement are provided in Section 6.3.

5.3 STATIC SETTLEMENT

Provided the existing near surface soils are removed and recompacted, total and differential static settlement can likely be limited to a maximum of 1 inch and ½-inch over 30 feet, respectively. These estimated magnitudes of static settlements are considered within tolerable limits for the proposed residential structures. Specific recommendations for ground preparation are provided in Section 6.1.4.

5.4 EXCAVATION AND MATERIAL CHARACTERISTICS

Onsite earth materials are anticipated to be relatively easy to excavate with conventional heavy earthmoving equipment. The site earth materials are generally considered suitable for reuse as fill provided they are cleared of deleterious debris and oversized rocks (greater than 4 inches in greatest dimension). If encountered, portions of concrete debris and asphalt can likely be reduced in size (4" minus) and incorporated within fill soils during earthwork operations.

Temporary construction slopes will be required to complete removal of unsuitable soils and for construction of underground utilities. Site materials are typically coarse-grained and may be prone to caving. Such excavations will require laybacks where they are surcharged or where they exceed 4 feet in height. Specific recommendations are provided in Section 6.1.5.

Most of the near-surface soils are below optimum moisture content. As such, the addition of water to these materials will be required during placement and compaction as engineered fills.

5.5 SHRINKAGE AND SUBSIDENCE

Volumetric changes in earth quantities will occur when excavated onsite soil materials are replaced as properly compacted fill. We estimate the existing upper 4 feet of earth materials will shrink up to approximately 8 to 13 percent. The subsidence of removal bottoms is estimated to be on the order of 0.15 feet. The estimates of shrinkage and/or bulkage are intended as an aid for project engineers in determining earthwork quantities. However, these estimates should be used with some caution since they are not absolute values. Contingencies should be made for balancing earthwork quantities based on actual swelling and bulkage that occurs during the grading process.

5.6 SOIL EXPANSION

Based on USCS visual manual classification, the near-surface soils within the site are generally anticipated to possess a **Very Low** expansion potential. Additional testing for soil expansion will be required subsequent to rough grading and prior to construction of foundations and other concrete work to confirm these conditions.

6.0 RECOMMENDATIONS

6.1 EARTHWORK

6.1.1 General Earthwork and Grading Specifications

All earthwork and grading should be performed in accordance with applicable requirements of Cal/OSHA, applicable specifications of the Grading Codes of the City of Garden Grove, California in addition to the recommendations presented herein.

6.1.2 Pre-Grade Meeting and Geotechnical Observation

Prior to commencement of grading, we recommend a meeting be held between the developer, City Inspector, grading contractor, civil engineer, and geotechnical consultant to discuss the proposed grading and construction logistics. We also recommend that a geotechnical consultant be retained to provide soil engineering and engineering geologic services during site grading and foundation construction. This is to observe compliance with the design specifications and recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated. If conditions are encountered that appear to be different than those indicated in this report, the project geotechnical consultant should be notified immediately. Design and construction revisions may be required.

6.1.3 Site Clearing

All existing site improvements, oversized materials, vegetation and other deleterious materials should be removed from the areas to be developed. Existing underground improvements such as utility lines, septic tanks, seepage pits, etc. are also anticipated at the site. If encountered during site development, these improvements should also be completely removed from the site and seepage pits should be properly abandoned in accordance with the requirements established by the governing agencies as well as recommendations made in the field by the project geotechnical consultant.

In general, seepage pits that are open should be cleared of any fluids and then filled with 2-sack cement slurry up to within 5 feet of proposed grades. Any brick lining that remains in the upper 5 feet should be removed and the remainder of the pit filled with engineered fill in accordance with Section 6.1.6. Seepage pits that are presently backfilled with soil should be removed to a depth of 10 feet below pad grade and be capped with 2-sack cement slurry. The slurry cap should be at least 5 feet thick and should extend at least 12 inches outside the perimeter of the seepage pit. The remaining 5 feet should be filled with engineered fill in accordance with Section 6.1.6.

The project geotechnical consultant should be notified at the appropriate times to provide observation services during clearing operations to verify compliance with the above recommendations. Voids created by clearing and excavation should be left open for observation by the geotechnical consultant. Should any unusual soil conditions or subsurface structures be encountered during site clearing or grading that are not described or anticipated herein, these conditions should be brought to the immediate attention of the project geotechnical consultant for corrective recommendations as needed.

Concrete debris generated by site demolition can be reduced to no more than 4 inches in maximum dimension and uniformly incorporated with fill soils during earthwork operations.

6.1.4 Ground Preparation

Within the building pad areas and retaining walls, the existing artificial fills are considered unsuitable for supporting proposed structures and site improvements. Therefore, the upper 2 feet of the existing earth materials should be removed and replaced as engineered compacted fills. In addition to general removal of unsuitable soils, the existing soils should be over-excavated to a minimum depth of 1 foot below the bottom of footings for residential structures and one foot below retaining walls.

Existing soil within roadways and parking areas should be removed to at least 12 inches below the proposed pavement subgrade and replaced with engineered compacted fill.

Removals should extend laterally beyond the limits of the proposed buildings, a distance equal to the depth of removal (i.e. 1:1 projection) but not less than 5 feet. Existing soils below proposed pavement should be removed laterally to at least the edge of the pavement. Where removals are limited by existing structures, protected trees or property lines, special considerations may be required in the construction of affected improvements. Under such conditions, specific recommendations should be provided by this firm.

All removal excavations should be evaluated by the geotechnical consultant during grading to confirm the exposed conditions are as anticipated and to provide supplemental recommendations if required.

The grading contractor should take appropriate measures when excavating adjacent any existing improvements to remain in-place to avoid disturbing or compromising support of existing structures.

Following removals and overexcavation, the exposed grade should first be scarified to a depth of 6 inches, brought to at least the optimum moisture content, and then compacted to at least 90 percent of the laboratory standard (ASTM D 1557).

6.1.5 Temporary Excavations

Temporary construction slopes and trench excavations may be cut vertically up to a height of 4 feet provided that no surcharging of the excavations is present. Temporary excavations greater than 4 feet in height but no more than 10 feet should be laid back to a 1:1 (H:V) or flatter or shored to mitigate the potential for instability. Where temporary excavations expose friable granular soils, the excavation should be laid back to a gradient of 1.5:1 (H:V).

Excavations should not be left open for prolonged periods of time. The project geotechnical consultant should observe all temporary cuts to confirm anticipated conditions and to provide alternate recommendations if conditions dictate. All excavations should conform to the requirements of Cal/OSHA.

The grading contractor should take appropriate measures when excavating adjacent existing improvements to avoid disturbing or compromising support of existing structures.

6.1.6 Fill Placement

Materials excavated from the site may be reused as fill provided they are free of deleterious materials and particles greater than 4 inches in maximum dimension (oversized materials). Asphaltic and concrete debris generated during site demolition or encountered within the existing fill can be incorporated within new fill soils during earthwork operations provided they are reduced to no more than 4 inches in maximum dimension. Such materials should be mixed thoroughly with fill soils to prevent nesting. All fill should be placed in lifts no greater than 8 inches in loose thickness, moisture conditioned to at least 100 percent of the optimum moisture content, then compacted in place to at least 90 percent of the laboratory standard. Each lift should be treated in a similar manner. Subsequent lifts should not be placed until the project geotechnical consultant has approved the preceding lift.

6.1.7 Import Materials

If import materials are required to achieve the proposed finish grades, the import soils should have an Expansion Index (EI) less than 21 (ASTM D 4829) and negligible soluble sulfate content. Import sources should be indicated to the geotechnical consultant at least 3 days prior to hauling the materials to the site so that appropriate testing and evaluation of the fill materials can be performed in advance.

6.2 SITE SPECIFIC SEISMIC DESIGN PARAMETERS

6.2.1 Mapped Seismic Design Parameters

For design of the project in accordance with Chapter 16 of the 2022 CBC, the mapped seismic parameters may be taken as presented in the tables below.

TABLE 6.1
2022 CBC Mapped Seismic Design Parameters

Parameter	Value
Site Class	D
Mapped MCE_R Spectral Response Acceleration, short periods, S_S	1.374
Mapped MCE_R Spectral Response Acceleration, at 1-second period, S_1	0.488
Site Coefficient, F_a	1.0
Site Coefficient, F_v *	1.712
Adjusted MCE_R Spectral Response Acceleration, short periods, S_{MS}	1.374
Adjusted MCE_R Spectral Response Acceleration, at 1-second period, S_{M1} *	1.253
Design Spectral Response Acceleration, short periods, S_{DS}	0.916
Design Spectral Response Acceleration, at 1-second period, S_{D1} *	0.835
Long-Period Transition Period, T_L (sec.)	8
Seismic Design Category for Risk Categories I-IV	II

MCE_R = Risk-Targeted Maximum Considered Earthquake

*According to Section 11.4.8 in ASCE 7-16 and supplement 3, "a ground motion hazard analysis shall be performed in accordance with Section 21.2 for the following structures on Site Class D site with S_1 greater than or equal to 0.2." However, "A ground motion hazard analysis is not required for structures where the value of the parameter S_{M1} determined by Eq. (11.4-2) is increased by 50% for all applications of S_{M1} in the Standard. The resulting value of the parameter S_{D1} determined by Eq. (11.4-4) shall be used for all applications of S_{D1} in this Standard." Should this exception not be met, the site-specific seismic design parameters provided in the next section should be used.

6.2.2 Site-Specific Seismic Design Parameters

In addition to the Code Spectra parameters presented in Table 6.1, we have performed a site-specific ground motion hazard analysis in accordance with Chapter 21 of ASCE 7-16 to obtain site-specific seismic design acceleration parameters, the risk-targeted maximum considered earthquake response spectrum, and the design earthquake response spectrum. The site-specific seismic design parameters are presented below.

TABLE 6.2
2022 CBC Site-Specific Seismic Design Parameters

Parameter	Value
Site Class	D
Site Coefficient, F_a	1.0
Site Coefficient, F_v	2.5
Adjusted MCE Spectral Response Acceleration, short periods, S_{MS}	1.683
Adjusted MCE Spectral Response Acceleration, at 1-second period, S_{M1}	1.488
Design Spectral Response Acceleration, short periods, S_{DS}	1.122
Design Spectral Response Acceleration, at 1-second period, S_{D1}	0.992

MCE = Maximum Considered Earthquake

6.3 FOUNDATION DESIGN

6.3.1 General

The following design parameters are provided to assist the project structural engineer to design foundation systems to support the proposed structures at the site. Recommendations for design of other foundation systems will be provided upon request. These design parameters are based on typical site materials encountered during subsurface exploration and are provided for preliminary design and estimating purposes. Depending on actual materials encountered during site grading and actual foundation loads, the design parameters presented herein may require modification.

The site is subject to the adverse effects of liquefaction. The site may be subject to seismic settlement that will require additional mitigation through design considerations in the foundation and slab on grade systems. We assume the foundation system will consist of either shallow foundations that are tied together with grade beams or a post-tension slab system. Therefore, the provision of ASCE 7-16, Section 12.13.9.2 should be incorporated into the design in addition to other recommendations provided below. Where the requirements of ASCE 7-16 are greater, the provisions of ASCE 7-16 should govern.

6.3.2 Soil Expansion

The recommendations presented herein are based on soils with a **Very Low** expansion potential (EI < 21). Following site grading, additional testing of site soils should be performed by the project geotechnical consultant to confirm the basis of these recommendations. If site soils with higher expansion potentials are encountered or imported to the site, the recommendations contained herein may require modification.

6.3.3 Settlement

Under normal static conditions, the foundation system should be designed to tolerate a total settlement of 1 inch and a differential settlement of ½-inch over 30 feet. The foundations should also be designed for total and differential seismic settlement of 5.5 inches and 2.75 inches over 30 feet, respectively. Requirements for conventional shallow footings should incorporate the requirements of Section 12.13.9 of ASCE 7-16. The PTI design parameters presented in Section 6.3.7 incorporate the estimated seismic settlements.

6.3.4 Allowable Bearing Value

Provided site grading is performed as recommended herein, a bearing value of 2,000 pounds per square foot (psf) may be used for continuous beams or isolated pad footings. The bearing value is based on beams having a minimum width of 12 inches and founded at a minimum of 12 inches below the lowest adjacent grade. The above value may be increased by 250 psf and 1000 psf for each additional foot in width and depth, respectively, up to a maximum value of 3,000 psf. Recommended allowable bearing values include both dead and live loads and may be increased by one-third for wind and seismic forces.

6.3.5 Lateral Resistance

Provided site grading is performed in accordance with the recommendations provided by the project geotechnical consultant, a passive earth pressure of 330 pounds per square foot per foot of depth up to

a maximum value of 1,000 pounds per square foot may be used to determine lateral bearing for beams. This value may be increased by one-third when designing for wind and seismic forces. A coefficient of friction of 0.37 may also be used between concrete and the supporting soils to determine lateral sliding resistance. No increase in the coefficient of friction should be used when designing for wind and seismic forces. Where lateral removals cannot be performed beyond the foundation, the passive resistance values should be decreased by 25% such as for design of property line walls.

The above values are based on foundations placed directly against compacted fill. In the case where footing sides are formed, all backfill against the foundations should be compacted to at least 90 percent of the laboratory standard.

6.3.6 Shallow Footings and Slabs on Grade

Exterior and interior building footings should be founded at a minimum depth of 12 inches and 12 inches, respectively, below the lowest adjacent grade. All continuous footings should be reinforced with a minimum of two No. 4 bars, one top and one bottom. The structural engineer may require different reinforcement and should dictate if greater than the recommendations provided herein.

Interior isolated pad footings should be a minimum of 24 inches square and founded at minimum depths of 12 inches below the lowest adjacent final grade. Exterior isolated pad footings intended for support of patio covers or similar construction should be a minimum of 24 inches square and founded at a minimum depth of 12 inches below the lowest adjacent final grade. Isolated footings should be tied to nearby continuous footings in both directions with grade beams in accordance with the requirements of ASCE 7-16, Section 12.13.9.

Interior concrete slabs constructed on grade should be a minimum 4 inches thick and should be reinforced with a minimum of No. 3 bars spaced 30 inches on center, each way. Care should be taken to ensure the placement of reinforcement at mid-slab height. The structural engineer may recommend a greater slab thickness and reinforcement based on proposed use and loading conditions and such recommendations should govern if greater than the recommendations presented herein. Reinforcement and stiffening beams should be provided as required by ASCE 7-16, Section 12.13.9 for effects of liquefaction settlement.

Concrete floor slabs in areas to receive carpet, tile, or other moisture sensitive coverings should be underlain with a minimum of 10-mil moisture vapor retarder conforming to ASTM E 1745-11, Class A. The membrane should be properly lapped, sealed, and underlain with at least 2 inches of sand having a SE no less than 30. One inch of this sand may be placed over the membrane to aid in the curing of the concrete. This vapor retarder system is anticipated to be suitable for most flooring finishes that can accommodate some vapor emissions. However, this system may emit more than 4 pounds of water per 1000 sq. ft. and therefore, may not be suitable for all flooring finishes. Additional steps should be taken if such vapor emission levels are too high for anticipated flooring finishes.

Special consideration should be given to slabs in areas to receive ceramic tile or other rigid, crack-sensitive floor coverings. Design and construction of such areas should mitigate hairline cracking as recommended by the structural engineer.

6.3.7 Post-Tensioned Slab on Grade

Due to potential seismic settlement, the proposed structures may be supported by a post-tension slab. Perimeter edge beams for the post-tensioned slabs should have a minimum effective width of 12 inches and be founded at a minimum depth of 12 inches below the lowest adjacent final ground surface. Interior beams may be founded at a minimum depth of 12 inches below the tops of the finish floor slabs. Where a post-tensioned mat is utilized, the exterior edge of the mat should be embedded at least 8 inches below the lowest adjacent grade. The thickness of the floor slab/mat should be determined by the project structural engineer; however, we recommend a minimum slab thickness of 5.0 inches.

Design of the mat may be based on a modulus of subgrade reaction (Kv1) of 125 pounds per cubic inch (pci). The modulus is based on an effective loading area of 1 foot by 1 foot. The modulus may be adjusted for other effective loading areas using the equation provided below.

$K_b(pci) = Kv1\left\{\frac{b+1}{2b}\right\}^2$; where "b" is the effective width of loading (minimum dimension) in feet.

Concrete floor slabs in areas to receive carpet, tile, or other moisture sensitive coverings should be underlain with a minimum of 10-mil moisture vapor retarder conforming to ASTM E 1745, Class A. The membrane should be properly lapped, sealed, and underlain within a layer of sand at least 2 inches thick. One inch of sand may be placed over the membrane to aid in the curing of the concrete. The sand should have a SE no less than 30. This vapor retarder system is anticipated to be suitable for most flooring finishes that can accommodate some vapor emissions. However, this system may emit more than 4 pounds of water per 1000 sq. ft. and therefore, may not be suitable for all flooring finishes. Additional steps should be taken if such vapor emission levels are too high for anticipated flooring finishes. If a post tension mat is used and is at least 8 inches in thickness, sand below the slab may be omitted.

Prior to placing concrete, subgrade soils below slab-on-grade/mat areas should be thoroughly moistened to provide moisture contents at least 120 percent of the optimum moisture content to a depth of 12 inches.

Based on the guidelines provided in the "Design of Post-Tensioned Slabs-on-Ground" 3rd Edition by Post-Tensioning Institute, the em and ym values are summarized in Table 6.3. These values already consider differential settlement from liquefiable soils.

TABLE 6.3
PTI Design Parameters

Parameter	Value
Edge Lift Moisture Variation Distance, e_m	5.1 feet
Edge Lift, y_m	1.66 inches
Center Lift Moisture Variation Distance, e_m	9.0 feet
Center Lift, y_m	1.10 inches

6.3.8 Foundation Observations

Foundation excavations should be observed by the project geotechnical consultant to verify that they have been excavated into competent bearing soils and to the minimum embedment recommended above. These observations should be performed prior to placement of forms or reinforcement. The excavations should be trimmed neat, level and square. Loose, sloughed or moisture-softened materials and debris should be removed prior to placing concrete.

6.4 RETAINING AND SCREENING WALLS

6.4.1 General

The following preliminary design and construction recommendations are provided for general retaining and screen walls. Final wall designs specific to site development should be provided to the project geotechnical consultant for review once completed. The structural engineer and architect should provide appropriate recommendations for sealing at all joints and applying moisture-proofing material on the back of the walls.

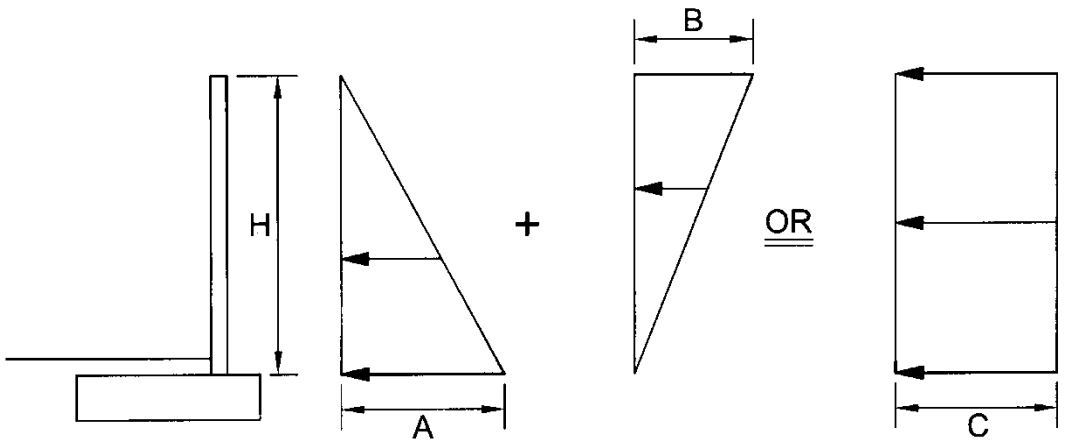
6.4.2 Allowable Bearing Value and Lateral Resistance

Design of retaining and screen walls may utilize the bearing and lateral resistance values provided in Section 6.3.4 and 6.3.5. The passive earth pressure for walls along property lines, where lateral removals are likely restricted, should be reduced by 25%.

6.4.3 Earth Pressures

Static and seismic earth pressures for level and 2:1 (H:V) backfill conditions are provided in Table 6.4. Seismic earth pressures provided herein are based on the method provided by Seed & Whitman (1970) using a peak ground acceleration (PGA) of 0.39 g for 10% probability of exceedance in 50 years. As indicated in Section 1807.2.2of the 2022 CBC, retaining walls supporting 6 feet of backfill or less are not required to be designed for seismic earth pressures. The values provided in the following table do not consider hydrostatic pressure. Retaining walls should also be designed to support adjacent surcharge loads imposed by other nearby footings or traffic loads in addition to the earth pressure.

TABLE 6.4
SEISMIC EARTH PRESSURES
Pressure Diagram



Earth Pressure Values
Walls Up to 10 Feet in Height

Value	Backfill Condition	
	Level	2H:1V Slope
A	33H	54H
B	12H	12H
C	22H	33H

Note:
H is in feet and resulting pressure is in psf. Design may utilize either the sum of the static component and the seismic component force diagrams or the total force diagram above. SEAOSC has suggested using a load factor of 1.7 for the static component and 1.0 for the seismic component. The actual load factors should be determined by the structural engineer.

6.4.4 Drainage and Moisture-Proofing

Retaining walls should be constructed with a perforated pipe and gravel subdrain to prevent entrapment of water in the backfill. The perforated pipe should consist of 4-inch-diameter, ABS SDR-35 or PVC Schedule 40 with the perforations laid down. The pipe should be embedded in ¾- to 1½-inch open-graded gravel wrapped in filter fabric. The gravel should be at least one foot wide and extend at least one foot up the wall above the footing and drainage outlet. Drainage gravel and piping should not be placed below outlets and weepholes. Filter fabric should consist of Mirafi 140N, or equal. Outlet pipes should be directed to positive drainage devices.

The use of weepholes may be considered in locations where aesthetic issues from potential nuisance water are not a concern. Weepholes should be 2 inches in diameter and provided at least every 6 feet on center. Where weepholes are used, perforated pipes may be omitted from the gravel subdrain.

Retaining walls supporting backfill should also be coated with a moisture-proofing compound or covered with such material to inhibit infiltration of moisture through the walls. Moisture-proofing material should cover any portion of the back of the wall that will be in contact with soil and should lap over and onto the top of the footing. A drainage panel should be provided between the soil backfill and water proofing. The panel should extend from the top of the backdrain gravel up to within 12 inches of finish grade. The top of footing should be finished smoothly with a trowel to inhibit the infiltration of water through the wall. The project structural engineer should provide specific recommendations for moisture-proofing, water stops, and joint details.

6.4.5 Footing Reinforcement

All continuous footings should be reinforced with a minimum of four No. 4 bars, two top and two bottom. The structural engineer may require different reinforcement and should dictate if greater than the recommendations provided herein. Where recommended removals are limited due to space restrictions, greater reinforcement may be warranted. Such specific recommendations should be provided by our firm during grading as-built conditions observed in the field.

6.4.6 Wall Jointing

All free-standing, exterior site walls should be provided with cold joints through the masonry block section at horizontal spacing generally not exceeding 40 feet. The joints should not extend through the footing. Retaining walls that are integral to the building should be provided joints based on recommendations by the structural engineer.

6.4.7 Footing Observations

Footing excavations should be observed by the project geotechnical consultant to verify that they have been excavated into competent bearing soils and to the minimum embedment recommended herein. These observations should be performed prior to placement of forms or reinforcement. The excavations should be trimmed neat, level, and square. Loose, sloughed or moisture-softened materials and debris should be removed prior to placing concrete.

6.4.8 Wall Backfill

Onsite soils may be used for backfill behind retaining walls. The project geotechnical consultant should approve the backfill used for retaining walls. Wall backfill should be thoroughly moistened to provide moisture contents slightly over optimum moisture content; placed in lifts no greater than 12 inches in thickness, and then mechanically compacted with appropriate equipment to at least 90 percent of the laboratory standard. Hand-operated compaction equipment should be used to compact the backfill placed immediately adjacent to the wall to avoid damage to the wall.

6.5 EXTERIOR FLATWORK

Concrete sidewalks, patios, and similar flatwork should be a nominal 4 inches thick and provided with saw cuts or expansion joints at spacing no greater than 10 feet in each direction. Special jointing detail should be provided in areas of block-outs, notches, or other irregularities to avoid cracking at points of high stress. Subgrade soils below flatwork should be thoroughly moistened to a moisture content of at least 100 percent of optimum to a depth of 12 inches. Moistening should be accomplished by lightly spraying the area over a period of a few days just prior to pouring concrete.

Drainage from flatwork areas should be directed to local area drains and/or other appropriate collection devices designed to carry runoff water to the street or other approved drainage structures. The concrete flatwork should also be sloped at a minimum gradient of 0.5% away from building foundations and masonry walls.

6.6 CONCRETE MIX DESIGN AND CORROSION

Laboratory testing of existing near-surface soils for soluble sulfate content indicates soluble sulfate concentration less than 0.15%. We recommend following the procedures provided in ACI 318, Section 4.3, Table 4.3.1 for **negligible** sulfate exposure. Upon completion of rough grading, an evaluation of as-graded conditions and further laboratory testing should be completed for the site to confirm or modify the recommendations provided in this section.

Laboratory testing of onsite soil indicates a minimum resistivity of 4,700 ohm-cm, chloride content of 25 ppm, and a pH of 8.3. Based on laboratory test results, site soils are **Moderately Corrosive** to metals. Structures fabricated from metals should have appropriate corrosion protection if they are in direct contact with site soils. Under such conditions, a corrosion specialist should provide specific recommendations.

6.7 POST GRADING CONSIDERATIONS

6.7.1 Site Drainage and Irrigation

Positive drainage devices, such as sloping concrete flatwork, graded swales or area drains, should be provided around the new construction to collect and direct all surface water to suitable discharge areas. In general, the site should be graded to conform to the requirements of Section 1804.4 of the 2022 California Building Code. However, the slope of the ground surface may be reduced to a maximum of 2% based on soils and environmental conditions of the site. No rain or excess water should be directed toward or allowed to pond against structures such as walls, foundations, flatwork, etc.

Excessive irrigation water can be detrimental to the performance of the proposed site development. Water applied in excess of the needs of vegetation will tend to percolate into the ground. Such percolation can lead to nuisance seepage and shallow perched groundwater. Seepage can form on slope faces, on the faces of retaining walls, in streets, or other low-lying areas. These conditions could lead to adverse effects such as the formation of stagnant water that breeds insects, distress or damage of trees, surface erosion, slope instability, discoloration and salt buildup on wall faces, and premature failure of pavement. Excessive watering can also lead to elevated vapor emissions within buildings that can damage flooring finishes or lead to mold growth inside the home.

Key factors that can help mitigate the potential for adverse effects of overwatering include the judicious use of water for irrigation, use of irrigation systems that are appropriate for the type of vegetation and geometric configuration of the planted area, the use of soil amendments to enhance moisture retention, use of low-water demand vegetation, regular use of appropriate fertilizers, and seasonal adjustments of irrigation systems to match the water requirements of vegetation. Specific recommendations should be provided by a landscape architect or other knowledgeable professional.

6.7.2 Utility Trenches

Trench excavations should be constructed in accordance with the recommendations contained in Section 6.1.5 of this report. Trench excavations must also conform to the requirements of Cal/OSHA.

Trench backfill materials and compaction criteria should conform to the requirements of the local municipalities. As a minimum, utility trench backfill should be compacted to at least 90 percent of the laboratory standard. Trench backfill should be brought to moisture content slightly over optimum, placed in lifts no greater than 12 inches in thickness, and then mechanically compacted with appropriate equipment to at least 90 percent of the laboratory standard. The project geotechnical consultant should perform density testing, along with probing, to test compaction. Jetting should not be completed without prior approval from the project geotechnical consultant.

Within shallow trenches (less than 18 inches deep) where pipes may be damaged by heavy compaction equipment, imported clean sand having a SE of 30 or greater may be utilized. The sand should be placed in the trench, thoroughly watered, and then compacted with a vibratory compactor. For utility trenches located below a 1:1 (H:V) plane projecting downward from the outside edge of the adjacent footing base or crossing footing trenches, concrete or slurry should be used as trench backfill.

6.8 PRELIMINARY PAVEMENT DESIGN

6.8.1 Preliminary Structural Sections

Based on the soil conditions present at the site and estimated traffic indices, preliminary pavement sections are provided in Table 6.5 below. A preliminary "R-value" of 25 was used for the near-surface soil in this preliminary pavement design. The sections provided below are for planning purposes only and should be re-evaluated subsequent to site grading. Final pavement sections should be based on actual R-value testing of in-place soils and analysis of anticipated traffic. It should be noted that the preliminary paving sections provided below are considered suitable for support of a 94,000 pound fire apparatus.

TABLE 6.5
PRELIMINARY PAVEMENT STRUCTURAL SECTIONS
FOR RESIDENTIAL DEVELOPMENT

Location	Traffic Index	AC (inches)	Paver Thickness (mm)	Portland Cement Concrete (inches)	AB (inches)
Driveway	5.0	3.0 4.0	--	--	7.0 4.0
		--	80	--	8.0
		--	--	6.0	--
Parking Stalls	--	3.0	--	---	4.0

6.8.1 Subgrade Preparation

Prior to placement of pavement elements, subgrade soils should be moisture-conditioned to at least 110 percent of the optimum moisture content then compacted to at least 90 percent of the laboratory determined maximum dry density. Areas observed to pump or yield under vehicle traffic should be removed and replaced with firm and unyielding compacted soil or aggregate base materials.

6.8.2 Aggregate Base

Aggregate base should be moisture conditioned to slightly over the optimum moisture content, placed in lifts no greater than 6 inches in thickness, then compacted to at least 95 percent of the laboratory standard (ASTM D 1557). Aggregate base materials should be Class 2 Aggregate Base conforming to Section 26-1 of the latest edition of the Caltrans Standard Specifications, Crushed Aggregate Base conforming to Section 200-2.2 of the latest edition of the Standard Specifications for Public Works Construction (Greenbook) or Crushed Miscellaneous Base conforming to Section 200-2.4 of the Greenbook.

6.8.3 Asphaltic Concrete

Paving asphalt should be PG 64-10. Asphaltic concrete materials should conform to Section 203-6 of the Greenbook and construction should conform to Section 302 of the Greenbook. Where traffic will traverse over cold joints in asphaltic concrete such as against concrete ribbon gutters and concrete paver sections, the asphaltic concrete section should be thickened by 1 additional inch from the values indicated in the above Table 6.5 within 2 feet of cold joints.

6.8.4 Concrete Pavers

Concrete pavers should conform to the requirements of ASTM C 936. Construction of the pavers, including bedding sand, should follow manufacturer's specifications. Typical thickness of bedding sand is about 1 inch. The gradation of bedding sand should meet the requirement in Table 6.6.

TABLE 6.6
Gradation for Sand Bedding

Sieve Size	Percent Passing
⅜"	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	0 - 1

Construction of edge restraints should also follow manufacturer's specifications. As a minimum, restraints should be provided along the perimeter of concrete pavers and where there is a change in the paving materials. The proposed concrete bands should extend to the bottom of the base course underlying the concrete pavers. Portland cement concrete used to construct concrete bands should conform to Section 201 of the Greenbook and should have a minimum compressive strength of 2,500 pounds per square inch (psi) at 28 days. Reinforcement and jointing of concrete pavement sections should be designed according to the minimum recommendations provided by the Portland Cement Association (PCA). For rigid pavement, transverse and longitudinal contraction joints should be provided at spacing no greater than 15 feet. Score joints may be constructed by saw cutting to a depth of ¼ of the slab thickness. Expansion/cold joints may be used in lieu of score joints. However, cold joints should be provided with dowels or keyways are recommended by PCA.

6.8.5 Portland Cement Concrete (PCC)

Portland cement concrete used to construct concrete paving should conform to Section 201 of the Greenbook and should have a minimum compressive strength of 3,000 pounds per square inch (psi) at 28 days. Reinforcement and jointing of concrete pavement sections should be designed according to the minimum recommendations provided by the Portland Cement Association (PCA). For rigid pavement, transverse and longitudinal contraction joints should be provided at spacing no greater than 15 feet. Score joints may be constructed by saw cutting to a depth of ¼ of the slab thickness. Expansion/cold joints may be used in lieu of score joints. Such joints should be properly sealed. Where traffic will traverse over cold joints or edges of concrete paving, the edges should be thickened by 20% of the design thickness toward the edge over a horizontal distance of 5 feet.

Trash pickup areas should be provided with a concrete slab where the bins will be picked up and extend at least 3 feet past the front wheel landing areas. The slab should be at least 8 inches thick and be reinforced with No. 4 bars spaced at 24 inches on centers, both ways. The slabs should be provided transverse and longitudinal joints spacing as specified above. Dowels or a keyway should be provided at all cold joints.

6.9 PLAN REVIEW AND CONSTRUCTION SERVICES

We recommend ***Albus & Associates, Inc.*** be engaged to review any future development plans, including revisions to the grading plans, foundation plans and proposed structural loads, prior to construction. This is to verify that the assumptions of this report are valid and that the preliminary conclusions and recommendations contained in this report have been properly interpreted and are incorporated into the project plans and specifications. If we are not provided the opportunity to review these documents, we take no responsibility for misinterpretation of our preliminary conclusions and recommendations.

We recommend that a geotechnical consultant be retained to provide soil engineering services during construction of the project. These services are to observe compliance with the design, specifications or recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

If the project plans change significantly from the assumed development described herein, the project geotechnical consultant should review our preliminary design recommendations and their applicability to the revised construction. If conditions are encountered during construction that appear to be different than those indicated in this report or subsequent design reports, the project geotechnical consultant should be notified immediately. Design and construction revisions may be required.

7.0 LIMITATIONS

This report is based on the proposed development and geotechnical data as described herein. The materials described herein and in other literature are believed representative of the total project area, and the conclusions contained in this report are presented on that basis. However, soil materials can vary in characteristics between points of exploration, both laterally and vertically, and those variations could affect the conclusions and recommendations contained herein. As such, observation and testing by a geotechnical consultant prior to and during the grading and construction phases of the project are essential to confirming the basis of this report.

This report summarizes several geotechnical topics that should be beneficial for project planning and budgetary evaluations. The information presented herein is intended only for a preliminary feasibility evaluation and is not intended to satisfy the requirements of a site specific and detailed geotechnical investigation required for further planning and permitting.

This report has been prepared consistent with that level of care being provided by other professionals providing similar services at the same locale and time period. The contents of this report are professional opinions and as such, are not to be considered a guaranty or warranty.

This report should be reviewed and updated after a period of one year or if the site ownership or project concept changes from that described herein.

This report has been prepared for the exclusive use of **Melia Homes** to assist the project consultants in determining the feasibility of the proposed development. This report has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes.

Respectfully submitted,

ALBUS & ASSOCIATES, INC

Daniel Albus
Project Engineer

Reviewed by:

Hai D. Nguyen
Associate Engineer
RCE 82460



REFERENCES

Report and Publications

American Society of Civil Engineers, 2017, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, ASCE 7-16.

California Department of Conservation, Division of Mines and Geology, 1997, "Seismic Hazard Zone Report for the Anaheim and Newport Beach 7.5-Minute Quadrangles, Orange County, California", Seismic Hazard Zone Report 03.

California Department of Conservation, Division of Mines and Geology (CDMG), 2008, "Guidelines for Evaluating and Mitigating Seismic Hazards in California," Special Publication 117A.

California Geological Survey, 1998, "Earthquake Zones of Required Investigation, Anaheim Quadrangle," Official Map Released: April 15, 1998, Scale 1:24,000.

Field, E.H., Biasi, G.P., Bird, P., Dawson, T.E., Felzer, K.R., Jackson, D.D., Johnson, K.M., Jordan, T.H., Madden, C., Michael, A.J., Milner, K.R., Page, M.T., Parsons, T., Powers, P.M., Shaw, B.E., Thatcher, W.R., Weldon, R.J., II, and Zeng, Y., 2013, Uniform California earthquake rupture forecast, version 3 (UCERF3)—The time-independent model: U.S. Geological Survey Open-File Report 2013–1165, 97 p., California Geological Survey Special Report 228, and Southern California Earthquake Center Publication 1792, http://pubs.usgs.gov/of/2013/1165/.

Field, E.H., T.H. Jordan, and C.A. Cornell (2003), OpenSHA: A Developing Community-Modeling Environment for Seismic Hazard Analysis, Seismological Research Letters, 74, no. 4, p. 406-419.

Ishihara, K., and Yoshimine, M., 1992, "Evaluation of Settlements in Sand Deposits Following Liquefaction During Earthquakes," Soils and Foundations, Vol. 32, No. 1.

Morton, P.K. and Miller, R.V., 1981, **Geologic map of Orange County, California, showing mines and mineral deposits**, California Division of Mines and Geology, Bulletin B-204, 1:48,000.

NCEER, 1997, "Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils," Technical Report NCEER-97-0022.

Robertson, P.K. (2009). "Performance based earthquake design using the CPT." Proc., IS Tokyo Conference, CRC Press/Balkema, Taylor & Francis Group, Tokyo.

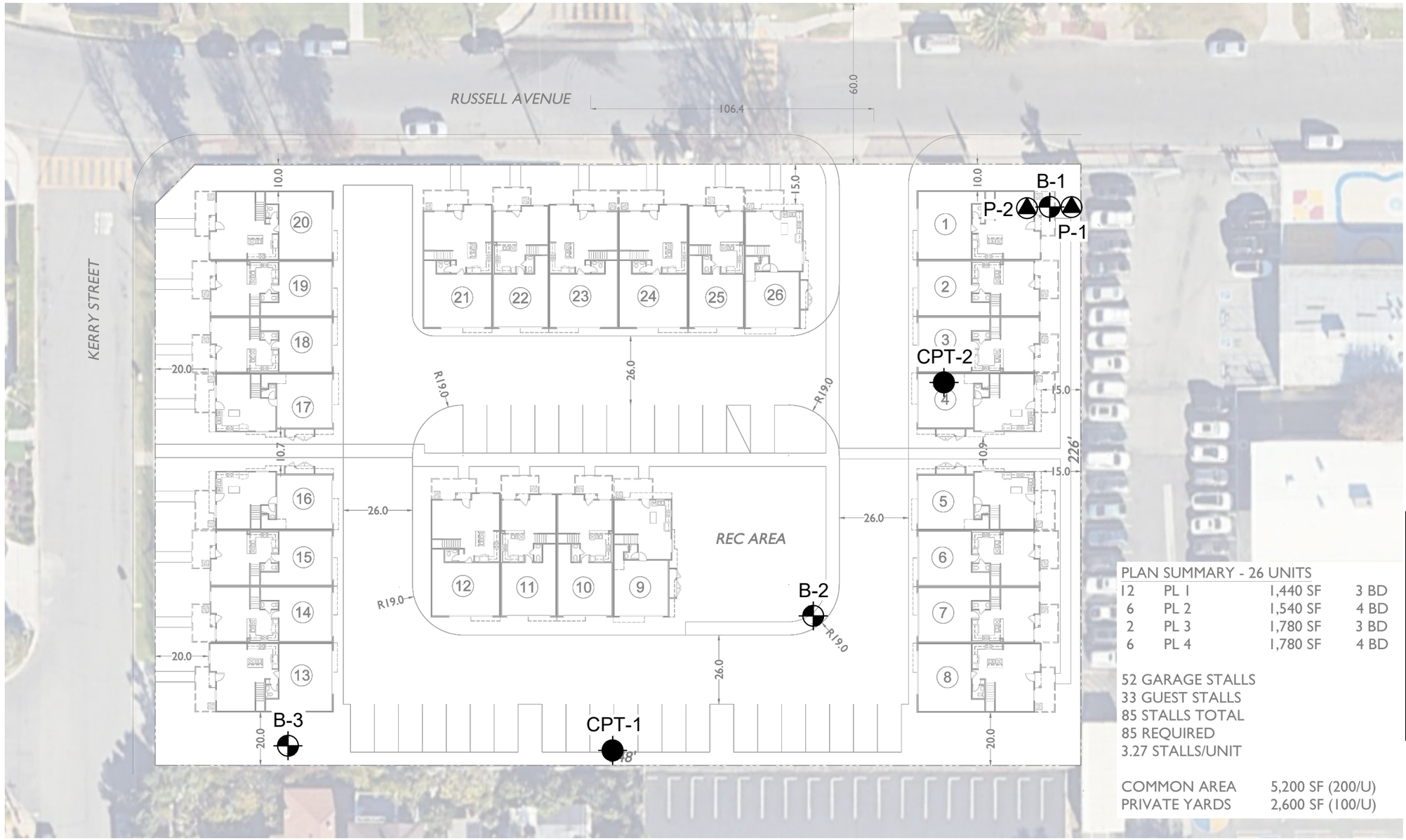
Seed, H.B. and Whitman, R.V., 1970, "Design of Earth Retaining Structures for Dynamic Loads," ASCE Specialty Conference, Lateral Stresses in the Ground and Design of Earth Retaining Structures, Cornell Univ., Ithaca, New York, 103-147.

Southern California Earthquake Center (SCEC), 1999, "Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazards in California," University of Southern California, March 1999.

Tokimatsu, K. & Seed, H.B., 1987, "Evaluation of Settlement in Sands Due to Earthquake Shaking," Journal of Geotechnical Engineering, ASCE 113 (8): 861-878.

U.S. Geologic Survey (USGS), 2004, "Preliminary Digital Geological Map of the 30' X 60' Santa Ana Quadrangle, southern California, version 2.0," Open-File Report 99-172.

Youd, T.L., Idriss, I.M., Andrus, R.D., Arango, I., Castro, G., Christian, J., Dobry, R., Finn, W.D.L., Harder, L.F., Hynes, M.E., Ishihara, K., Koester, J.P., Liao, S.S.C., Marcuson, W.F., Martin, G.R., Mitchell, J.K., Moriwaki, Y., Power, M.S., Robertson, P.K., Seed, R.B., and Stokoe, K.H. 2001. "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils." Journal of Geotechnical and Geoenvironmental Engineering, 127 (10): 817-833.



0 20 40 80

APPROX SCALE : 1" = 40'

EXPLANATION

(Locations Approximate)

- Exploratory Boring
- Percolation Testing
- CPT

PLAN SUMMARY - 26 UNITS

12	PL 1	1,440 SF	3 BD
6	PL 2	1,540 SF	4 BD
2	PL 3	1,780 SF	3 BD
6	PL 4	1,780 SF	4 BD

52 GARAGE STALLS
33 GUEST STALLS
85 STALLS TOTAL
85 REQUIRED
3.27 STALLS/UNIT

COMMON AREA	5,200 SF (200/U)
PRIVATE YARDS	2,600 SF (100/U)

© Google 2025

Base Provided By Summa Architecture

ALBUS ASSOCIATES

GEOTECHNICAL MAP

Job No.: 3341.00 | Date: 06/18/2025 | Plate: 1

APPENDIX A

EXPLORATION LOGS

Field Identification Sheet

Light gray

Gray

Dark gray

Gray Brown

Light brown

Brown

Dark Brown

Olive brown

Olive

Yellow

Yellowish brown

Yellowish red

Red

Reddish Brown

Tan

Description Order:

Description, Color, Moisture, Density, Grain Size, Additional Description

Description	%	Example
	0-5	Sand
trace	5-15	Sand trace Silt
with	15-30	Sand with Silt
	30+	Silty Sand

More Examples

Sand with Silt trace Clay

Sand trace Silt and Clay

Sand with Silt and Clay

Gravelly Sand with Silt trace Clay

Silty Clay with Sand trace Gravel

Moisture

Dry	absence of water
Damp	below optimum
Moist	near optimum
Very Moist	above optimum
Wet	free water visible

Density (Navfac)

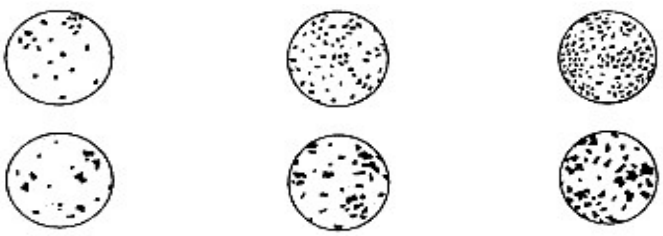
Coarse grained soils	SPT	CA
Very Loose	0-3	0-5
Loose	3-8	5-13
Medium Dense	8-14	13-22
Dense	14-25	22-40
Very Dense	25>	40>
Fine grained soils		
Very Soft	2<	0-3
Soft	2-4	3-6
Medium Stiff	4-8	6-13
Stiff	8-15	13-24
Very Stiff	15-30	24-48
Hard	30>	48>

Grain Size

Description		Sieve Size	Approx. Size
Boulders		>12"	Larger than basketball
Cobbles		3-12"	Fist to basketball
Gravel	coarse	3/4-3"	Thumb to Fist
	fine	#4-3/4"	Pea to Thumb
Sand	coarse	#10-4	Rock Salt to Pea
	medium	#40-10	Sugar to Rock Salt
	fine	#200-40	Flour to Sugar
Fines		Pass #200	Smaller than Flour

Additional Description (ie. roots, pinhole pores, debris, etc.)

Trace 5% Moderate 15% Abundant 30%



EXPLORATION LOG

Project:		Location:
Address:		Elevation:
Job Number:	Client:	Date:
Drill Method:	Driving Weight:	Logged By:

Depth (feet)	Lith-ology	Material Description	Water	Samples: Blows Per Foot	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		EXPLANATION							
		Solid lines separate geologic units and/or material types.							
		Dashed lines indicate unknown depth of geologic unit change or material type change.							
5		**Solid black rectangle** in Core column represents California Split Spoon sampler (2.5in ID, 3in OD).							
		Double triangle in core column represents SPT sampler.							
10		**Vertical Lines** in core column represents Shelby sampler.							
		Solid black rectangle in Bulk column respresents large bag sample.							
		Other Laboratory Tests:							
15		Max = Maximum Dry Density/Optimum Moisture Content							
		EI = Expansion Index							
		SO4 = Soluble Sulfate Content							
		DSR = Direct Shear, Remolded							
		DS = Direct Shear, Undisturbed							
		SA = Sieve Analysis (1" through #200 sieve)							
		Hydro = Particle Size Analysis (SA with Hydrometer)							
20		200 = Percent Passing #200 Sieve							
		Consol = Consolidation							
		SE = Sand Equivalent							
		Rval = R-Value							
		ATT = Atterberg Limits							

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76847	-117.95723	70.9

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							max ei so4 sa ph resist ch
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): tan, damp, medium grained				20	3	96	
3		**Alluvium (Qal)** Sand (SP): tan, damp, medium dense, fine to medium grained							
4						20	2.4	97.7	
5									
6		Sand trace Silt (SP): gray brown, very moist, loose, fine to medium grained				6	7.6	93.1	200
7									
8									
9									
10		Sandy Silt (ML): gray brown, very moist, very loose, fine to medium grained				5			
11									
12									
13									
14			▼						
15		@ 15 ft, wet, loose				3			200
16									
17									
18									
19									
20		Silty Sand / Sandy Silt (SM / ML): gray, wet, medium dense / very stiff, fine grained				14			200
21									
22									
23									
24									
25		Silty Sand (SM): gray, wet, loose, fine grained				6	25.5		att
26									
27									
28									
29									

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
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LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
31		Silty Sand / Sandy Silt (SM / ML): gray, wet, loose / stiff, fine grained				6			
32									
33									
34									
35		@ 35 ft, medium dense				9			200
36									
37									
38									
39									
40						8			
41									
42									
43									
44									
45		Silty Sand with Clay (SM-SC): gray, wet, medium dense, fine grained				11	27.8		att
46									
47									
48									
49									
50						8	34.3		
51									
52		Total Depth 51.5 feet Groundwater at 14 feet							
53									
54									
55									
56									
57									
58									
59									

EXPLORATION LOG B-2

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76805	-117.95752	70.7

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, damp, fine to medium grained				19	6.8	99.9	
3									
4		**Alluvium (Qal)** Sand (SP): light brown, damp, medium dense, fine to medium grained				12	8.8	96.9	consol
5									
6		@ 4 ft, gray brown, moist, loose				6	12.4	89.8	
7									
8									
9									
10		Sandy Silt trace Clay (ML): gray brown, very moist to wet, very loose, fine grained				4	31.6	89.1	sa hydro
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

EXPLORATION LOG B-3

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76792	-117.95817	71.3

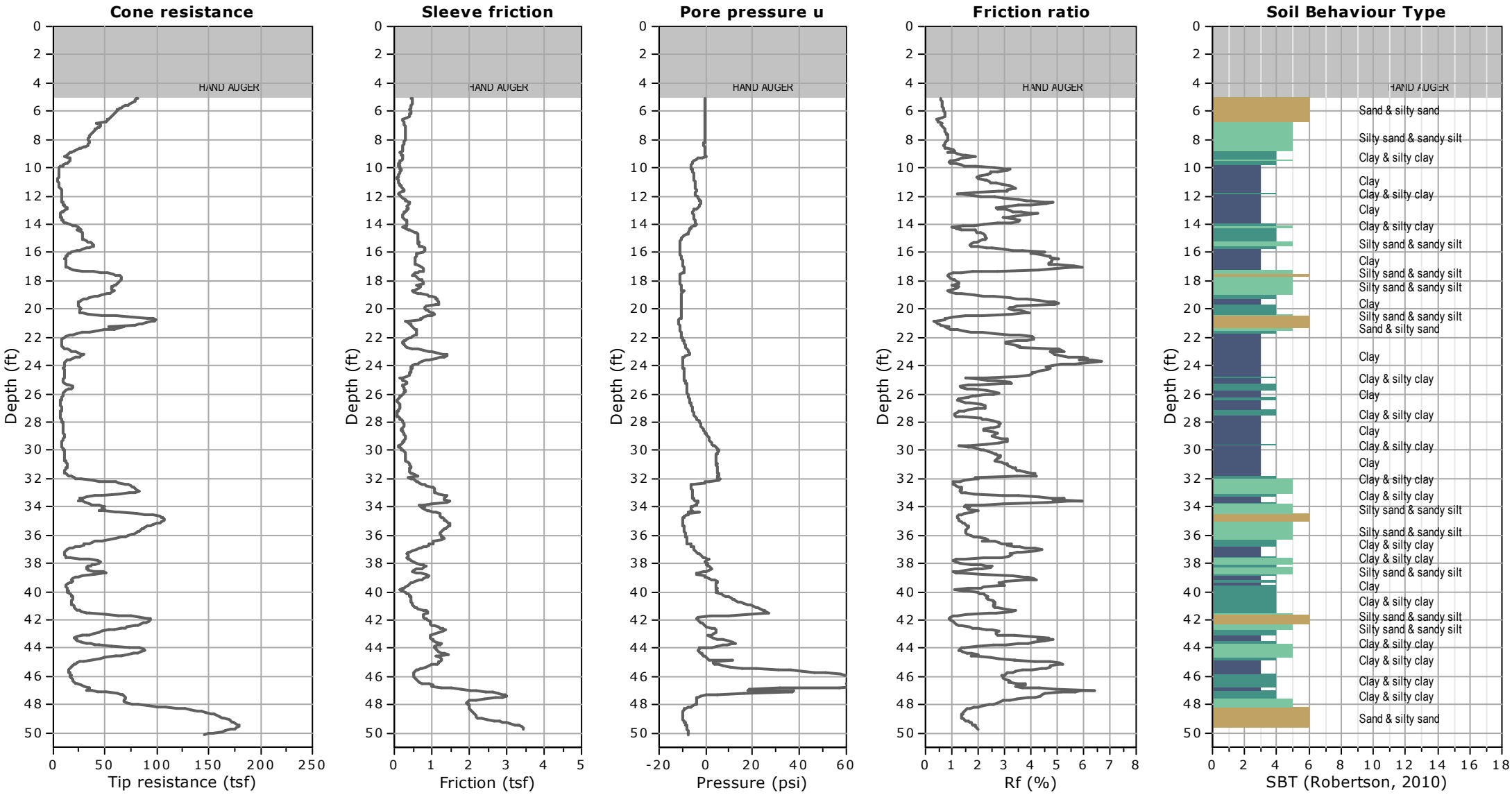
LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, moist, fine to medium grained				13	4.7	100.4	
3									
4		**Alluvium (Qal)** Sand (SP): brown, damp to moist, loose, fine to medium grained				16	8.4	100.2	
5									
6		@ 4 ft, medium dense				12	12.4	87.4	
7		@ 6 ft, loose							
8									
9									
10		Sandy Silt with Clay (ML): gray brown, moist, soft, fine grained				4	28.5	93.2	
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

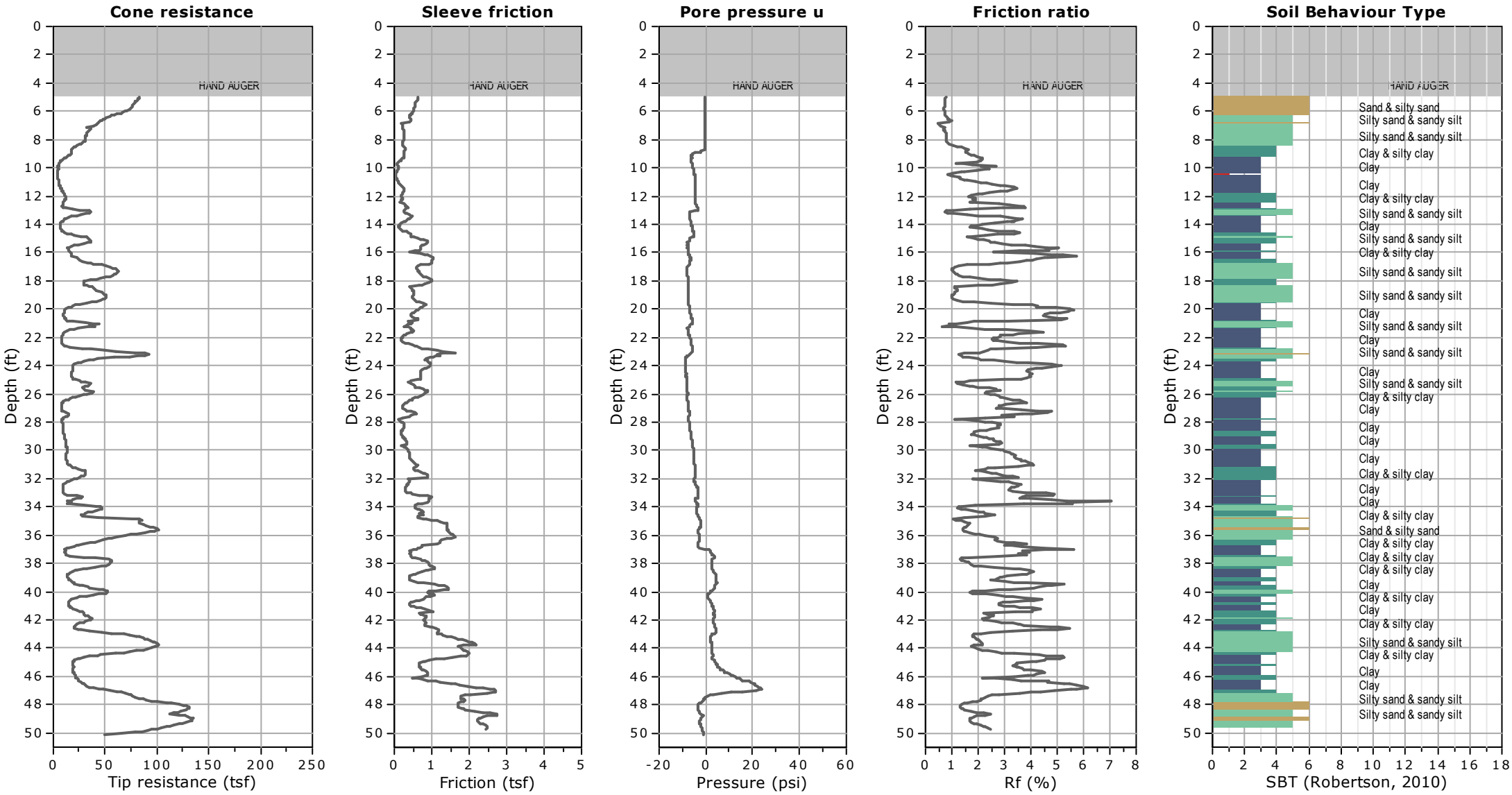
CPT-1
Total depth: 50.07 ft, Date: 6/10/2025



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

CPT-2
Total depth: 50.07 ft, Date: 6/10/2025



APPENDIX B

LABORATORY TEST PROGRAM

LABORATORY TESTING PROGRAM

Soil Classification

Soils encountered within the exploratory borings were initially classified in the field in general accordance with the visual-manual procedures of the Unified Soil Classification System (ASTM D2488). The samples were re-examined in the laboratory and classifications reviewed and then revised where appropriate. The assigned group symbols are presented in the Boring Logs provided in Appendix A.

In Situ Moisture and Density

Moisture content and dry density of in-place soil materials were determined in representative strata. Test data are summarized on the Boring Logs provided in Appendix A.

Maximum Dry Density and Optimum Moisture Content

Maximum dry density and optimum moisture content of onsite soils were determined for one selected sample in general accordance with Method A of ASTM D1557. Pertinent test values are given on Table B-1.

Expansion Potential

Expansion index testing was performed on a selected sample. The test was performed in accordance with ASTM D4829. The test result is presented on Table B-1.

Soluble Sulfate Content

A chemical analysis was performed on a selected soil sample to determine soluble sulfate content. The test was performed in accordance with California Test Method (CTM) 417. The test result is included in Table B-1.

Atterberg Limits

Atterberg Limits (Liquid Limit, Plastic Limit, and Plasticity Index) were performed in accordance with Test Method ASTM D-4318. Pertinent test values are presented within Table B-1.

Particle-Size Analyses and Hydrometer

Particle-size analyses were performed on selected samples in accordance with ASTM D 422. The results are presented graphically on the attached Plates B-1 and B-2.

Consolidation

Consolidation tests were performed for selected soil samples in general conformance with ASTM D 2435. Axial loads were applied in several increments to a laterally restrained 1-inch-high sample. Loads were applied in geometric progression by doubling the previous load, and the resulting deformations were recorded at selected time intervals. Results of the tests are graphically presented on Plate B-3.

Direct Shear

The Coulomb shear strength parameters, angle of internal friction and cohesion, were determined for

a bulk sample obtained from one our borings. The tests were performed in general conformance with Test Method ASTM D 3080. The sample was remolded to 90 percent of maximum dry density and at the optimum moisture content. Three specimens were prepared for each test, artificially saturated, and then sheared under varied loads at an appropriate constant rate of strain. Results are graphically presented on Plate B-4.

Percent Passing the No. 200 Sieve

The percentage of material passing the No. 200 sieve was determined on selected samples to verify visual classifications performed in the field. These tests were performed in accordance with ASTM D1140. Test results are presented on Table B-1.

Corrosion

Select samples were tested for minimum resistivity, chloride, and pH in accordance with California Test Method 643. Results of these tests are provided in Table B-1.

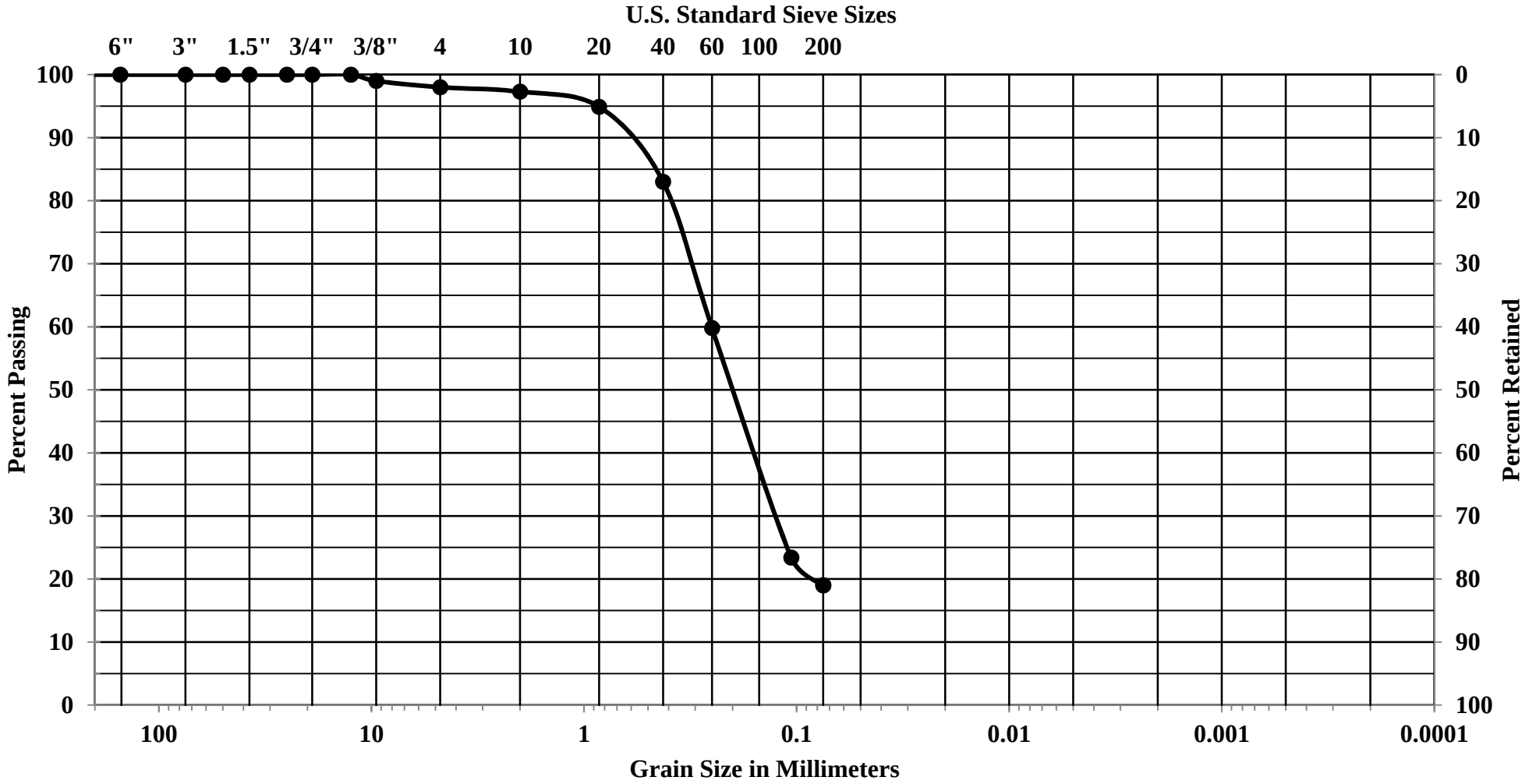
TABLE B-1
SUMMARY OF LABORATORY TEST RESULTS

Boring No.	Sample Depth (ft.)	Soil Description	Test Results	
B-1	0-5	Sand with Silt (SP-M)	Maximum Dry Density (pcf): Optimum Moisture Content (%): Expansion Index: Expansion Potential: Soluble Sulfate Content (%): Sulfate Exposure: pH: Chloride (ppm): Minimum Resistivity (ohm-cm):	121 10 0 Very Low 0.015 Negligible 8.3 25 4700
B-1	6	Sand trace Silt (SP)	Passing No. 200 Sieve (%):	2.6
B-1	15	Sandy Silt (ML)	Passing No. 200 Sieve (%):	59.1
B-1	20	Silty Sand / Sandy Silt (SM/ML)	Passing No. 200 Sieve (%):	51
B-1	25	Silty Sand (SM)	Liquid Limit: Plastic Index:	29 5
B-1	35	Silty Sand / Sandy Silt (SM/ML)	Passing No. 200 Sieve (%):	45.5
B-1	45	Silty Sand with Clay (SM-SC)	Liquid Limit: Plastic Index:	36 12

Note: Additional laboratory test results are provided on the boring logs provided in Appendix A.

GRAIN SIZE DISTRIBUTION

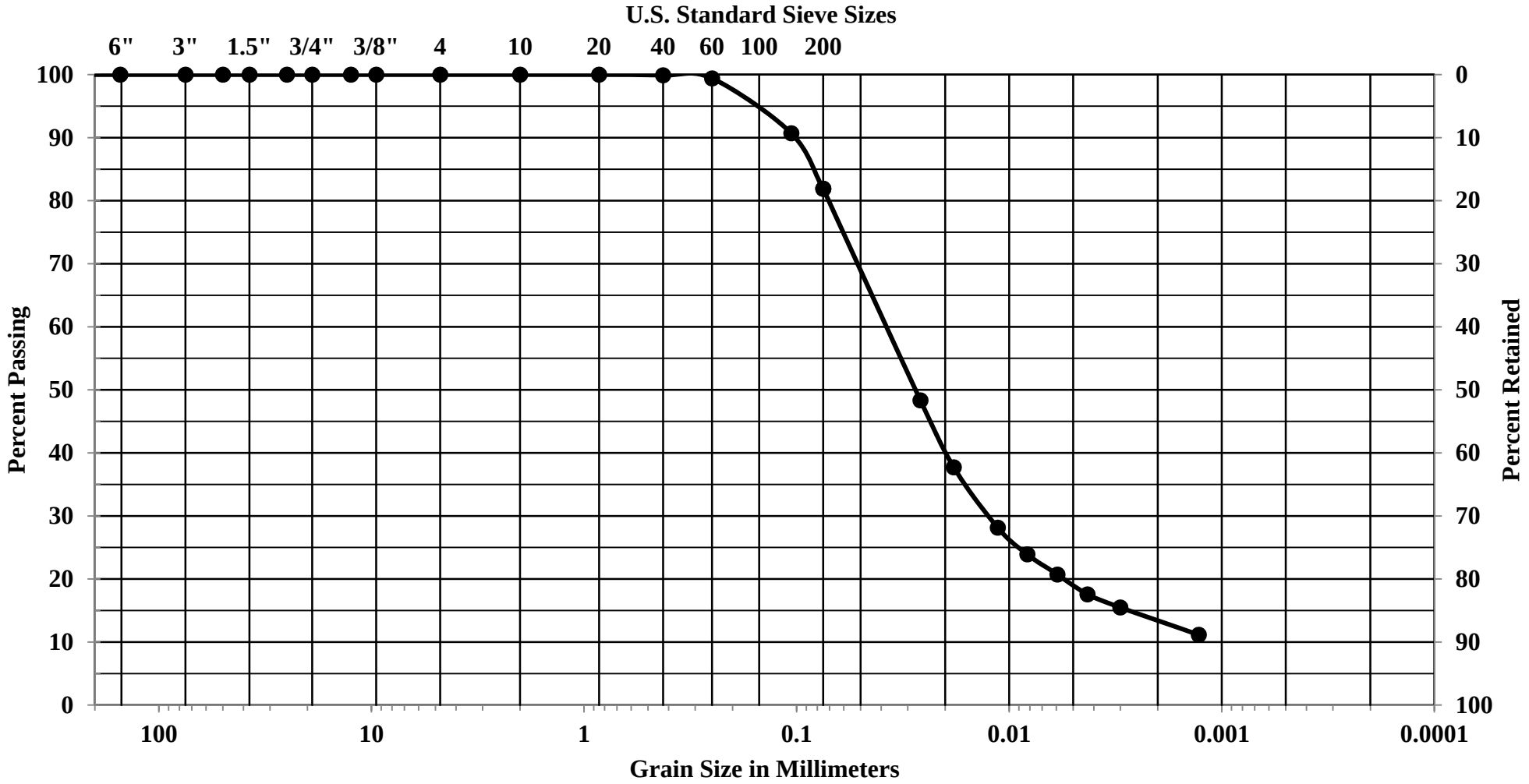
COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-1	0-5	Sand with Silt (SP-SM)

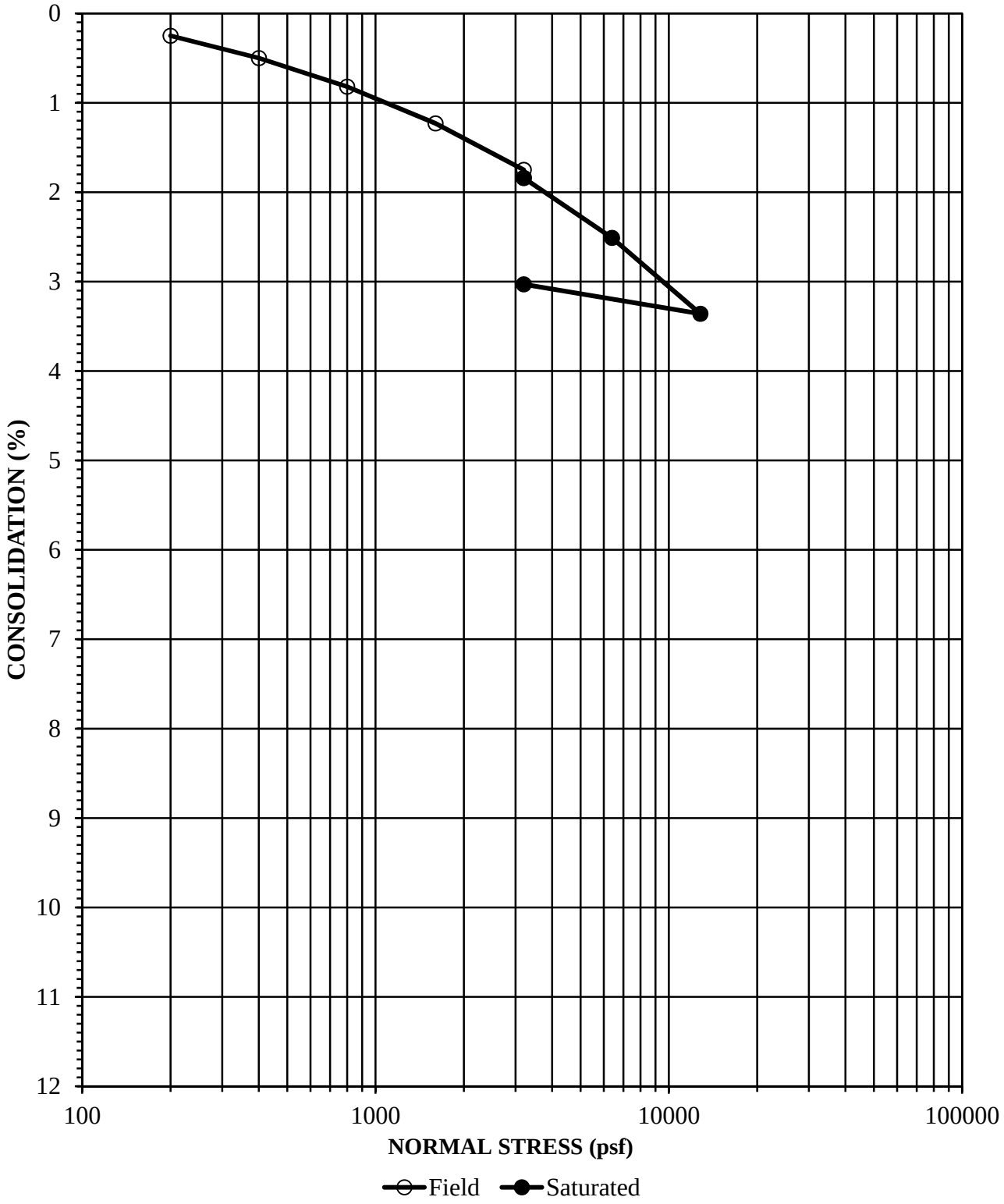
GRAIN SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-2	10	Silt trace Sand and Clay (ML)

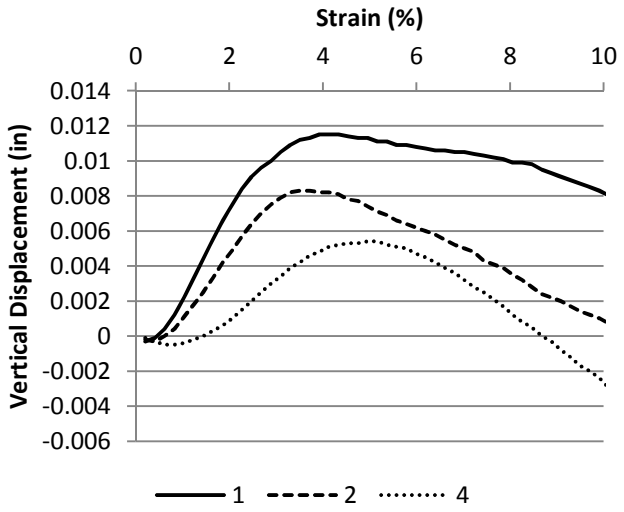
CONSOLIDATION

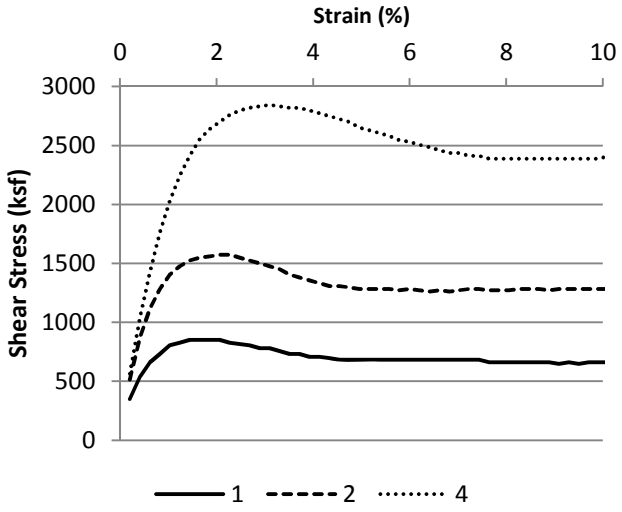


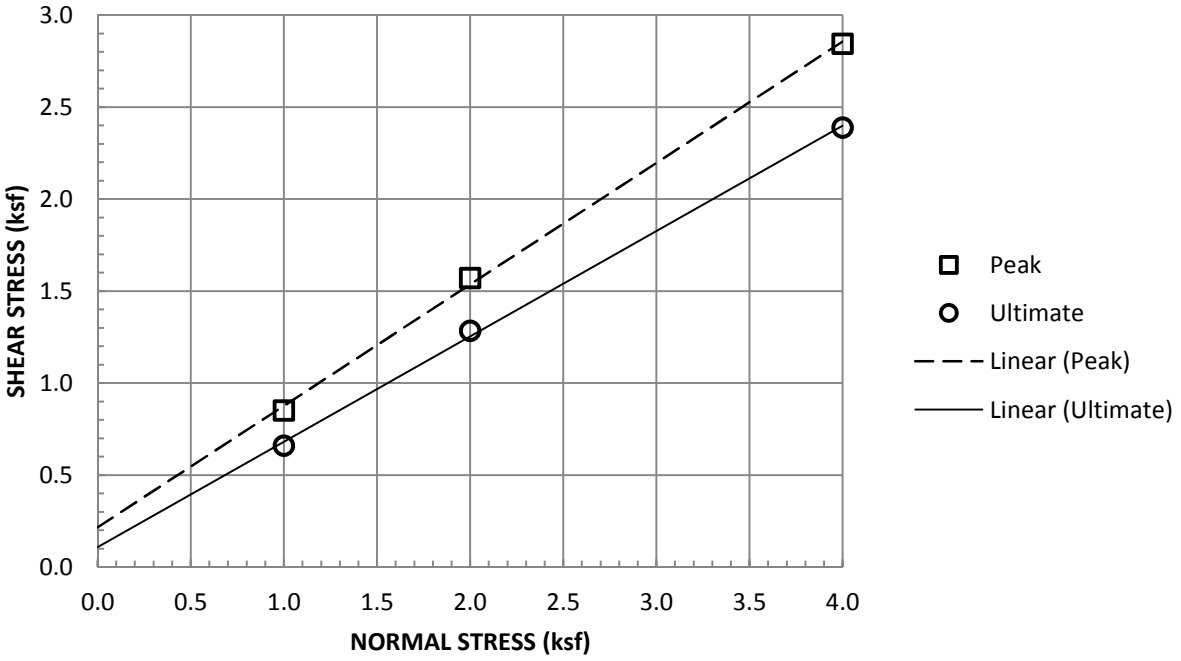
Job Number	Location	Depth	Description
3341.00	B-2	4	Silty Sand (SM)

Initial Dry Density (pcf)	Initial Moisture Content (%)	Final Moisture Concent (%)
96.0	10.4	17

DIRECT SHEAR







Sample Type:	Remolded to 90% of 121 pcf, Saturated		
Normal Stress (ksf)	1	2	4
Peak Shear Stress (ksf)	0.852	1.572	2.844
Peak Displacement (in)	0.012	0.008	0.005
Ultimate Shear Stress (ksf)	0.66	1.284	2.388
Ultimate Displacement (in)	0.25	0.25	0.25
Initial Dry Density (pcf)	108.7	108.7	108.7
Initial Moisture Content (%)	10	10	10
Final Moisture Content (%)	15.2	15.1	14.3
Strain Rate (in/min)	0.01		

Job Number	Location	Depth	Description
3341.00	B-1	0-5	Sand with Silt (SP-SM)

APPENDIX C

LIQUEFACTION ANALYSIS

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Summary data report 1
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Summary data report 8
Vertical settlements summary report 14

Kehoe Testing and Engineering
Albus & Associates, Inc.
1011 N. Armando St., Anaheim, CA
www.albusgeo.net

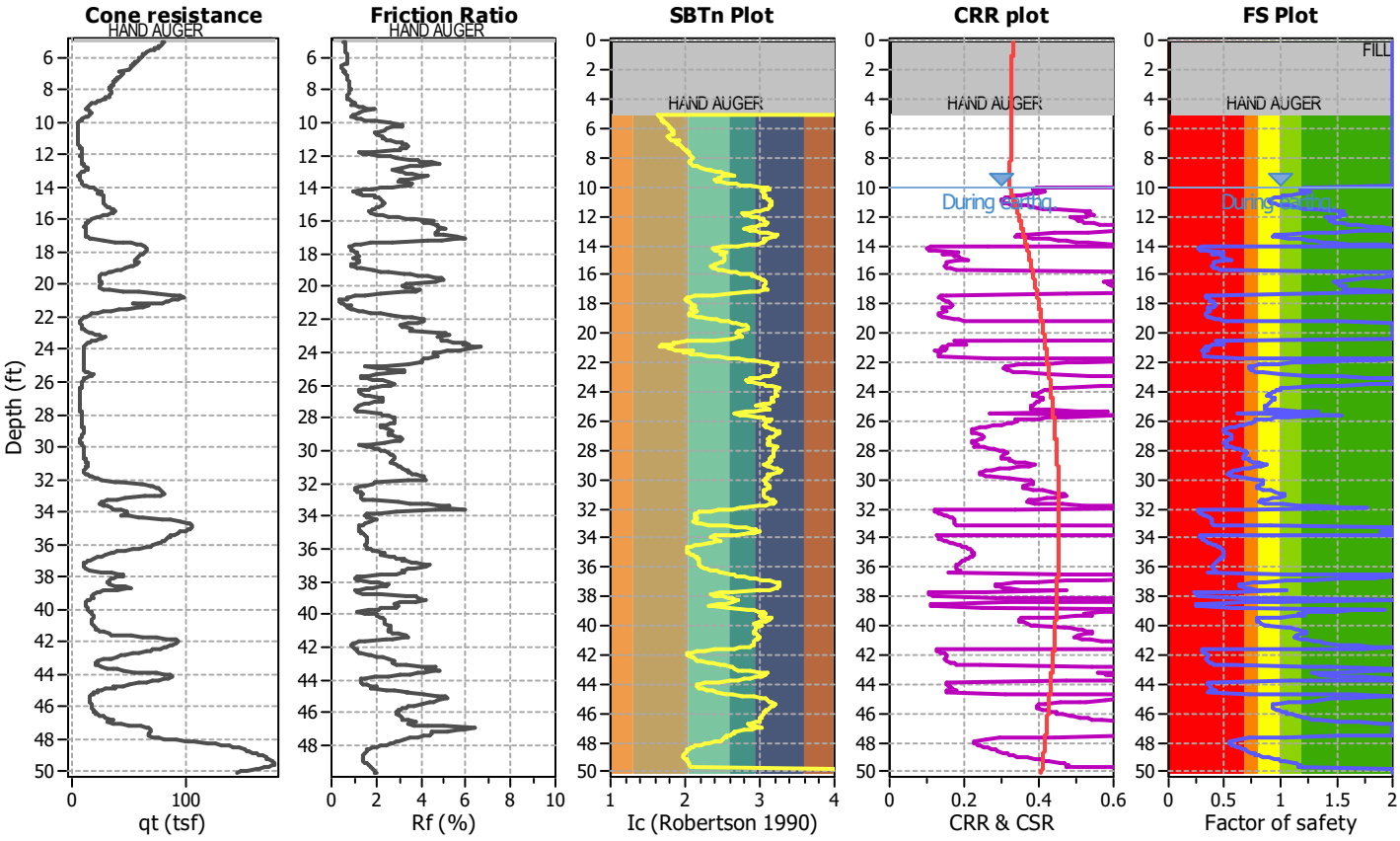
LIQUEFACTION ANALYSIS REPORT

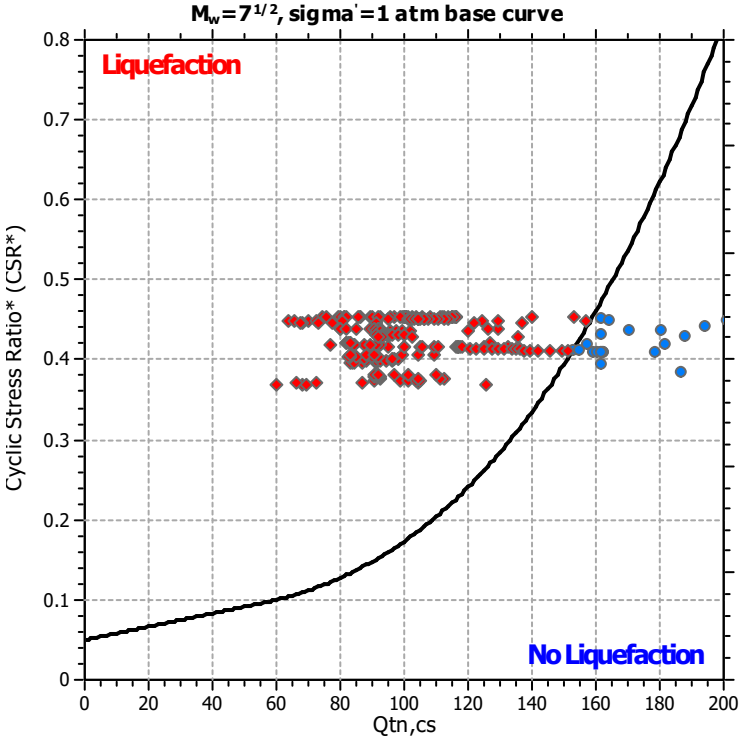
Project title : 3341.00 Melia Homes -- Garden Grove **Location : 9822 Russell Avenue, Garden Grove, CA**

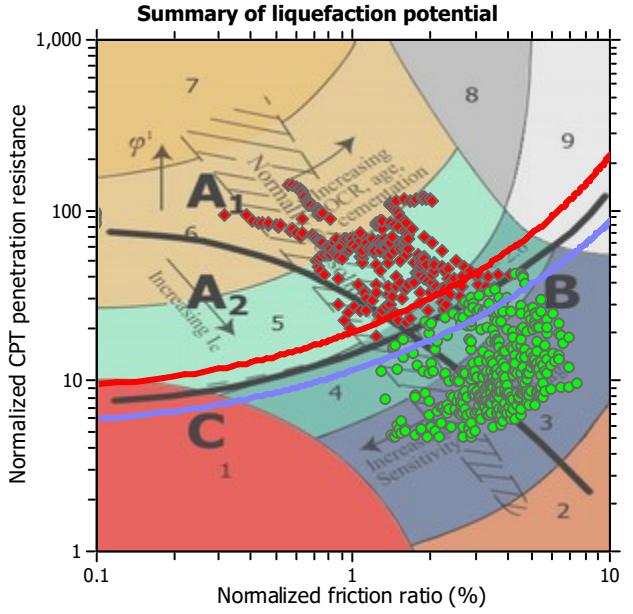
CPT file : CPT-1

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	14.00 ft	Use fill:	Yes	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	13.00 ft	Fill height:	3.00 ft	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	120.00 lb/ft³	Limit depth:	N/A
Earthquake magnitude M_w:	6.74	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.67	Unit weight calculation:	Based on SBT	K_σ applied:	No		

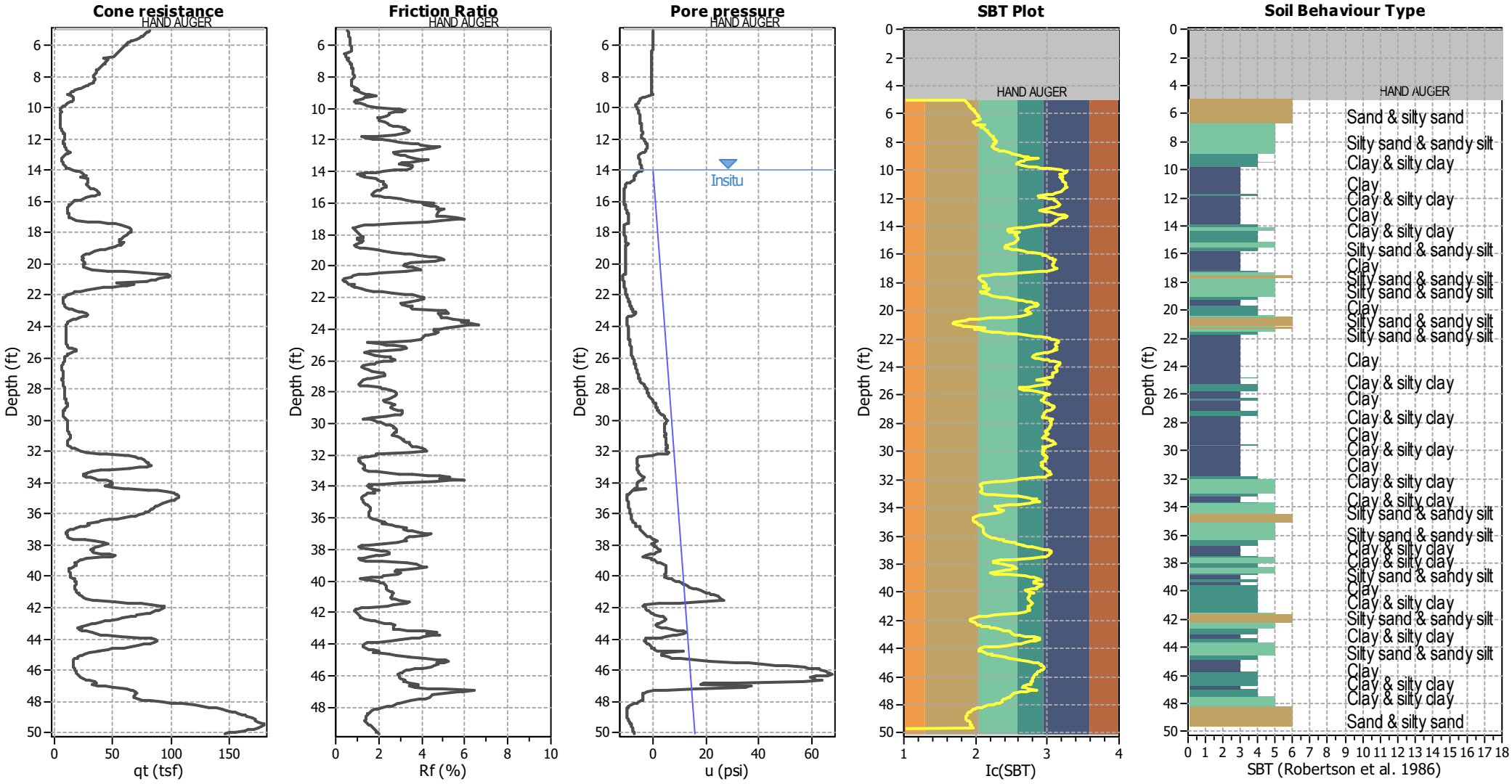






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



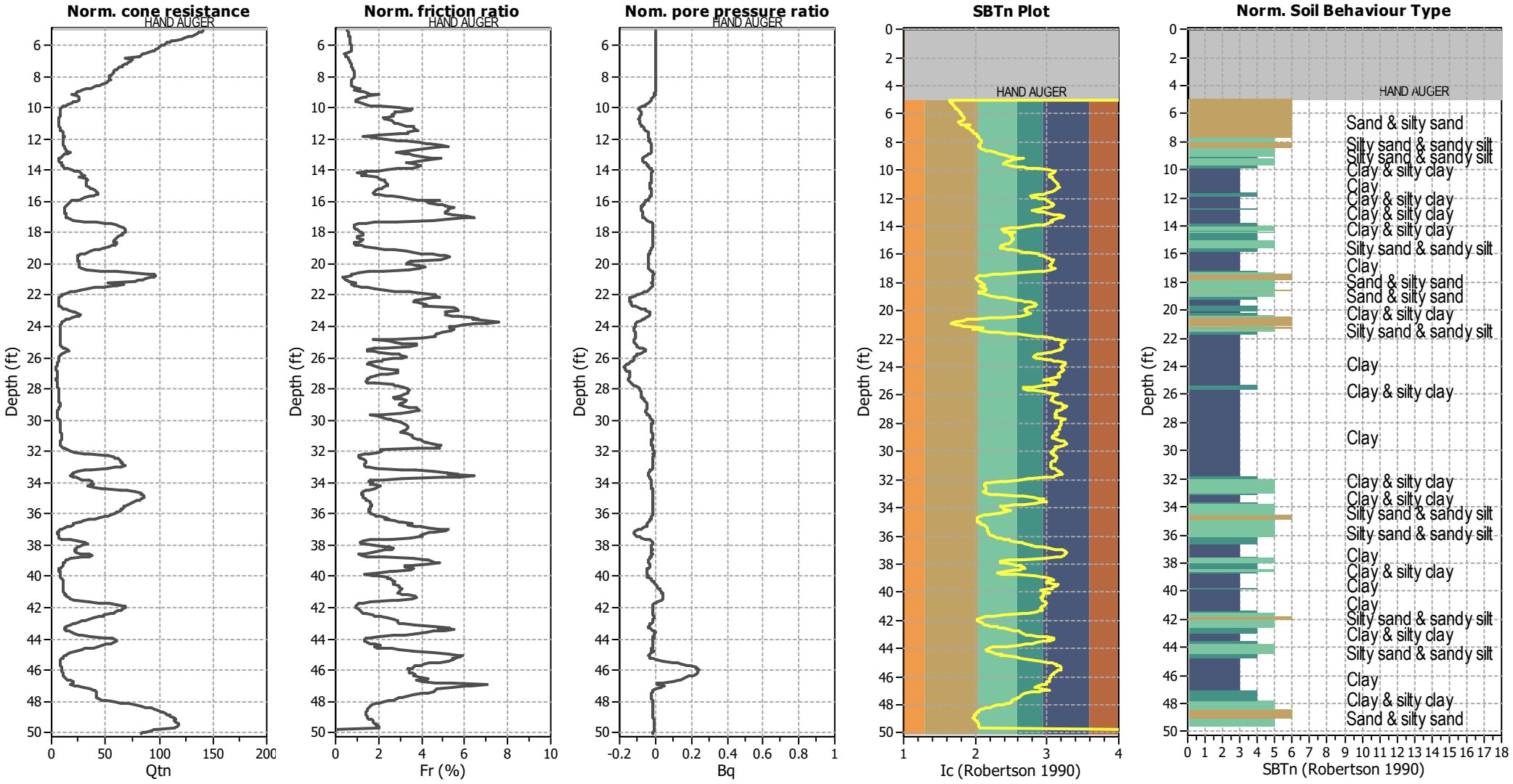
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



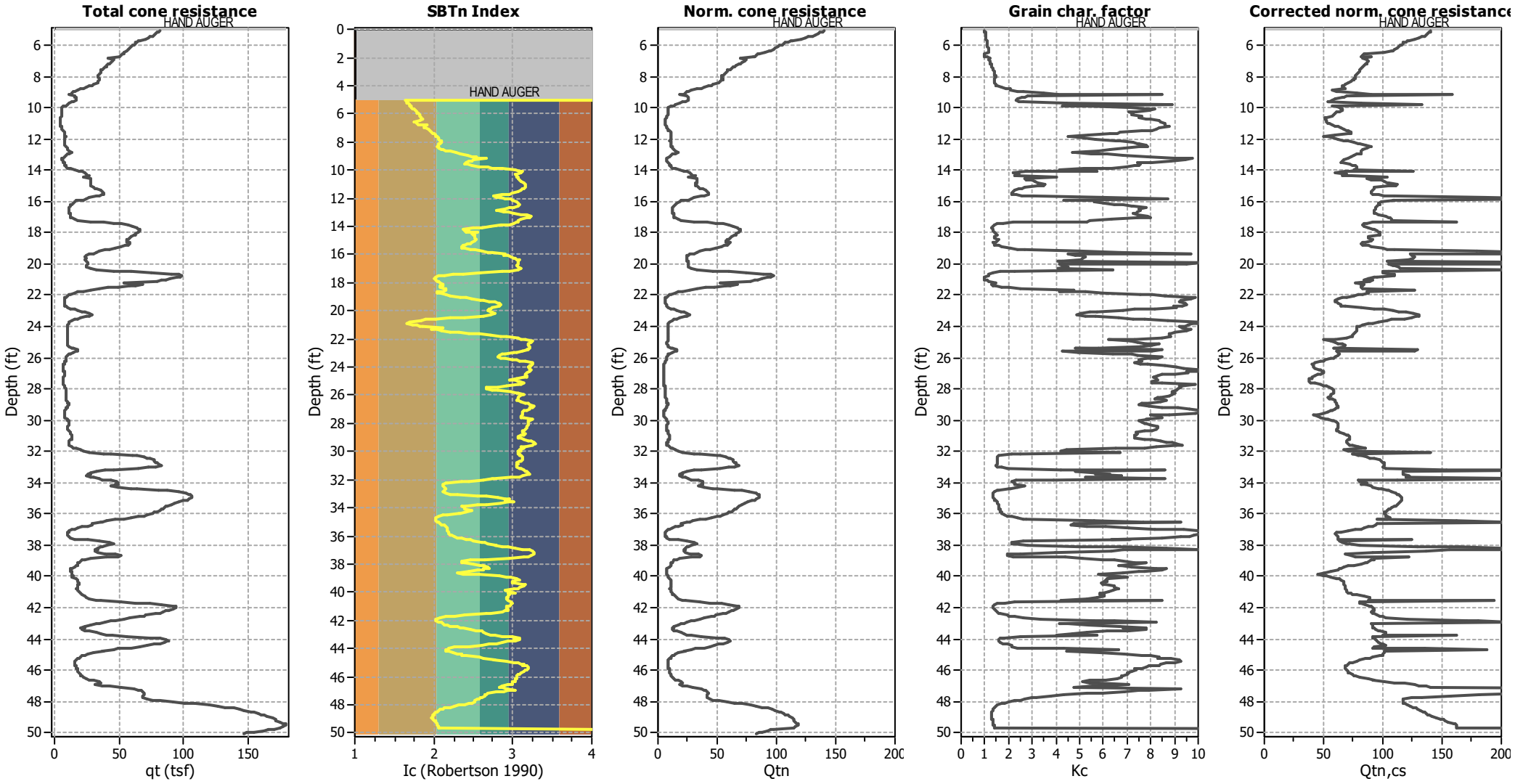
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

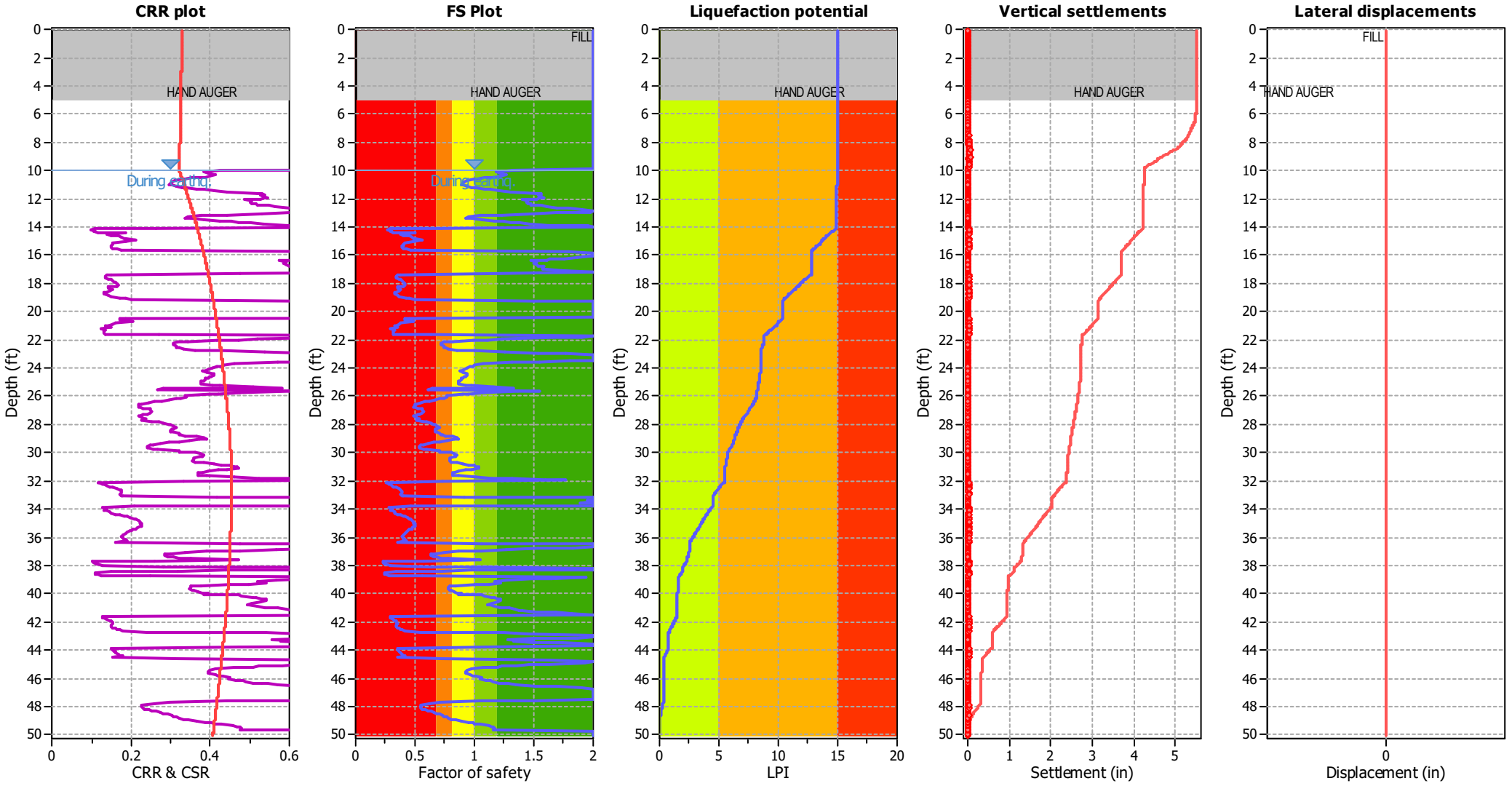
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

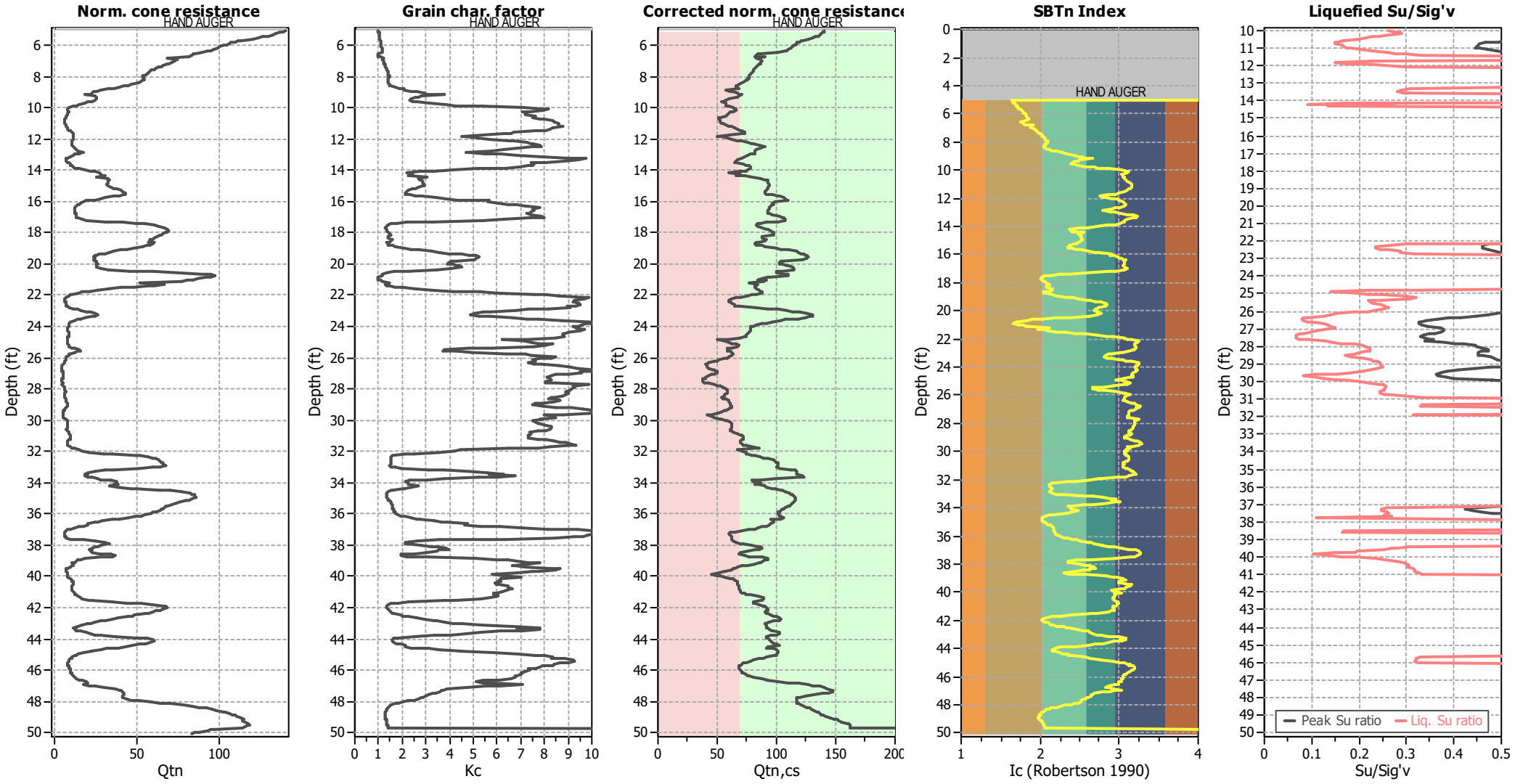
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

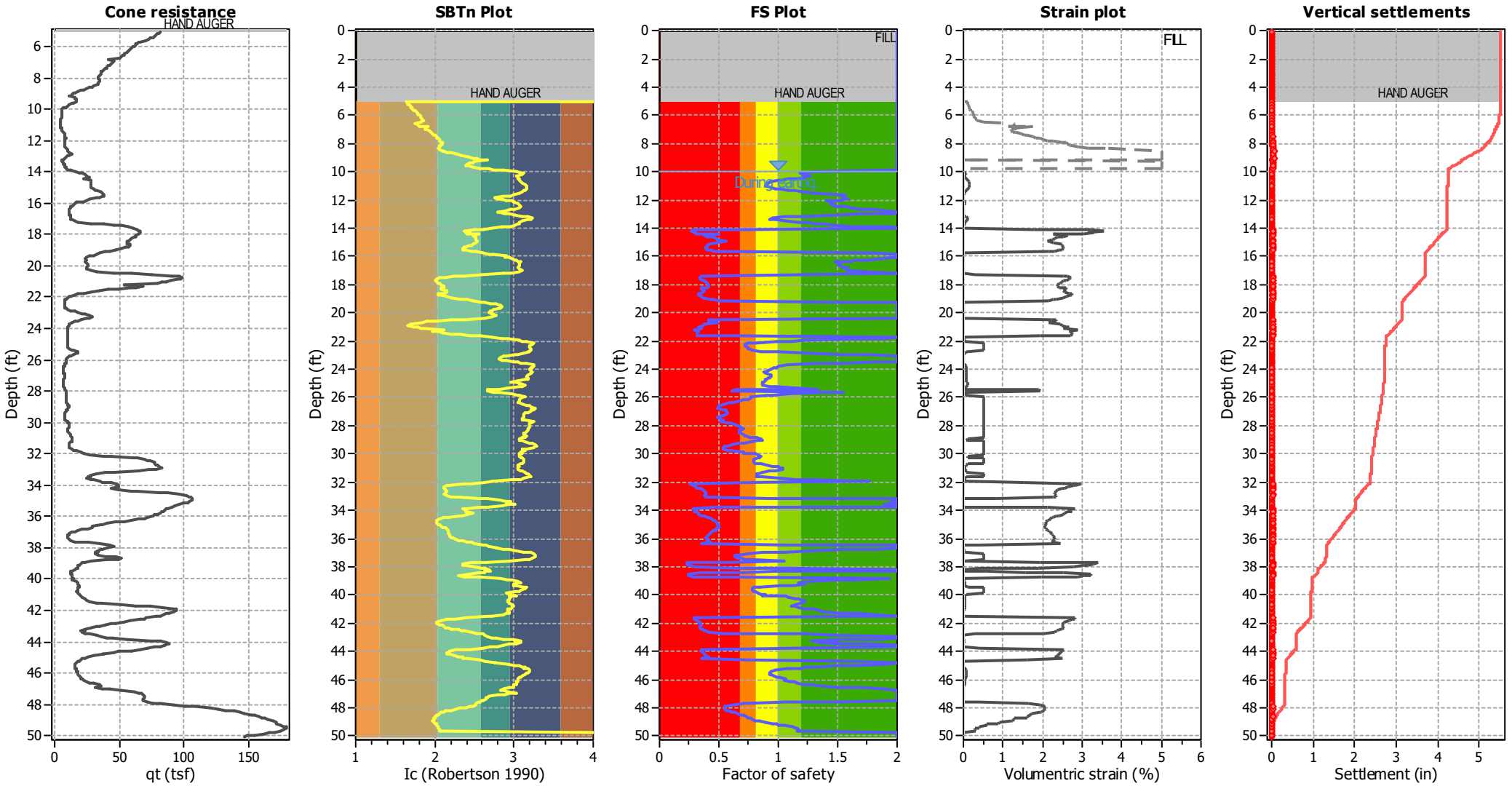
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

Kehoe Testing and Engineering
Albus & Associates, Inc.
1011 N. Armando St., Anaheim, CA
www.albusgeo.net

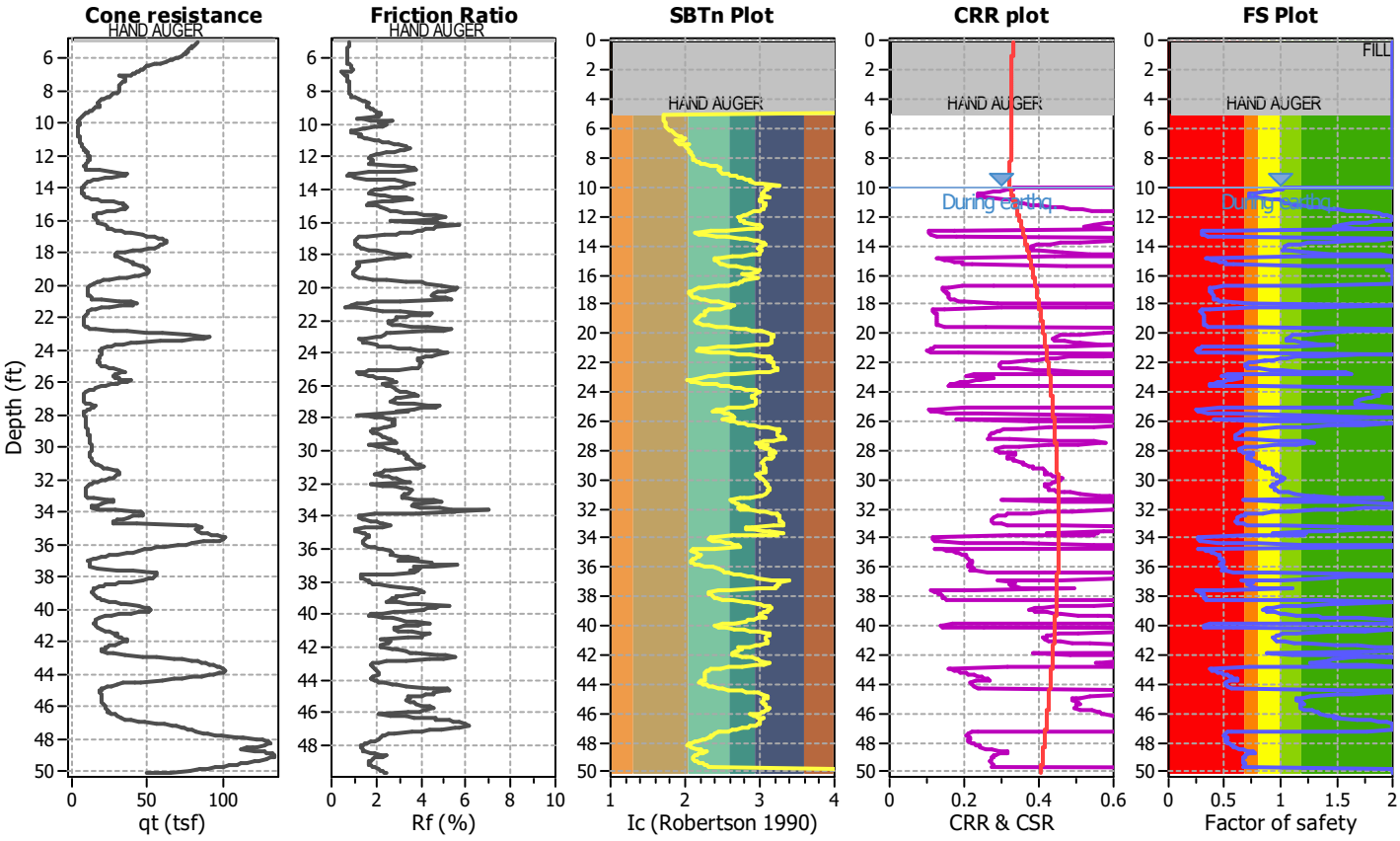
LIQUEFACTION ANALYSIS REPORT

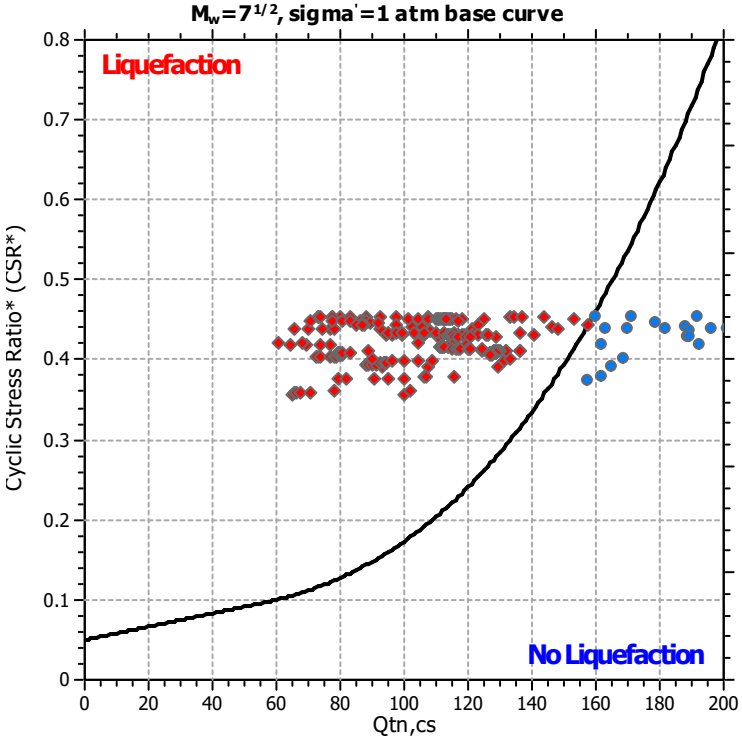
Project title : 3341.00 Melia Homes -- Garden Grove **Location : 9822 Russell Avenue, Garden Grove, CA**

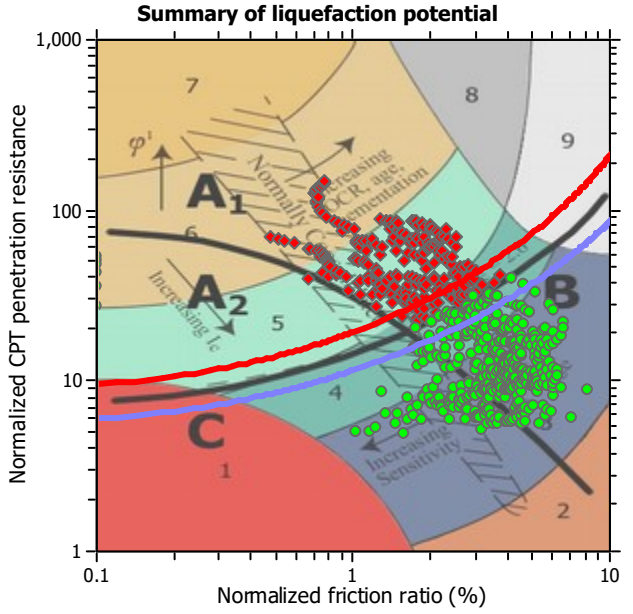
CPT file : CPT-2

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	14.00 ft	Use fill:	Yes	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	13.00 ft	Fill height:	3.00 ft	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	120.00 lb/ft³	Limit depth:	N/A
Earthquake magnitude M_w:	6.74	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.67	Unit weight calculation:	Based on SBT	K_σ applied:	No		

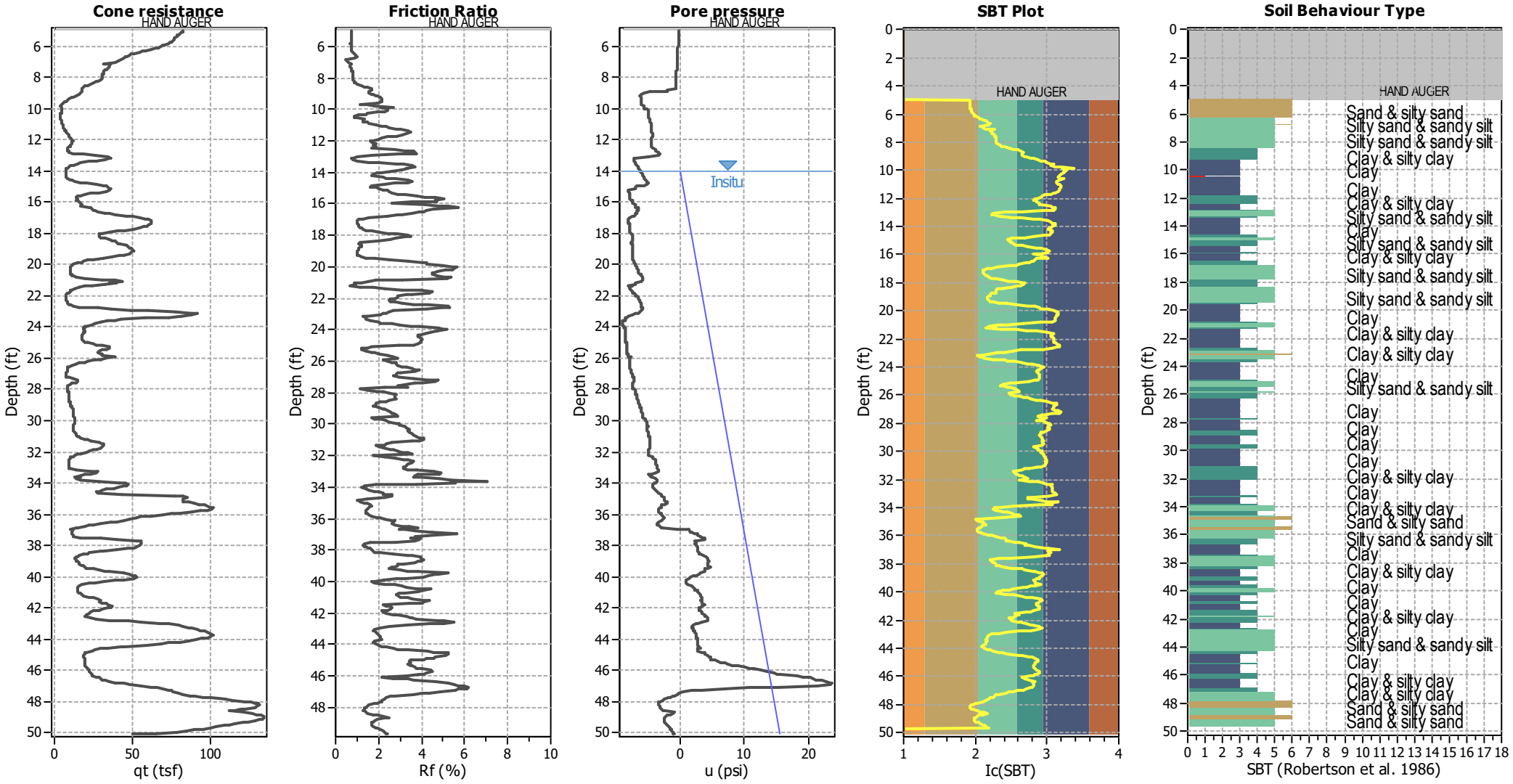






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



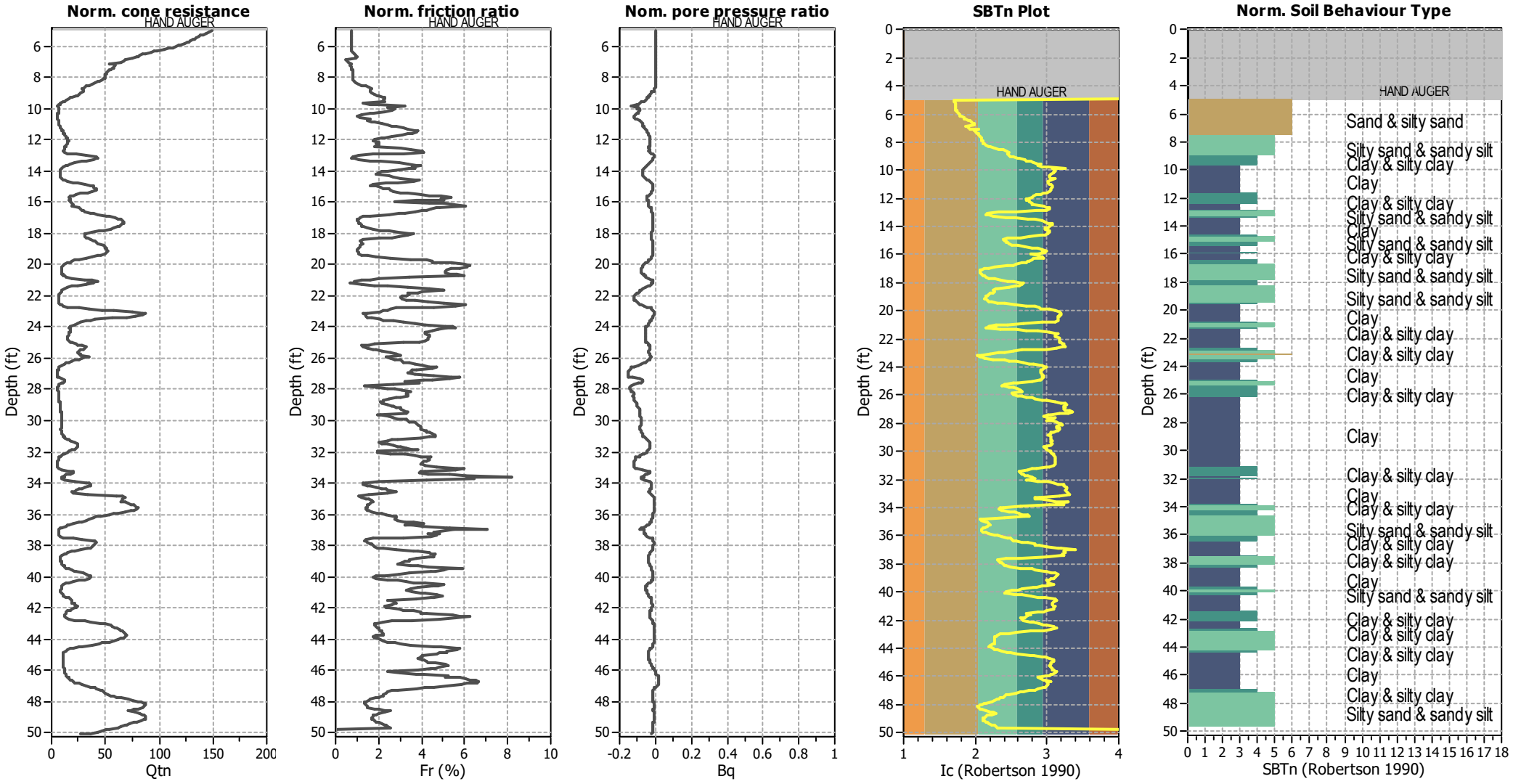
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



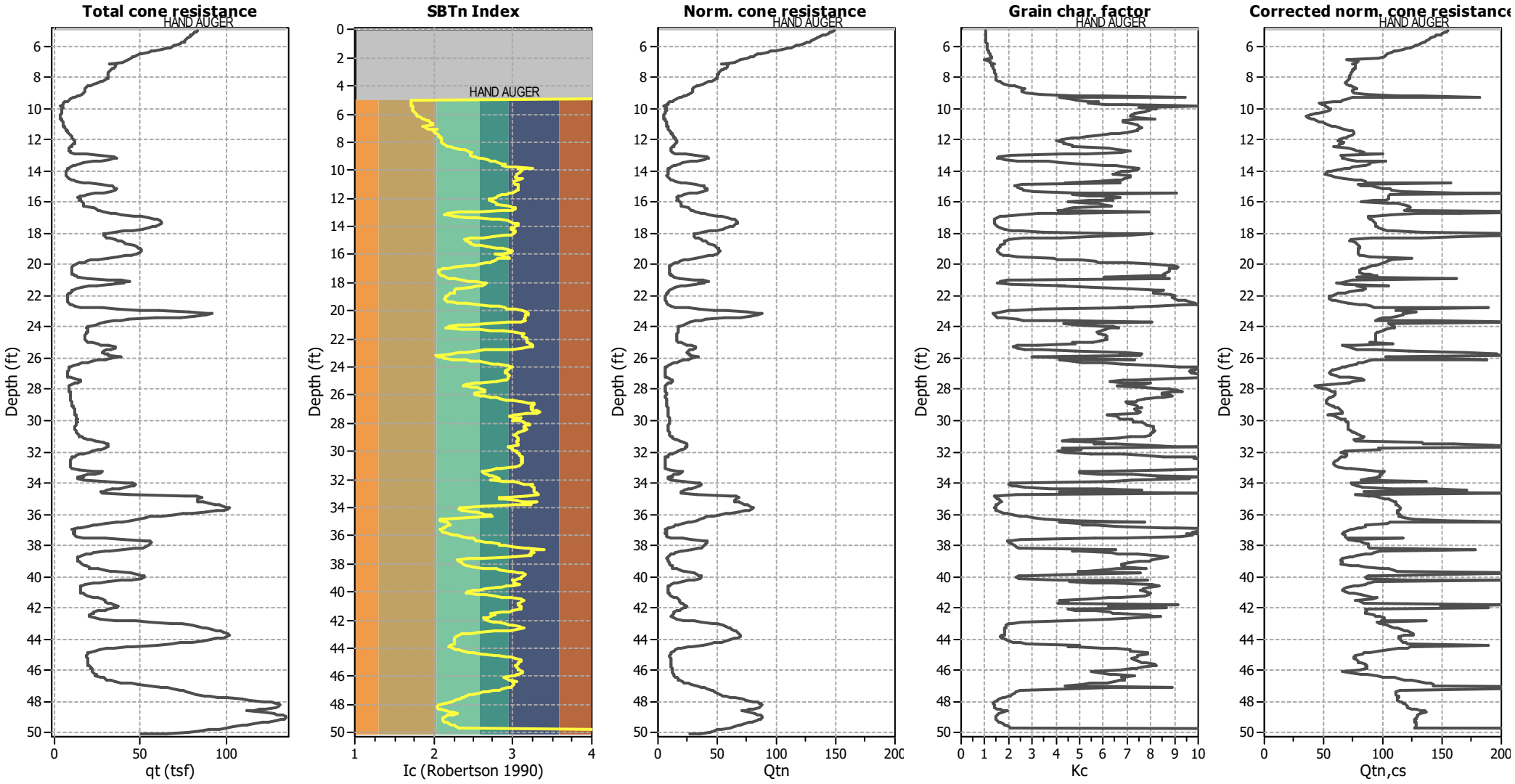
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

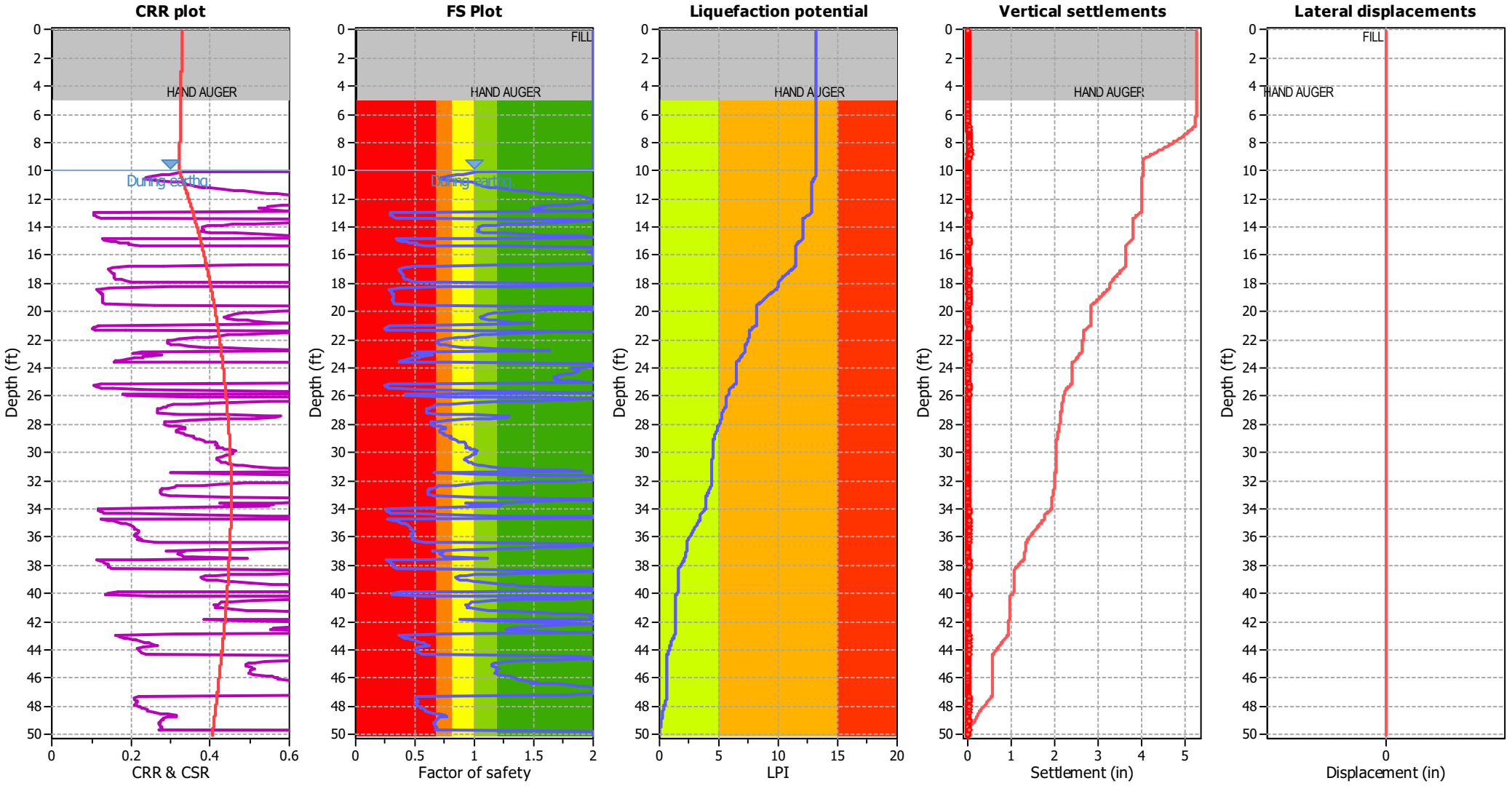
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_o applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

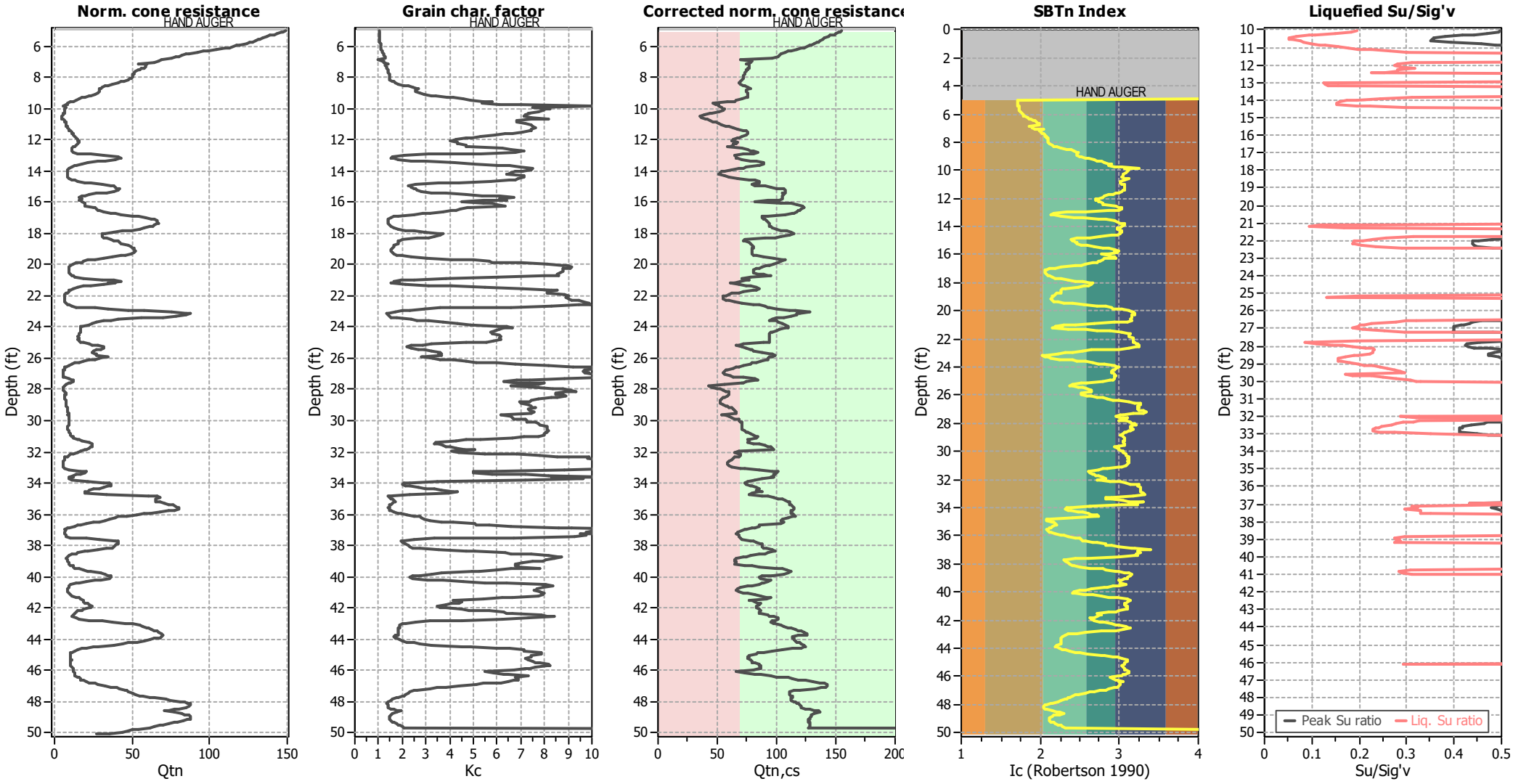
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

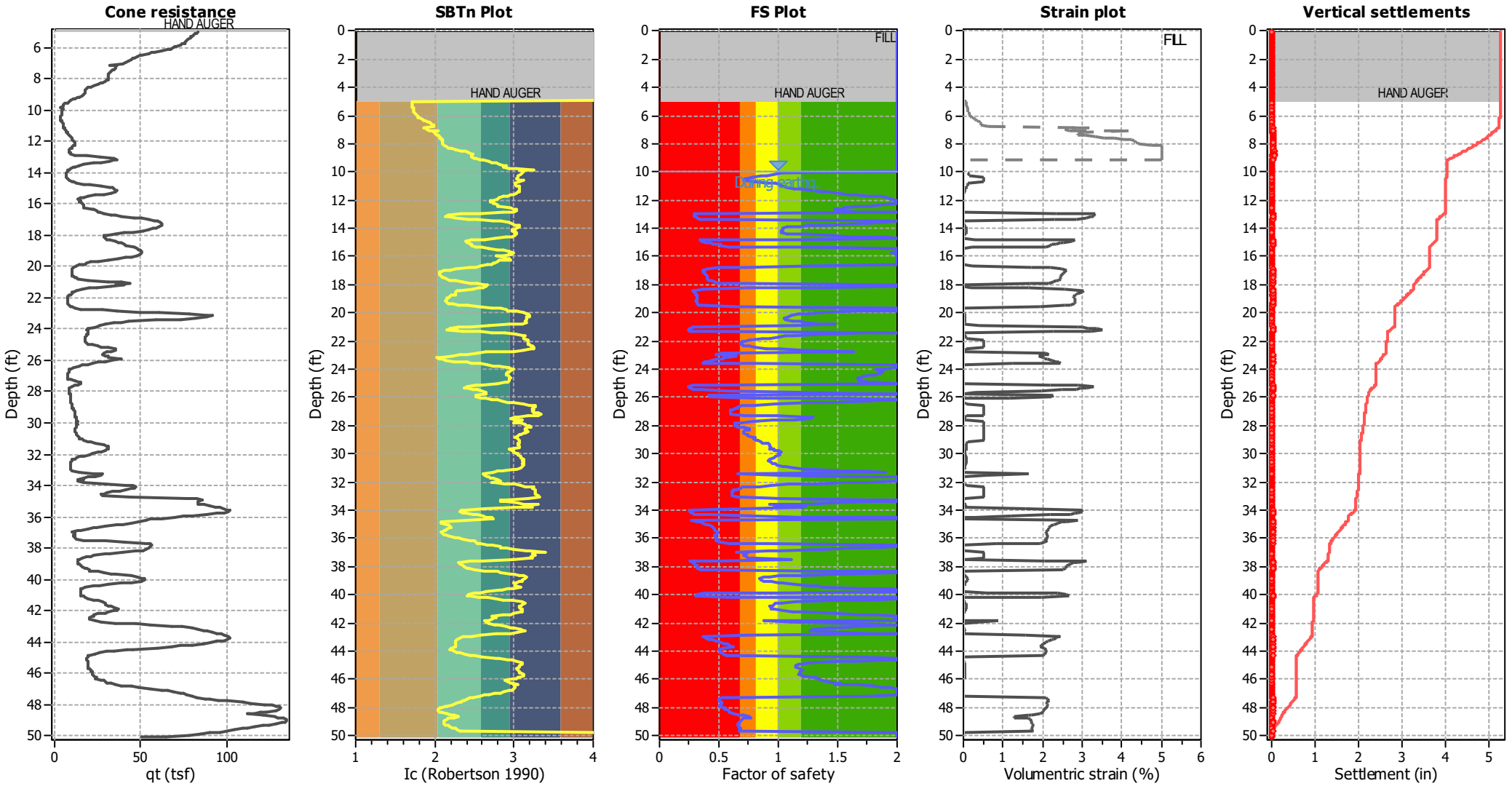
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	13.00 ft	Fill weight:	120.00 lb/ft³
Fines correction method:	Robertson (2009)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	No
Earthquake magnitude M_w:	6.74	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.67	Use fill:	Yes	Limit depth applied:	No
Depth to water table (insitu):	14.00 ft	Fill height:	3.00 ft	Limit depth:	N/A

Estimation of post-earthquake settlements



Abbreviations

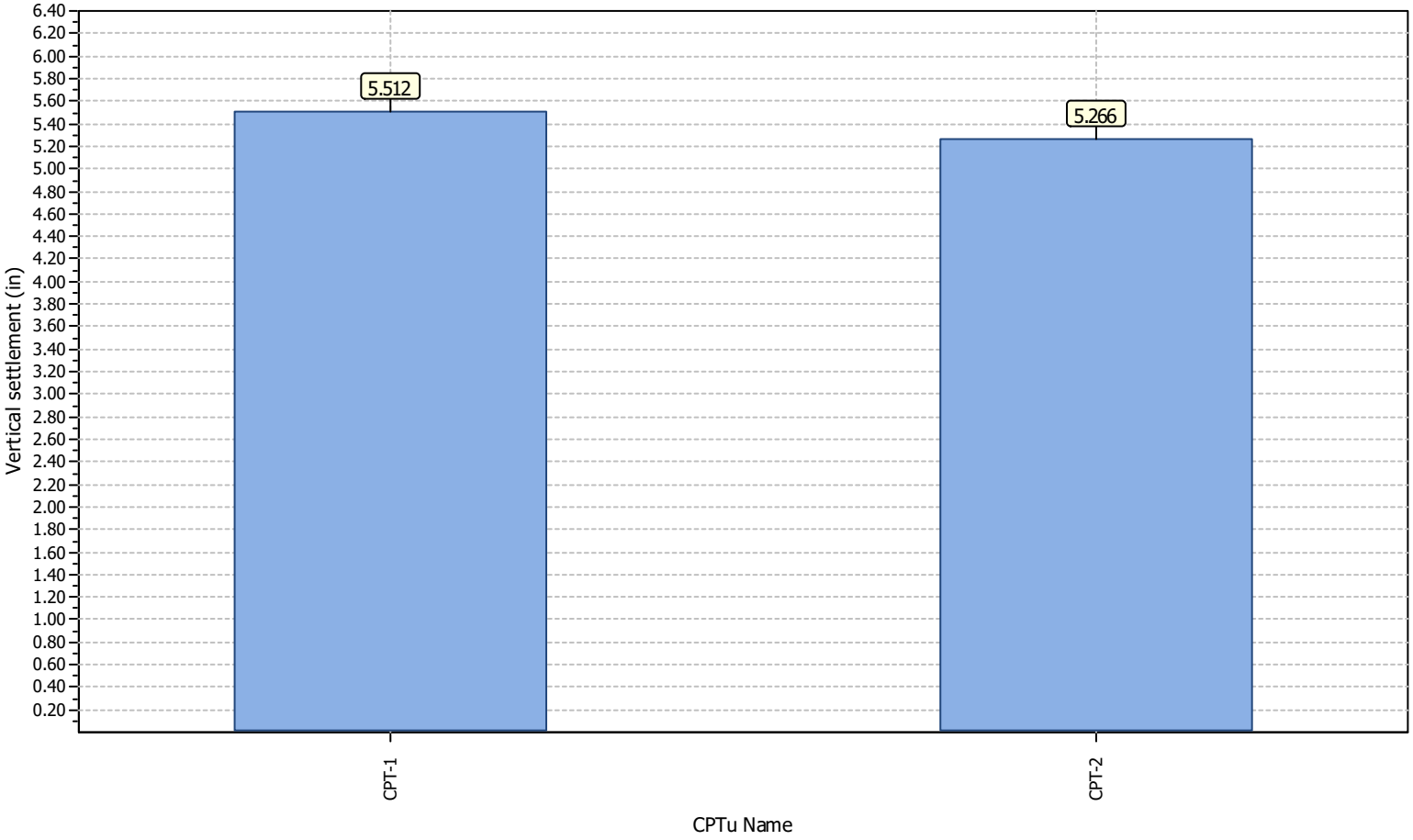
q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

Kehoe Testing and Engineering
Albus & Associates, Inc.
1011 N. Armando St., Anaheim, CA
www.albusgeo.net

Project title : 3341.00 Melia Homes -- Garden Grove

Location : 9822 Russell Avenue, Garden Grove, CA

Overall vertical settlements report



APPENDIX F

ALBUS & ASSOCIATES, INC.'S PRELIMINARY GEOTECHNICAL INVESTIGATION FOR PROPOSED WATER QUALITY IMPROVEMENTS, PROPOSED RESIDENTIAL DEVELOPMENT, 9822 RUSSELL AVENUE, GARDEN GROVE, CALIFORNIA, DATED OCTOBER 20, 2025

October 20, 2025
J.N.: 3341.00

Mr. Chad Brown
Melia Homes
8951 Research Drive
Irvine, California 92618

Subject: **Preliminary Geotechnical Investigation for Proposed Water Quality Improvements, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California**

Dear Mr. Wister,

Albus & Associates, Inc. has completed a geotechnical investigation of the site for evaluation of the percolation characteristics of the site soils. The scope of this investigation consisted of the following:

- Exploratory drilling, soil sampling and test well installation
- Field percolation testing
- Laboratory testing of selected soil samples
- Engineering analysis of the data
- Preparation of this report

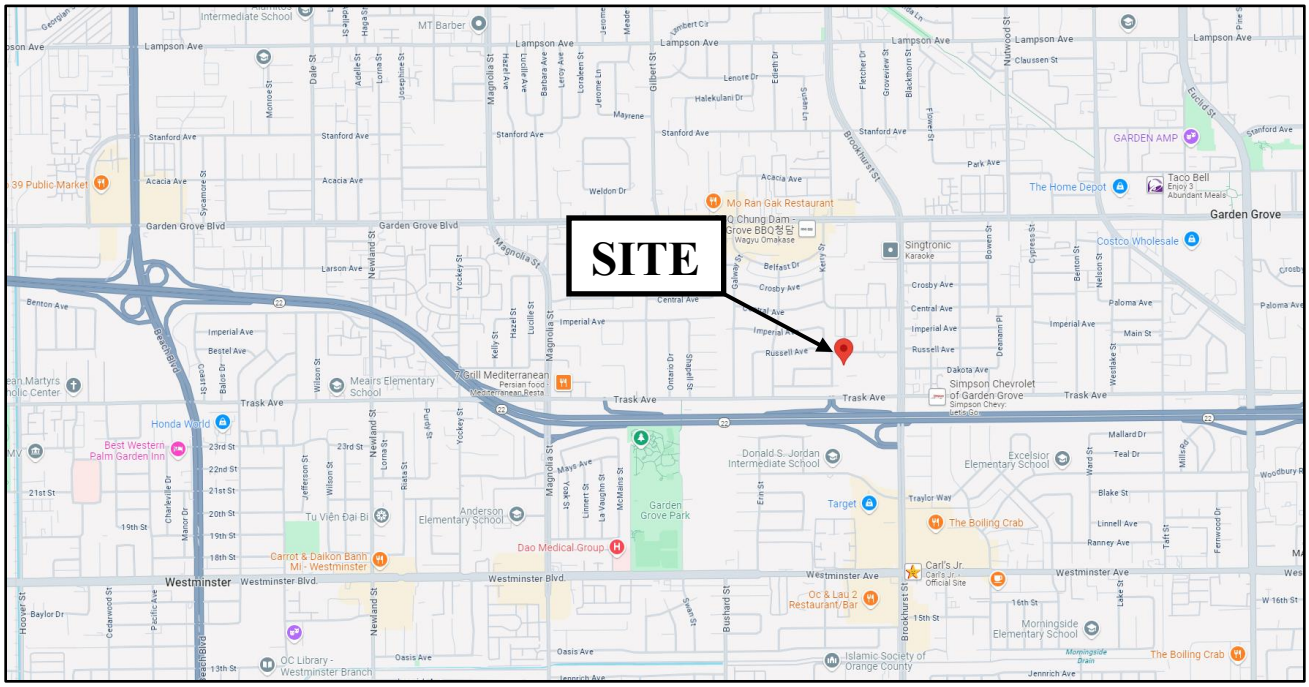
SITE DESCRIPTION AND PROPOSED DEVELOPMENT

Site Location and Description

The property is located at 9822 Russell Avenue within the city of Garden Grove. The site is rectangularly shaped and bordered by Kerry Street to the west, Russel Avenue to the north, residential properties to the south, and Sunnyside Elementary School to the east. The location of the site and its relationship to the surrounding areas are shown on Figure 1, Site Location Map.

The site is currently occupied by a church located within the northwest corner of the site. Additional structures are also present within the northwest portion of the site and appear to be associated with a child day care center. The remainder of the site is covered in asphalt with driveways and parking bays associated with the onsite improvements. Chain link fencing is present along the east and a portion of the south. A masonry block wall is also present along the south property line.

The site is relatively flat with elevations ranging from 70 to 72 feet above Mean Sea Level (based on Google Earth). Drainage is generally directed as sheet flow to either Russell Avenue or to Kerry Street. Site vegetation consists of bushes and moderate sized trees.



N

FIGURE 1-SITE LOCATION MAP

Proposed Residential Development
9822 Russell Avenue, Garden Grove, California

NOT TO SCALE

Proposed Development

Review of the conceptual site plan provided suggests the site will be constructed with (26) twenty-six 2-story townhomes at grade within six buildings. Associated interior driveways, parking, underground utilities, and decorative hardscape and landscape areas are also anticipated.

No grading or structural plans were available in preparing this report. However, we anticipate minor cuts and filling of the site will be required to achieve future surface configuration, and we expect future foundation loads will be relatively light.

SUMMARY OF FIELD AND LABORATORY WORK

Subsurface Investigation

Subsurface exploration for this investigation was conducted on June 10, 2025, and consisted of drilling three (3) soil borings to depths ranging from approximately 11.5 to 51.5 feet below the existing ground

surface (bgs) and advancing two (2) Cone Penetration Testing (CPT) soundings to a depth of approximately 50 feet bgs each. The borings were drilled using a truck-mounted, continuous flight, hollow-stem-auger drill rig. A representative of Albus & Associates, Inc. logged the exploratory borings. Visual and tactile identifications were made of the materials encountered, and their descriptions are presented in the Exploration Logs in Appendix A.

The CPT soundings were advanced using a 30-ton CPT truck. As the cone is advanced through the soil, direct measurements are obtained and recorded for tip resistance, side resistance and porewater measurements. The relationship between the tip resistance and the side resistance allows a determination of the general soil type. Following completion of the CPT soundings, a log is generated that provides a continuous profile of the tip resistance, side resistance and porewater measurements. Shear wave velocity was measured within one of the CPTs using a seismic cone. Copies of the CPT logs are provided in Appendix A.

The approximate locations of our borings and CPTs are shown on the enclosed Geotechnical Map, Plate 1.

Bulk, relatively undisturbed and Standard Penetration Test (SPT) sample was obtained at selected depths within the exploratory borings for subsequent laboratory testing. A California split-spoon soil sampler with a 3-inch O.D., 2.5-inch I.D., lined with brass rings, was used to gather soil samples. SPT samples were obtained from the boring using a standard, unlined SPT soil sampler. During each sampling interval, the sampler was driven 18 inches with successive drops of a 140-pound automatic hammer falling 30 inches. The number of blows required to advance the sampler was recorded for each six inches of advancement. The total blow count for the lower 12 inches of advancement per soil sample is recorded on the exploration log. Sample was placed in sealed containers or plastic bags and transported to our laboratory for analysis. The borings were backfilled with auger cuttings upon completion of sampling.

Two additional borings, P-1 and P-2, were drilled near boring B-1 for percolation testing. Upon completion of drilling, well materials were installed within P-1 and P-2 for subsequent percolation testing. Construction details for P-1 and P-2 consisted of 5 feet and 4.9 feet of well materials. Both wells utilized perforated 3-inch-diameter pipe and pipe covered with filter sock. Upon completion of testing, all well materials were removed from the borings and then backfilled with soil cuttings.

Percolation Testing

Percolation testing was performed on June 10, 2025, in general conformance with the constant-head test procedures outlined in the referenced Well Permeameter Method (USBR 7300-89). A water hose attached to a water source on site was connected to an inline flowmeter to measure the water flow. The flowmeter is capable of measuring flow rates up to 10 gallons per minute and as low as 0.06 gallons per minute. A valve was connected in line with the flowmeter to control the flow rate. A filling hose was used to connect the flowmeter and the test wells. Water was introduced by the filling hose near the bottom of the test wells. A water level meter with 1/100-foot divisions was used to measure the depths to water surface from the top of well casings.

Flow to the wells was terminated upon either completion of testing of all the pre-determined water levels or the flow rate exceeded the maximum capacity of the flowmeter. Measurements obtained during the percolation testing are provided in Appendix C on Plates C-1 and C-2.

Laboratory Testing

Selected soil samples of representative earth materials were tested to assist in the formulation of conclusions and recommendations presented in this report. Tests consisted of in-situ moisture contents and dry densities, 200 washes, and sieve analyses. Results of laboratory testing relevant to percolation characteristics are presented in Appendix B and on the Exploration Logs in Appendix A.

ANALYSIS OF DATA

Subsurface Conditions

Artificial fills (Af) were encountered within the upper 2 feet across the site within the areas of our exploration. The fills were predominately sands with silts, damp, and fine- to medium-grained. Site exploration was limited to areas within the existing asphalt due to the existing buildings onsite. We anticipate deeper, localized fills below and surrounding the existing buildings which would have resulted from previous grading activities.

Alluvium (Qal) was encountered below the fills for the maximum depth explored of 51.5 feet. The alluvium consisted of sands with silt, sandy silts, silty sands / sandy silts, and silty sands.

A more detailed description of the interpreted soil profile at each of the boring locations is presented in Appendix A. The stratigraphic descriptions in the logs represent the predominant materials encountered and relatively thin, often discontinuous layers of different material may occur within the major divisions.

Groundwater

Groundwater was encountered during this firm's subsurface exploration at a depth of 14 feet. The CDMG Special Report 03 suggests that historic high groundwater for the subject site is approximately 13-14 feet.

Percolation Data

Analyses were performed to evaluate permeability using the flow rate obtained at the end of the constant-head stage of field percolation testing. These analyses were performed in accordance with the procedures provided in the referenced USBR 7300-89. The procedure essentially uses a closed-form solution to the percolation out of a small-diameter well.

Using the USBR method, we calculated a composite permeability value for the head conditions maintained in the wells. The results are summarized in Table 1 below and the supporting analyses are included in Appendix C, Plates C-3 and C-4.

TABLE 1
Summary of Back-Calculated Permeability Coefficient

Test Well	Total Depth of Well (ft)	Depth to Water in Well (ft)	Height of Water in Well (ft)	Static Flow Rate (gal./min.)	Estimated Permeability, k_s (in/hr.)
P-1	5	2.85	2.15	1.36	5.04
P-2	4.9	2.8	2.1	1.56	5.86

Design of Chamber

The ***infiltration rate*** in a BMP is dependent upon several factors including the soil permeabilities of the various soil layers throughout the soil mass, hydraulic gradient of water pressure head in the soil mass, and depth to groundwater. The infiltration rate is related to the permeability by Darcy's equation:

$V = ki$

Where:

V= water velocity (infiltration rate)
k= permeability
i=hydraulic gradient

The presence of differing soil layers with differing permeabilities, the variable head condition in the BMP, and presence of ground water are factors that make determining the effective infiltration rate of a device somewhat complicated. We have performed the Well Permeameter tests in accordance with the test method. This test provides a means to estimate the ***Permeability Rate*** of the soils being tested, not the infiltration rate. Therefore, the effective infiltration rate must be determined using the relationship between permeability and infiltration rate as expressed by Darcy's equation. Generally, solution of Darcy's equation would require solving a differential equation. Where the BMP is a shallow basin with homogenous soil conditions and no groundwater within the influence of infiltration, the hydraulic gradient is approximately 1 and therefore, the infiltration rate would simply be equal to the permeability rate. However, where these conditions are not met such as the presence of variable permeability characteristics with depth, shallow groundwater, or the BMP has significant water head conditions, the hydraulic gradient could be more or less than 1 and a more complex approach is required to determine the effective infiltration rate. At the site, the upper 10 feet of cleaner sands are underlain by a soil with a significantly lower permeability. Groundwater is also present as a depth that will lessen the downward flow. The presence of these conditions will require additional consideration to estimate the effective infiltration rate of the chambers. Due to these complications, the infiltration characteristics of the proposed chamber were modeled using a computer program.

Infiltration in a chamber was modeled using the software Seep/W, version 2007, by Geo-Slope International. The program allows for modeling of both partially-saturated and saturated porous medium using a finite element approach to solve Darcy's Law. The program can evaluate both steady-

state and transient flow in planar and axisymmetric cases. Boundaries of the model can be identified with various conditions including fix total head, fix pressure head, fix flow rate, and head as a function of flow. Soil permeability properties can be modeled with either Fredlund et al (1994), Green and Corey (1971), Van Genuchten (1980), or Saxton et al. (1986). Only saturated permeabilities were used in our analyses.

A Seep/W model was setup as a 2D planer layout and with the bottom of the chamber at a depth of 4 feet below ground surface and a width of 10 feet. The model consisted of two zones of material to represent the general soil profile. The saturated permeability of material 1 was modeled to represent the coarse-grained materials encountered in the upper 10 feet and was based on the results of our field percolation testing. The saturated permeability of material 2 was estimated from gradation testing of the materials. The permeability values are summarized in Table 2.

TABLE 2
Summary of Permeability Values

Depth (ft)	Material No.	Material Type	Sat. Perm., Ks (in/hr)
0-10	1	SP	5.0
>10	2	ML	0.35

Water in the chamber was assumed to be at a depth of 4 feet below the ground surface (bottom of chamber) so a fix-head boundary was set with a total head elevation of 96 feet along the bottom edge of the chamber (ground surface was set to an elevation of 100 feet). Groundwater was assumed to be present at a depth of 14 feet. Therefore, a fix-head boundary was set with a total head of 86 feet along the sides and bottom of the model.

A steady state analysis was performed to estimate the outflow that the chamber well can accommodate. Using a chamber as described above, we obtain a static total flow of 0.00044 ft^3/sec per foot of chamber. The "measured" infiltration rate is obtained by dividing the flow rate by the width of the chamber. Therefore, the measured infiltration rate is 0.00044cfs * 3,600 sec/hr. * 12 in/ft / 10 ft = 1.9 in/hr. A plot depicting the resulting pressure head contours and flow vectors for the model is provided on Plate C-5.

CONCLUSIONS AND RECOMMENDATIONS

Results of our work indicate a storm water disposal system consisting of shallow chambers is feasible at the site. The use of a chamber system is not anticipated to result in worsening any adverse conditions or hazards that may be present for the proposed site development or adjacent properties including subsidence, landsliding, or liquefaction. As presented in our referenced geotechnical report, the site is within a liquefaction hazard zone. However, infiltration is not anticipated to cause mounding of groundwater due to the relatively high permeability of the site soils. As discussed above, the

groundwater level for the site is 14 feet in depth. Therefore, a chamber system set at a depth of 4 feet will maintain a minimum required clearance of 10 feet from groundwater.

The "design" infiltration rate should be obtained by applying a factor of safety to the effective "measured" infiltration rate of 1.9 in./hr. Table 2 includes the details of estimating this factor of safety for Factor Category A per requirements of the Santa Ana Regional Water Quality Control Board. The civil engineer should assign appropriate factor values for Factor Category B to obtain the overall factor of safety. The measured infiltration rate is based on chambers that are no more than 10 feet in width. If the chambers are more than 10 feet in width, this office should be contacted to evaluate the potential for a reduction in the measured infiltration rate.

TABLE 2
Factor Values for Factor Category A

Infiltration Facility Safety Factor Determination Worksheet					
Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w * v
A	Suitability Assessment	Soil assessment methods	0.25	2	0.5
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.25

Excavation for the chambers should avoid causing compaction of the bottom soils. A representative of this firm should observe the exposed soils prior to placement of gravel or chambers to confirm the appropriate soils are exposed.

A filter fabric such as Mirafi 140N should be provided between the surrounding soils and gravel on the sides and top of the gravel section. The gravel should be placed in lifts no more than 24 inches thick and vibrated to consolidate the materials.

Soils in the upper 4 feet are expected to be friable in nature. As such, open excavations for the chambers should be laid back at a 1.5 to 1 (H:V). Excavation for construction of the chamber system should be in accordance with OSHA requirements. The installation of the system should be observed by the project geotechnical consultant.

LIMITATIONS

This report is based on the geotechnical data as described herein. The materials encountered in our boring excavations and utilized in our laboratory testing for this investigation are believed representative of the project area, and the conclusions and recommendations contained in this report are presented on that basis. However, soil and bedrock materials can vary in characteristics between

points of exploration, both laterally and vertically, and those variations could affect the conclusions and recommendations contained herein. As such, observations by a geotechnical consultant during the construction phase of the storm water infiltration systems are essential to confirming the basis of this report.

This report has been prepared consistent with that level of care being provided by other professionals providing similar services at the same locale and time period. The contents of this report are professional opinions and as such, are not to be considered a guaranty or warranty.

This report should be reviewed and updated after a period of one year or if the site ownership or project concept changes from that described herein.

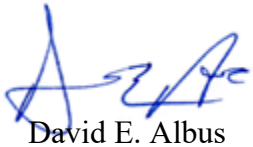
This report has been prepared for the exclusive use of **Melia Homes** to assist the project consultants in the design of the proposed development. This report has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes.

This report is subject to review by the controlling governmental agency.

We appreciate this opportunity to be of service to you. If you should have any questions regarding the contents of this report, please do not hesitate to call.

Sincerely,

ALBUS & ASSOCIATES, INC.



David E. Albus
Principal Engineer



Enclosures: Plate 1- Geotechnical Map
Appendix A - Exploratory Logs
Appendix B – Laboratory Testing
Appendix C - Percolation Testing and Analyses

REFERENCES

Publications & Reports

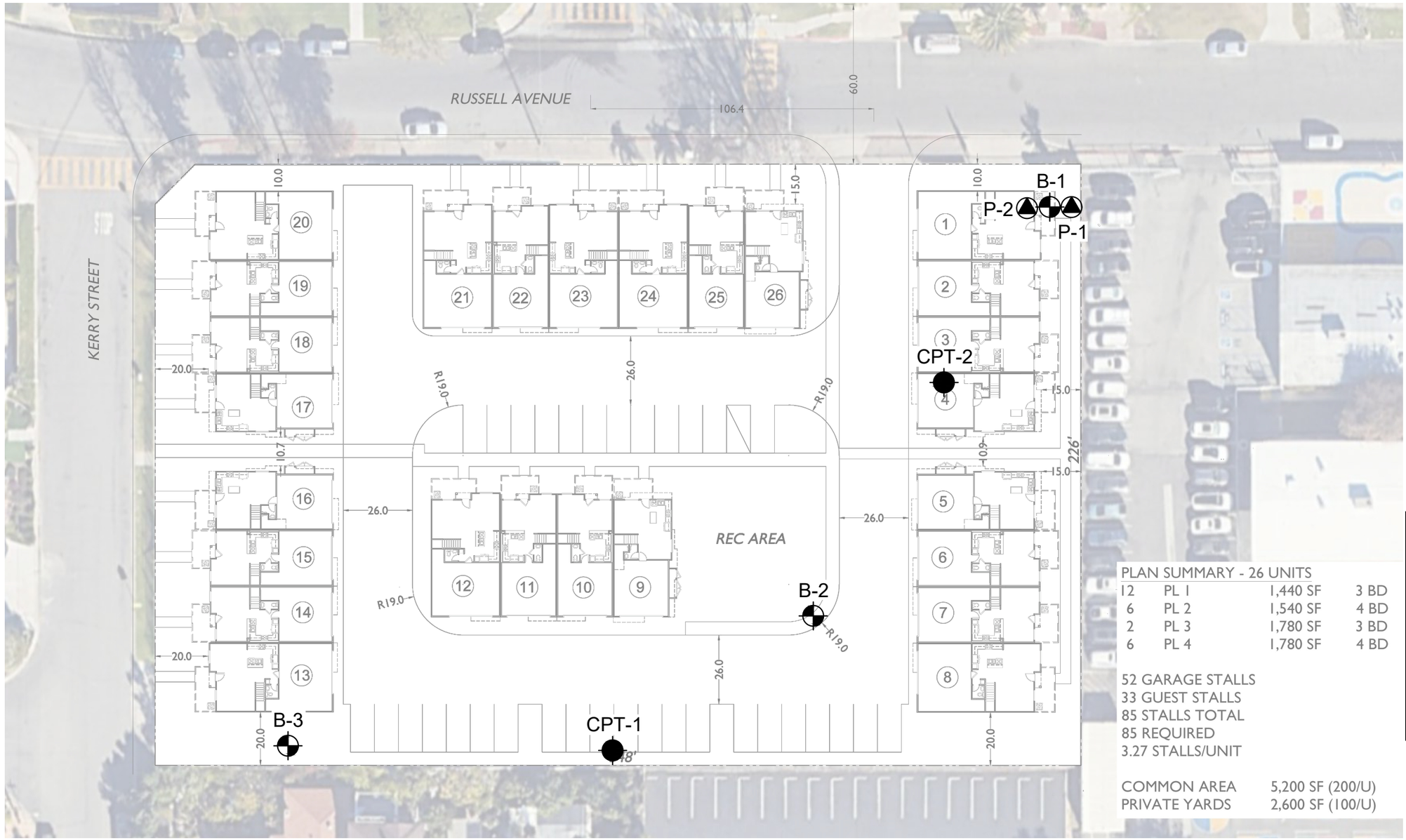
Albus & Associates, Inc., (2025), *Preliminary Geotechnical Investigation Report, Proposed Residential Development, 9822 Russell Avenue, Garden Grove, California*, dated July 1, 2025, J.N. 3341.00

California Department of Conservation, Division of Mines and Geology (1997), "*Seismic Hazard Zone Report for the Anaheim and Newport Beach 7.5-Minute Quadrangle, Orange Counties, California*", Seismic Hazard Report 003, 1997.

United States Department of The Interior, Bureau of Reclamation (1989), *Procedure for Performing Field Permeability Testing by the Well Permeameter Method*, (USBR 7300-89).

Plans

CA Engineering, Inc., *Water Quality Management Plan, BMP Exibit (Site Plan), Tr# 19447, 9822 Russell Avenue, Garden Grove, CA 92844*, dated October 8, 2025.



0 20 40 80

APPROX SCALE : 1" = 40'

EXPLANATION

(Locations Approximate)

- Exploratory Boring
- Percolation Testing
- CPT

PLAN SUMMARY - 26 UNITS

12	PL 1	1,440 SF	3 BD
6	PL 2	1,540 SF	4 BD
2	PL 3	1,780 SF	3 BD
6	PL 4	1,780 SF	4 BD

52 GARAGE STALLS
33 GUEST STALLS
85 STALLS TOTAL
85 REQUIRED
3.27 STALLS/UNIT

COMMON AREA	5,200 SF (200/U)
PRIVATE YARDS	2,600 SF (100/U)

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Base Provided By Summa Architecture

ALBUS ASSOCIATES

GEOTECHNICAL MAP

Job No.: 3341.00 | Date: 10/20/2025 | Plate: 1

APPENDIX A

EXPLORATORY LOGS

Field Identification Sheet

Light gray

Gray

Dark gray

Gray Brown

Light brown

Brown

Dark Brown

Olive brown

Olive

Yellow

Yellowish brown

Yellowish red

Red

Reddish Brown

Tan

Description Order:

Description, Color, Moisture, Density, Grain Size, Additional Description

Description	%	Example
	0-5	Sand
trace	5-15	Sand trace Silt
with	15-30	Sand with Silt
	30+	Silty Sand

More Examples

Sand with Silt trace Clay

Sand trace Silt and Clay

Sand with Silt and Clay

Gravelly Sand with Silt trace Clay

Silty Clay with Sand trace Gravel

Moisture

Dry	absence of water
Damp	below optimum
Moist	near optimum
Very Moist	above optimum
Wet	free water visible

Density (Navfac)

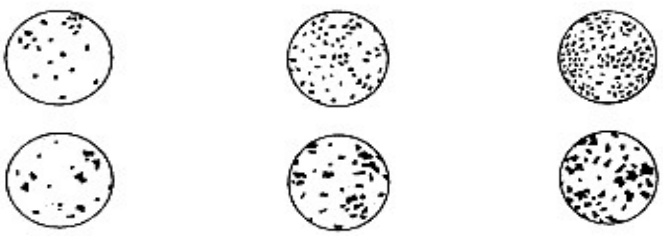
Coarse grained soils	SPT	CA
Very Loose	0-3	0-5
Loose	3-8	5-13
Medium Dense	8-14	13-22
Dense	14-25	22-40
Very Dense	25>	40>
Fine grained soils		
Very Soft	2<	0-3
Soft	2-4	3-6
Medium Stiff	4-8	6-13
Stiff	8-15	13-24
Very Stiff	15-30	24-48
Hard	30>	48>

Grain Size

Description		Sieve Size	Approx. Size
Boulders		>12"	Larger than basketball
Cobbles		3-12"	Fist to basketball
Gravel	coarse	3/4-3"	Thumb to Fist
	fine	#4-3/4"	Pea to Thumb
Sand	coarse	#10-4	Rock Salt to Pea
	medium	#40-10	Sugar to Rock Salt
	fine	#200-40	Flour to Sugar
Fines		Pass #200	Smaller than Flour

Additional Description (ie. roots, pinhole pores, debris, etc.)

Trace 5% Moderate 15% Abundant 30%



EXPLORATION LOG

Project:		Location:
Address:		Elevation:
Job Number:	Client:	Date:
Drill Method:	Driving Weight:	Logged By:

Depth (feet)	Lith-ology	Material Description	Water	Samples: Blows Per Foot	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		EXPLANATION							
		Solid lines separate geologic units and/or material types.							
		Dashed lines indicate unknown depth of geologic unit change or material type change.							
5		**Solid black rectangle** in Core column represents California Split Spoon sampler (2.5in ID, 3in OD).							
		Double triangle in core column represents SPT sampler.							
10		**Vertical Lines** in core column represents Shelby sampler.							
		Solid black rectangle in Bulk column respresents large bag sample.							
		Other Laboratory Tests:							
15		Max = Maximum Dry Density/Optimum Moisture Content							
		EI = Expansion Index							
		SO4 = Soluble Sulfate Content							
		DSR = Direct Shear, Remolded							
		DS = Direct Shear, Undisturbed							
		SA = Sieve Analysis (1" through #200 sieve)							
		Hydro = Particle Size Analysis (SA with Hydrometer)							
20		200 = Percent Passing #200 Sieve							
		Consol = Consolidation							
		SE = Sand Equivalent							
		Rval = R-Value							
		ATT = Atterberg Limits							

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76847	-117.95723	70.9

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							max ei so4 sa ph resist ch
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): tan, damp, medium grained				20	3	96	
3		**Alluvium (Qal)** Sand (SP): tan, damp, medium dense, fine to medium grained							
4						20	2.4	97.7	
5									
6		Sand trace Silt (SP): gray brown, very moist, loose, fine to medium grained				6	7.6	93.1	200
7									
8									
9									
10		Sandy Silt (ML): gray brown, very moist, very loose, fine to medium grained				5			
11									
12									
13									
14			▼						
15		@ 15 ft, wet, loose				3			200
16									
17									
18									
19									
20		Silty Sand / Sandy Silt (SM / ML): gray, wet, medium dense / very stiff, fine grained				14			200
21									
22									
23									
24									
25		Silty Sand (SM): gray, wet, loose, fine grained				6	25.5		att
26									
27									
28									
29									

EXPLORATION LOG B-1

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76847	-117.95723	70.9

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
31		Silty Sand / Sandy Silt (SM / ML): gray, wet, loose / stiff, fine grained				6			
32									
33									
34									
35		@ 35 ft, medium dense				9			200
36									
37									
38									
39									
40						8			
41									
42									
43									
44									
45		Silty Sand with Clay (SM-SC): gray, wet, medium dense, fine grained				11	27.8		att
46									
47									
48									
49									
50						8	34.3		
51									
52		Total Depth 51.5 feet Groundwater at 14 feet							
53									
54									
55									
56									
57									
58									
59									

EXPLORATION LOG B-2

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76805	-117.95752	70.7

LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, damp, fine to medium grained				19	6.8	99.9	
3									
4		**Alluvium (Qal)** Sand (SP): light brown, damp, medium dense, fine to medium grained				12	8.8	96.9	consol
5									
6		@ 4 ft, gray brown, moist, loose				6	12.4	89.8	
7									
8									
9									
10		Sandy Silt trace Clay (ML): gray brown, very moist to wet, very loose, fine grained				4	31.6	89.1	sa hydro
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

EXPLORATION LOG B-3

JOB NO.	CLIENT/PROJECT	DAY	DATE
3341.00	Melia Homes	Tuesday	2025-06-10

LOCATION	LATITUDE	LONGITUDE	ELEVATION
9822 Russell Avenue, Garden Grove	33.76792	-117.95817	71.3

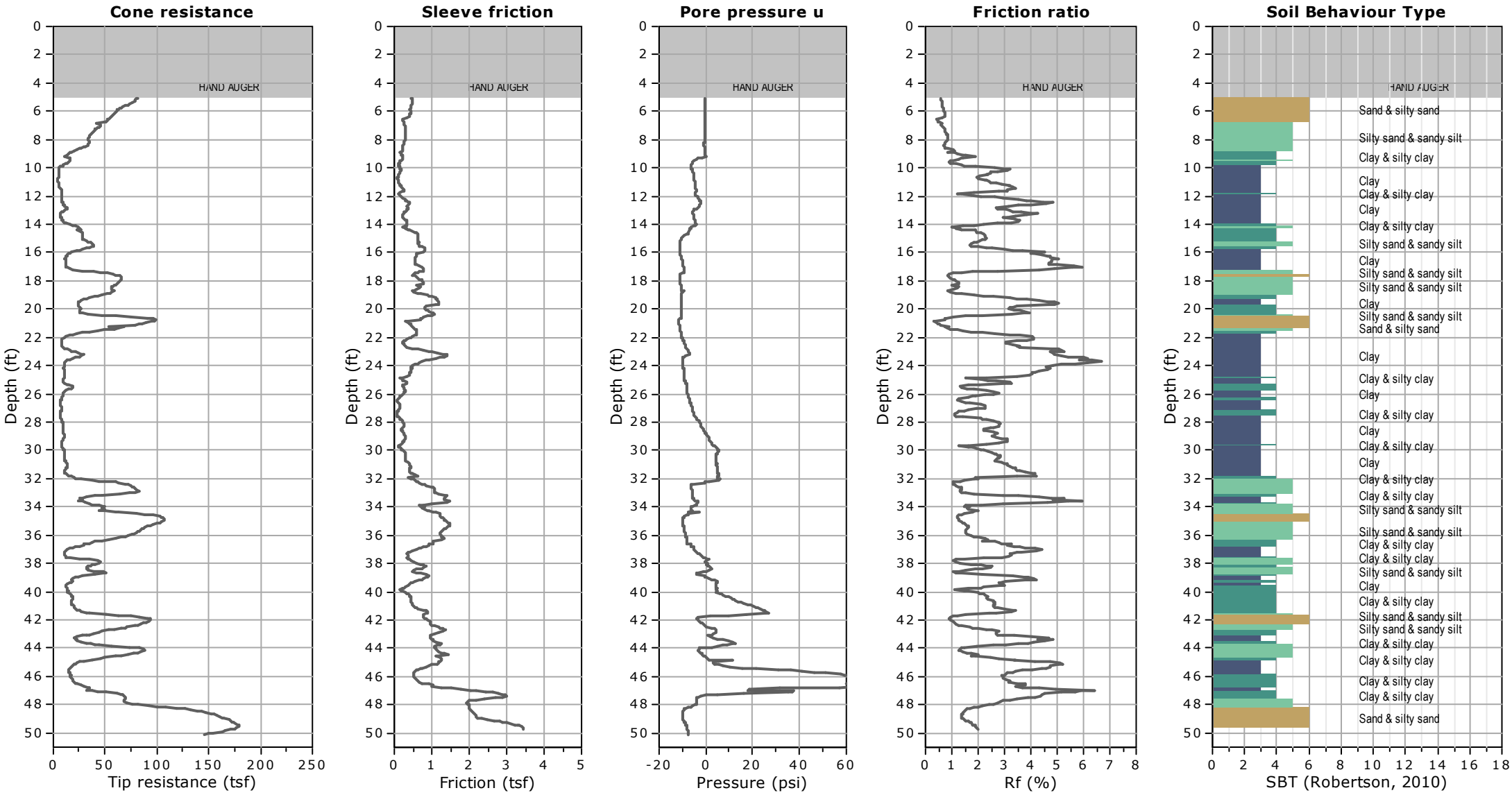
LOGGED BY	DRILLER	DRILL METHOD	DRIVING WEIGHT
klopez	2R Drilling	Hollow-Stem Auger	140 lbs / 30 in

DEPTH	LITHO	DESCRIPTION	H2O	COR	BAG	BLOW COUNT	MC (%)	DD (pcf)	LAB
1		Asphalt							
2		**Artificial Fill (Af)** Sand with Silt (SP-SM): light brown, moist, fine to medium grained				13	4.7	100.4	
3									
4		**Alluvium (Qal)** Sand (SP): brown, damp to moist, loose, fine to medium grained				16	8.4	100.2	
5									
6		@ 4 ft, medium dense				12	12.4	87.4	
7		@ 6 ft, loose							
8									
9									
10		Sandy Silt with Clay (ML): gray brown, moist, soft, fine grained				4	28.5	93.2	
11									
12		Total Depth 11.5 feet No Groundwater							
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

CPT-1
Total depth: 50.07 ft, Date: 6/10/2025



Kehoe Testing and Engineering
714-901-7270
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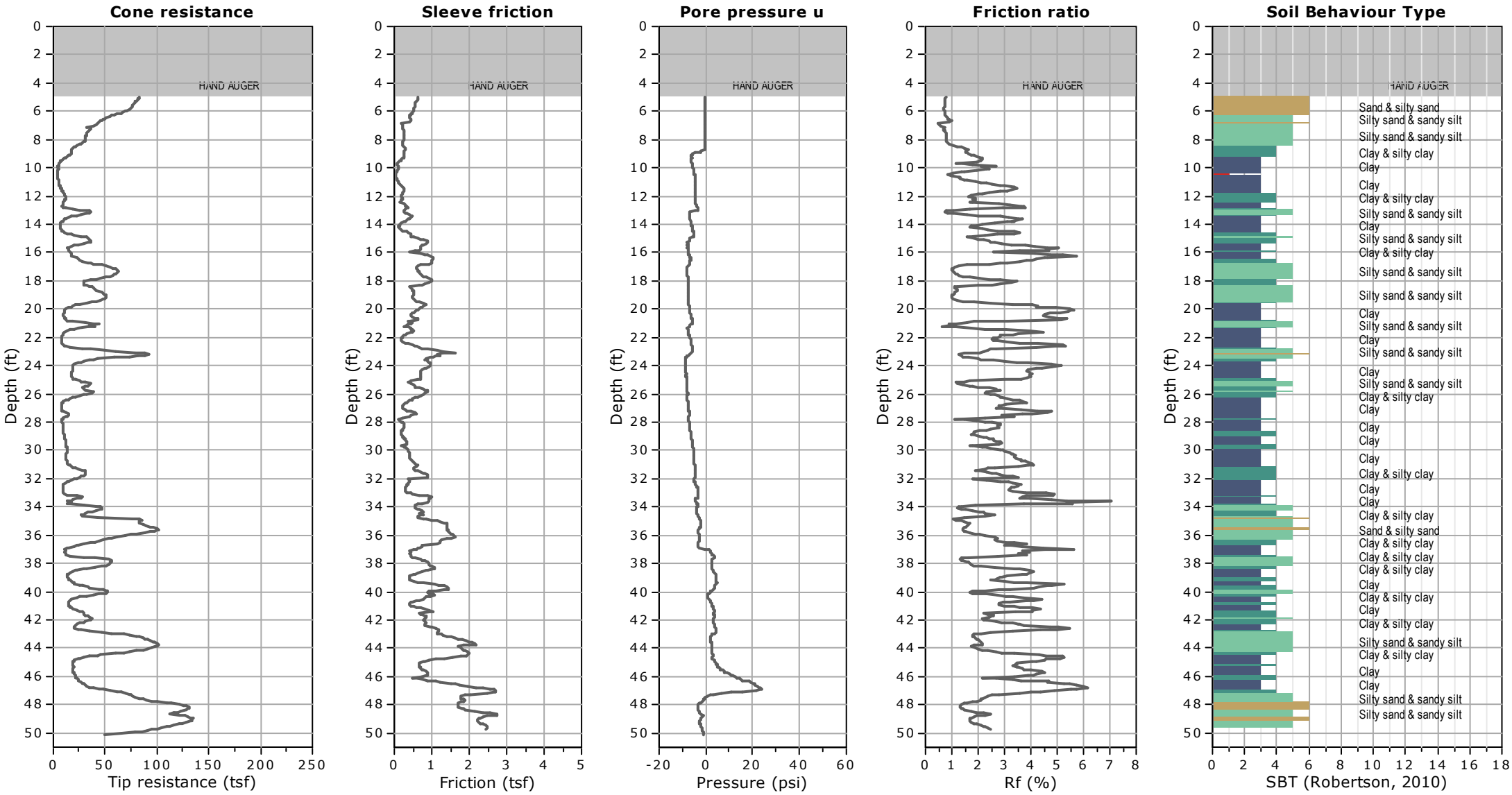
www.kehoetesting.com

Project: **Albus & Associates**
Location: **9822 Russell Avenue, Garden Grove, CA**

CPT-2
Total depth: 50.07 ft, Date: 6/10/2025



APPENDIX B

LABORATORY TEST PROGRAM

LABORATORY TESTING PROGRAM

Soil Classification

Soils encountered within the exploratory borings were initially classified in the field in general accordance with the visual-manual procedures of the Unified Soil Classification System (ASTM D 2487). The samples were re-examined in the laboratory and classifications reviewed and then revised where appropriate. The assigned group symbols are presented on the Exploration Logs provided in Appendix A.

In Situ Moisture and Density

Moisture content and unit dry density of in-place soil materials were determined in representative strata. Test data are summarized in the Boring Logs, Appendix A.

Particle-Size Analyses

Particle-size analyses were performed on selected samples in accordance with ASTM D 422. The results are presented graphically on the attached Plate B-1.

Percent Passing the No. 200 Sieve

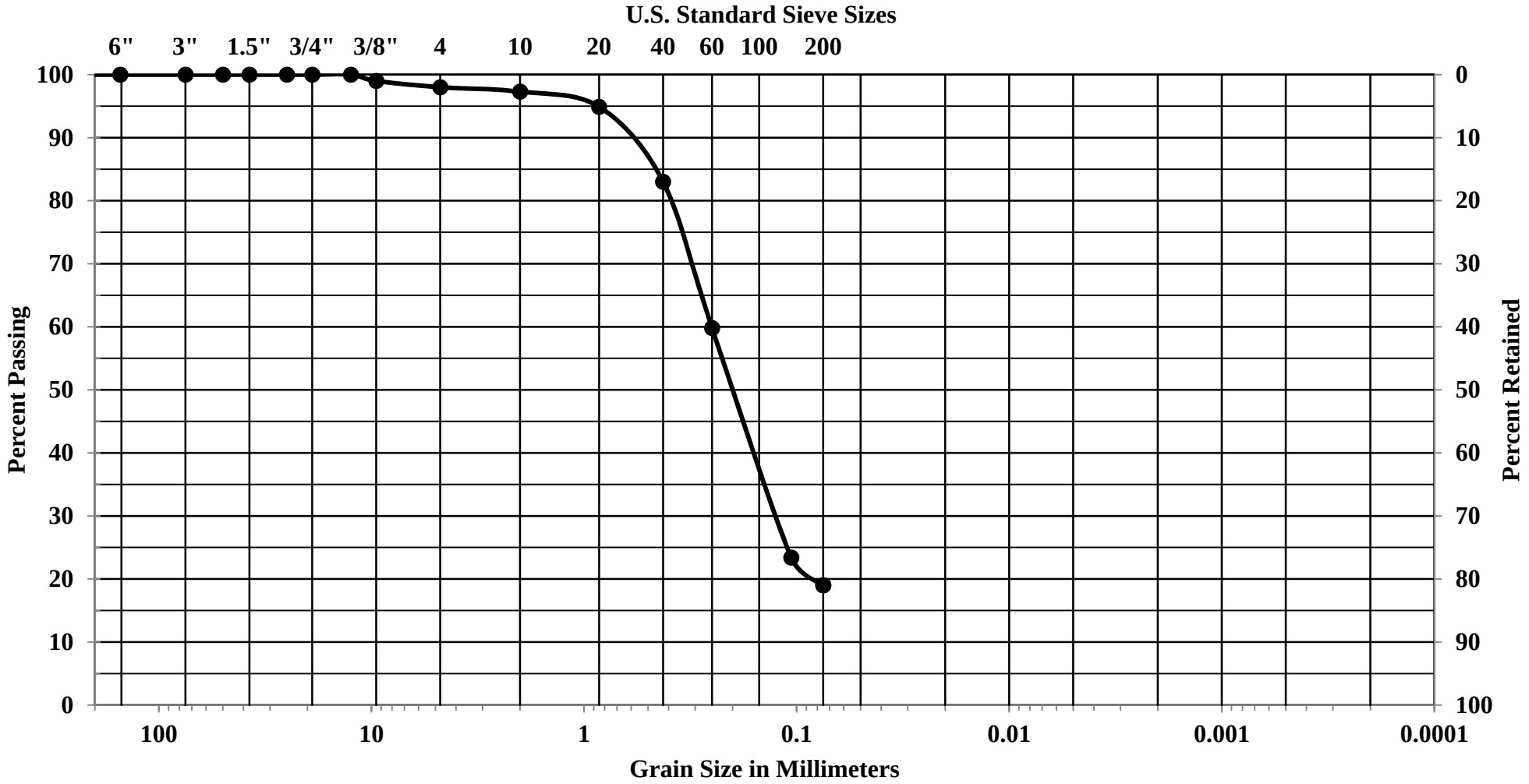
The percentage of material passing the No. 200 sieve was determined on selected samples to verify visual classifications performed in the field. These tests were performed in accordance with ASTM D1140. Test results are presented on Table B.

TABLE B
SUMMARY OF LABORATORY TEST RESULTS

Boring No.	Sample Depth (ft)	Soil Description	Test Results	
B-1	35	Silty Sand	Passing -200 (%):	45.5
B-2	6	Sand trace Silt (SP)	Passing -200 (%):	12.6
B-2	15	Sandy Silt	Passing -200 (%):	59.1
B-2	20	Sandy Silt	Passing -200 (%):	51

GRAIN SIZE DISTRIBUTION

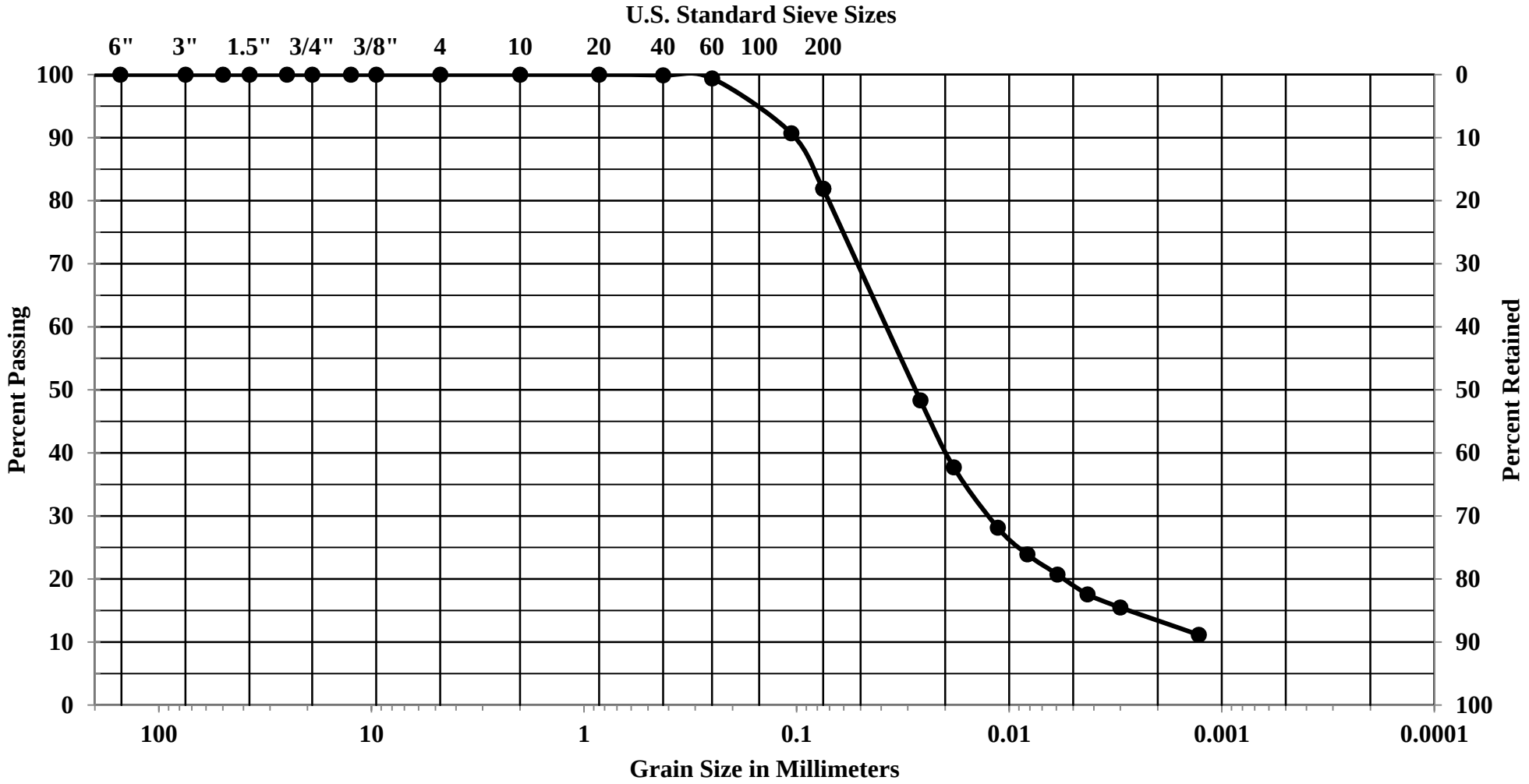
COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-1	0-5	Sand with Silt (SP-SM)

GRAIN SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



Job Number	Location	Depth	Description
3341.00	B-2	10	Silt trace Sand and Clay (ML)

APPENDIX C

PERCOLATION TESTING AND ANALYSES

Field Percolation Testing - Constant Head

Client: Melia Homes

Job. No.: 3341.00

Date Tested: 6/10/2025

Test by: ddalbus

Location: P-1

Top of Casing to Bottom of Well (ft): 5

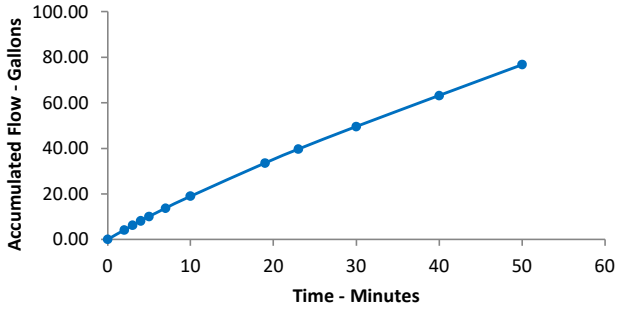
Elev. of Ground Surface (ft):

Diam. of Test Hole (in): 8

Diam. of Casing (in): 3

Ht. to Top of Casing (ft): 0.25

Water Tempurature (C°):



Constant Head

Elapsed Time (minutes)	Time	Depth to H2O (ft)	Flow Rate (gal./min.)	Total H_2O used (gal)
0	12:00	2.95	2.12	0.00
2	12:02	2.9	2.00	4.12
3	12:03	2.9	1.96	6.18
4	12:04	2.85	1.86	8.16
5	12:05	2.8	1.82	10.07
7	12:07	2.8	1.68	13.75
10	12:10	2.80	1.56	19.00
19	12:19	2.80	1.48	33.58
23	12:23	2.85	1.36	39.66
30	12:30	2.85	1.36	49.60
40	12:40	2.85	1.36	63.20
50	12:50	2.85	1.36	76.80

Field Percolation Testing - Constant Head

Client: Melia Homes

Job. No.: 3341.00

Date Tested: 6/10/2025

Test by: ddalbus

Location: P-2

Top of Casing to Bottom of Well (ft): 4.9

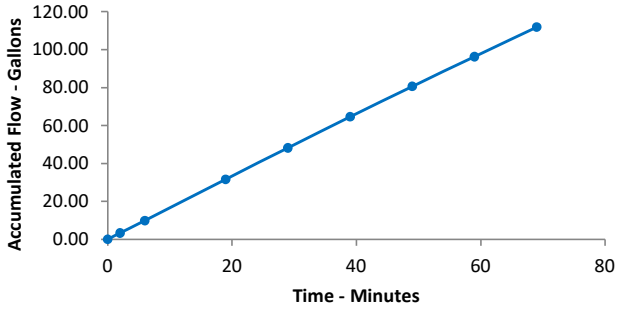
Elev. of Ground Surface (ft):

Diam. of Test Hole (in): 8

Diam. of Casing (in): 3

Ht. to Top of Casing (ft): 0.2

Water Tempurature (C°):



Constant Head

Elapsed Time (minutes)	Time	Depth to H2O (ft)	Flow Rate (gal./min.)	Total H_2O used (gal)
0	12:56	2.75	1.66	0.00
2	12:58	2.85	1.66	3.32
6	13:02	2.9	1.68	9.96
19	13:15	2.80	1.64	31.67
29	13:25	2.80	1.64	48.27
39	13:35	2.80	1.56	64.67
49	13:45	2.80	1.56	80.67
59	13:55	2.80	1.56	96.27
69	14:05	2.80	1.56	111.87

INFILTRATION WELL DESIGN

Constant Head
USBR 7300-89 Method
J.N.: 3341.00
Client: Melia Homes
Well No.: P-1

Low Water Table	Condition 1	
High Water Table & Water Below Bottom of Well	Condition 2	
High water Table with Water Above the Well Bottom	Condition 3	
		Units:
Enter Condition (1, 2 or 3):	2	
Ground Surface to Bottom of Well (h_1):	4.75	feet
Depth to Water (h_2):	2.6	feet
Height of Water in the Well (h_1-h_2=**h**):	2.15	feet
Radius of Well (**r**):	4.0	Inches
Minimum Volume Required:	223.2	Gal.
Discharge Rate of Water Into Well for Steady-State Condition (**q**):	1.36	Gal/min.
Temperature (**T**):	21	Celsius
(Viscosity of Water @ Temp. T) / (Viscosity of water @ 20° C) (**V**):	0.9647	ft^3/min.
Unsaturated Distance Between the Water Surface in the Well and the Water table (T_u):	9.4	
Factor of Safety:	1	
Coefficient of Permeability @ 20° C (k_{20}):	7.00E-03	ft/min.
Design k_{20}:	5.04	in./hr.

The presence or absence of a water table or impervious soil layer within a distance of less than three times that of the water depth in the well (measured from the water surface) will enable the water table to be classified as **Condition I**, **Condition II**, **Condtion III**.

Low Water Table-When the distance from the water surface in the test well to the ground water table, or to an impervious soil layer which is considered for test puposes to be equivalent to a water table, is greater than three times the depth of water in the well, classify as **Condition I**.

High Water Table-When the distance from the water surface in the test well to the ground water table or to an impervious layer is less than three times the depth of water in the well, a high water table condition exists. Use **Condition II** when the water table or impervious layer is below the well bottom. Use **Condition III** when the water table or impervious layer is above the well bottom.

INFILTRATION WELL DESIGN

Constant Head
USBR 7300-89 Method
J.N.: 3341.00
Client: Melia Homes
Well No.: P-2

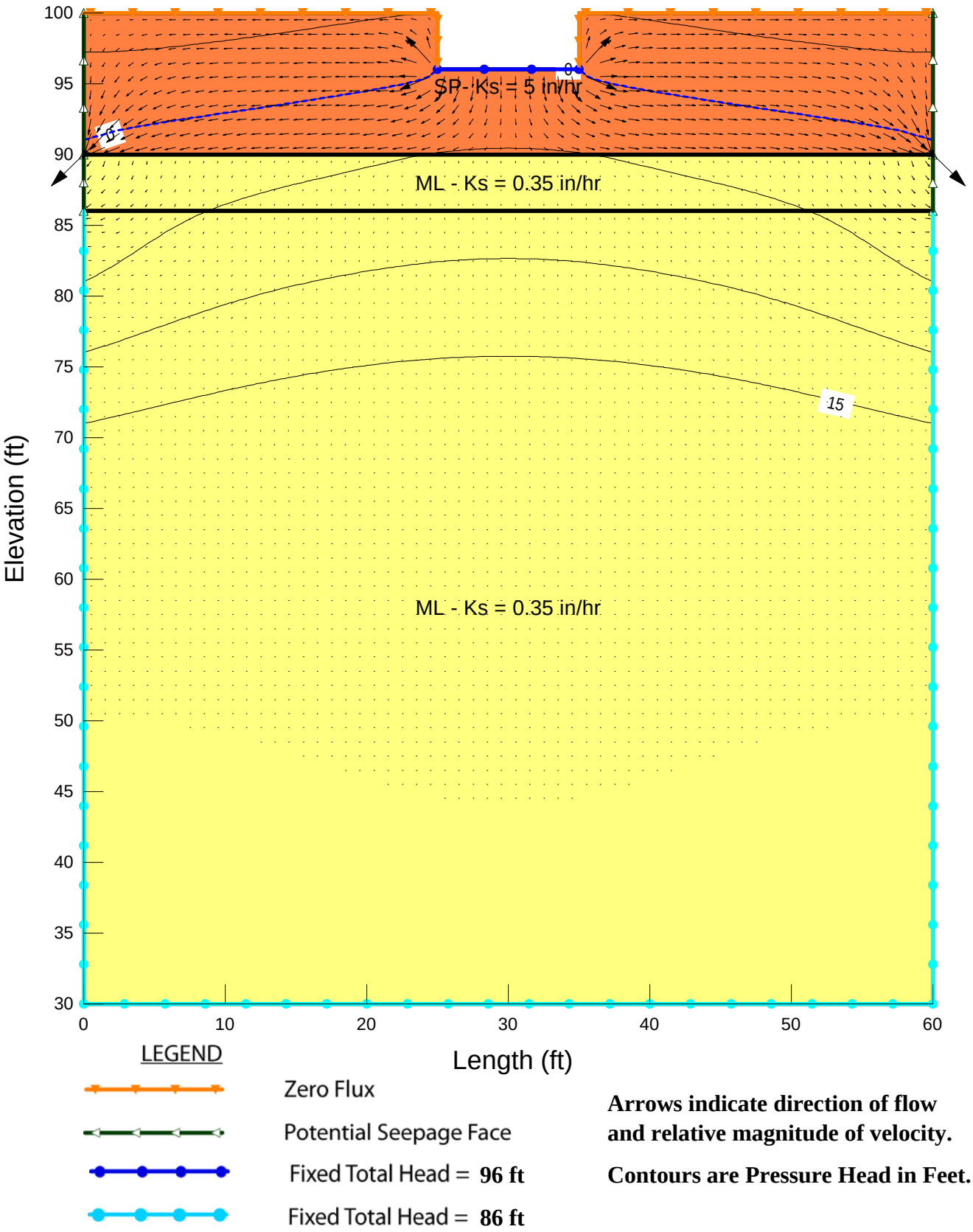
Low Water Table	Condition 1	
High Water Table & Water Below Bottom of Well	Condition 2	
High water Table with Water Above the Well Bottom	Condition 3	
		Units:
Enter Condition (1, 2 or 3):	2	
Ground Surface to Bottom of Well (h_1):	4.7	feet
Depth to Water (h_2):	2.6	feet
Height of Water in the Well (h_1-h_2=**h**):	2.1	feet
Radius of Well (**r**):	4.0	Inches
Minimum Volume Required:	212.7	Gal.
Discharge Rate of Water Into Well for Steady-State Condition (**q**):	1.56	Gal/min.
Temperature (**T**):	21	Celsius
(Viscosity of Water @ Temp. T) / (Viscosity of water @ 20° C) (**V**):	0.9647	ft^3/min.
Unsaturated Distance Between the Water Surface in the Well and the Water table (T_u):	9.4	
Factor of Safety:	1	
Coefficient of Permeability @ 20° C (k_{20}):	8.14E-03	ft/min.
Design k_{20}:	5.86	in./hr.

The presence or absence of a water table or impervious soil layer within a distance of less than three times that of the water depth in the well (measured from the water surface) will enable the water table to be classified as **Condition I**, **Condition II**, **Condtion III**.

Low Water Table-When the distance from the water surface in the test well to the ground water table, or to an impervious soil layer which is considered for test puposes to be equivalent to a water table, is greater than three times the depth of water in the well, classify as **Condition I**.

High Water Table-When the distance from the water surface in the test well to the ground water table or to an impervious layer is less than three times the depth of water in the well, a high water table condition exists. Use **Condition II** when the water table or impervious layer is below the well bottom. Use **Condition III** when the water table or impervious layer is above the well bottom.

STEADY STATE



Arrows indicate direction of flow and relative magnitude of velocity.

Contours are Pressure Head in Feet.

APPENDIX G

OPERATION AND MAINTENANCE (O&M) PLAN

Operation and Maintenance (O&M) Plan

Water Quality Management Plan
for

RUSSELL AVENUE TOWNHOMES
(TTM 19447)

9822 Russell Avenue
Garden Grove, CA 92844

Appendix G, Operation and Maintenance Plan
Note: OWNER = Melia Homes, Inc.

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Non-Structural Source Control BMPs			
Y	**N1. Education for Property Owners, Tenants and Occupants** For developments with POA and residential projects of more than fifty (50) dwelling units, project conditions of approval will require that the POA periodically provide environmental awareness education materials, made available by the municipalities, to all of its members. Among other things, these materials will describe the use of chemicals (including household type) that should be limited to the property, with no discharge of wastes via hosing or other direct discharge to gutters, catch basins and storm drains. Educational materials available from the County of Orange can be downloaded here: **http://www.ocwatersheds.com/PublicEd/resources/default.aspx** (TGD Section 6.2)	Educational materials shall be provided upon owner occupancy. Refer to Section VII for a list of educational materials to be distributed to residential tenants. **Frequency: Upon owner occupancy, and annually thereafter**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**
Y	**N2. Activity Restrictions** If a POA is formed, conditions, covenants and restrictions (CCRs) must be prepared by the developer for the purpose of surface water quality protection. An example would be not allowing car washing outside of established community car wash areas in multi-unit complexes. Alternatively, use restrictions may be developed by a building operator through lease terms, etc. These restrictions must be included in the Project WQMP. (TGD Section 6.2)	The owner, through CCRs or another equally effective method, shall develop use restrictions. These will include, but are not limited to, use of pesticides and fertilizers consistent with City and County guidelines, prohibiting washing or hosing of walkways and driveways, and prohibiting the washing of cars on the property. **Frequency: Continuous**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**N3. Common Area Landscape Management** Identify on-going landscape maintenance requirements that are consistent with those in the County Water Conservation Resolution (or city equivalent) that include fertilizer and/or pesticide usage consistent with Management Guidelines for Use of Fertilizers (DAMP Section 5.5). Statements regarding the specific applicable guidelines must be included in the Project WQMP. (TGD Section 6.2.)	Maintenance shall be consistent with City requirements, plus fertilizer and/or pesticide usage shall be consistent with County Management Guidelines for Use of Fertilizers (OC DAMP Section 5.5). Typical maintenance includes mowing, trimming, replanting, and debris removal. **Frequency: Weekly**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**
Y	**N4. BMP Maintenance** The Project WQMP shall identify responsibility for implementation of each non-structural BMP and scheduled cleaning and/or maintenance of all structural BMP facilities.	Maintenance of BMPs implemented at the project site shall be performed at the frequency prescribed in this WQMP. Records of inspections and BMP maintenance shall be maintained by the owner and shall be available for review upon request. **Frequency: Continuous**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
N	**N5. Title 22 CCR Compliance**		
N	**N6. Local Water Quality Permit Compliance**		
N	**N7. Spill Contingency Plan**		
N	**N8. Underground Storage Tank Compliance**		
N	**N9. Hazardous Materials Disclosure Compliance**		
N	**N10. Uniform Fire Code Implementation**		
Y	**N11. Common Area Litter Control** For industrial/commercial developments and for developments with POAs, the owner/POA should be required to implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water. The owner/POA may contract with their landscape maintenance firms to provide this service during regularly scheduled maintenance, which should consist of litter patrol, emptying of trash receptacles in common areas, and noting trash disposal violations by tenants/homeowners or businesses and reporting the violations to the owner/POA for investigation.	Litter patrol, violation investigation, reporting and other litter control activities shall be performed in conjunction with maintenance activities. **Frequency: Weekly**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**N12. Employee Training** Education program (see N1) as it would apply to future employees of individual businesses. Developer either prepares manual(s) for initial purchasers of business site or for development that is constructed for an unspecified use makes commitment on behalf of POA or future business owner to prepare. An example would be training on the proper storage and use of fertilizers and pesticides, or training on the implementation of hazardous spill contingency plans.	The owner shall educate all new employees/managers on storm water pollution prevention, particularly good housekeeping practices prior to the start of the rainy season (October 1st). Refresher courses shall be conducted on an as needed basis. **Frequency: Annually**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**
N	**N13. Housekeeping of Loading Docks**		
Y	**N14. Common Area Catch Basin Inspection** For industrial/commercial developments and for developments with privately maintained drainage systems, the owner is required to have at least 80 percent of drainage facilities inspected, cleaned and maintained on an annual basis with 100 percent of the facilities included in a two-year period. Cleaning should take place in the late summer/early fall prior to the start of the rainy season. Drainage facilities include catch basins (storm drain inlets) detention basins, retention basins, sediment basins, open drainage channels and lift stations. Records should be kept to document the annual maintenance.	Catch basin inlets shall be inspected and, if necessary, cleaned prior to the storm season by October 1st each year and after all major storm events. **Frequency: Annually and Immediately After Major Storm Events**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**N15. Street Sweeping Private Streets and Parking Lots** Streets and parking lots are required to be swept prior to the storm season, in late summer or early fall, prior to the start of the rainy season or equivalent as required by the governing jurisdiction.	Parking lots and drive aisles must be swept every two weeks or more often if needed, including prior to the start of the rainy season (October 1st). **Frequency: Biweekly or More Often if Needed**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
	Structural Source Control BMPs		
Y	**S1. Provide Storm Drain System Stenciling and Signage** Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the municipal storm drain system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Stencils and signs alert the public to the destination of pollutants discharged into stormwater. The following requirements should be included in the project design and shown on the project plans: 1. Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the project area with prohibitive language (such as: "NO DUMPING-DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping. 2. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area. 3. Maintain legibility of stencils and signs. See CASQA Stormwater Handbook BMP Fact Sheet SD-13 for additional information.	Storm drain stencils shall be inspected for legibility, at a minimum, once prior to the storm season, and no later than October 1st of each year. Those signs determined to be illegible will be re-stenciled as soon as possible. **Frequency: Annually**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**
N	**S2. Design Outdoor Hazardous Material Storage Areas to Reduce Pollutant Introduction**		

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**S3. Design Trash Enclosures to Reduce Pollutant Introduction** Trash storage areas will be designed to reduce pollutant introduction. All trash container areas will meet the following requirements: - Paved with an impervious surface, designed to not allow run-on from adjoining areas, designed to divert drainage from adjoining roofs and pavements around the area, screened or walled to prevent off-site transport of trash; and - Provide solid roof or awning to prevent exposure to direct precipitation. - No trash area drains will be connected to the MS4.	**Frequency: Continuous**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**S4. Use Efficient Irrigation Systems & Landscape Design** Projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the municipal storm drain system. (Limited exclusion: detached residential homes.) The following methods to reduce excessive irrigation runoff shall be considered, and incorporated on common areas of development and other areas where determined applicable and feasible by the Permittee: 1. Employing rain shutoff devices to prevent irrigation after precipitation. 2. Designing irrigation systems to each landscape area's specific water requirements 3. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines. 4. Implementing landscape plan consistent with County Water Conservation Resolution or city equivalent, which may include provision of water sensors, programmable irrigation times (for short cycles), etc. 5. The timing and application methods of irrigation water shall be designed to minimize the runoff of excess irrigation water into the municipal storm drain system. 6. Employing other comparable, equally effective, methods to reduce irrigation water runoff. 7. Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider other design features, such as:	Maintain all common landscape areas utilizing planting materials with similar watering requirements to reduce excess irrigation runoff. Inspect and maintain the efficient irrigation systems installed for the common area landscaping to ensure the proper functioning of all water sensors, programmable irrigation cycles and rain shutoff valves. **Frequency: Monthly**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Y	**S4. Use Efficient Irrigation Systems & Landscape Design (Continued)** Use mulches (such as wood chips or shredded wood products) in planter areas without ground cover to minimize sediment in runoff. Install appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant material where possible and/or as recommended by the landscape architect. Leave a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible. Choose plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth. Irrigation practices shall comply with local and statewide ordinances related to irrigation efficiency.		

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
N	**S5. Protect Slopes and Channels**		
N	**S6. Loading Dock Areas**		
N	**S7. Maintenance Bays and Docks**		
N	**S8. Vehicle Wash Areas**		
N	**S9. Outdoor Processing Areas**		
N	**S10. Equipment Wash Areas**		
N	**S11. Fueling Areas**		
N	**S12. Hillside Landscaping**		

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
N	**S13. Wash Water Controls for Food Preparation Areas**		
N	**S14. Community Car Wash Racks**		

BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Low Impact Development BMPs		
Infiltration BMP # 1 Underground Infiltration Chambers (INF-7) Quarterly inspections of the underground infiltration BMPs shall be conducted utilizing the designed manholes/inspection ports. The BMPs shall be cleaned when inspection reveals that accumulated sediment or trash is clogging the system. Accumulated sediment and trash can be evacuated through the manholes.	**Frequency: Quarterly And Immediately After Major Storm Events**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**
Pretreatment BMP #1 Proprietary Catch Basin Insert Filters (Pretreatment for Infiltration) **(Oldcastle FloGard +Plus Catch Basin Insert Filter or Approved Equivalent)** Twice a year, prior to and after the rainy season, and after major storm events, the catch basin insert filters shall be visually inspected for damage, have all sediment and debris removed, and the filter medium pouches shall be replaced if necessary. The Applicant may conduct this maintenance itself, or may enter into a service contract for the maintenance of the insert filters as detailed in the Kristar FloGard +Plus Specifications /Maintenance Requirements brochure, a copy of which is attached hereto.	**Frequency: Every Six Months (Approximately April 1st and October 1st) and Immediately After Major Storm Events**	**Melia Homes, Inc. (the owner of the project) shall be responsible for all BMP operation and maintenance for the Project until a homeowners' association is formed, at which time all BMP operation and maintenance responsibilities shall be transferred to the homeowners' association.**

Required Permits

No permits are required for the implementation, operation, and maintenance of the BMPs described in this plan.

Recordkeeping

All records must be maintained for at least five (5) years and must be made available for review upon request.

Oldcastle Infrastructure™
A CRH COMPANY

FLOGARD+PLUS®
CATCH BASIN INSERT FILTER

Inspection and Maintenance Guide



DRAINAGE PROTECTION SYSTEMS
DPS
A division of
Oldcastle Infrastructure

Water

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed FloGard+Plus Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (wash racks, parking garages, etc.): On a recurring basis (no less than three times per year).

SERVICE PROCEDURES:

1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing FloGard+Plus catch basin inserts).
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc., shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary, and the pouch tethers re-attached to the liner's D-ring.
5. The grate shall be replaced.

REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium will be replaced with new material. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

DPS also has the capability of servicing all manner of storm drain filters, catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined-space trained and certified. Call us at (888) 950-8826 for further information and assistance.

FLOGARD+PLUS®
CATCH BASIN INSERT FILTER

OUR MARKETS



BUILDING STRUCTURES



COMMUNICATIONS



WATER



ENERGY



TRANSPORTATION

APPENDIX H

RECORD OF BMP IMPLEMENTATION, MAINTENANCE AND INSPECTION

RECORD OF BMP IMPLEMENTATION, MAINTENANCE AND INSPECTION

Today's Date: _____

Name of Person Performing Activity (Printed): _____

Signature: _____

BMP Name (As Shown in O&M Plan)	Brief Description of Implementation, Maintenance, and Inspection Activity Performed

APPENDIX I

ANNUAL CERTIFICATE OF COMPLIANCE

(BMP MAINTENANCE)

ANNUAL CERTIFICATE OF COMPLIANCE
(BMP INSPECTION & MAINTENANCE)

Project: Russell Avenue Townhomes (TR 19447) **Year:** _____
9822 Russell Avenue
Garden Grove, CA 92844

CERTIFICATION: I certify that the above-named project has complied with the inspection and maintenance frequencies specified for the onsite Best Management Practices (BMPs) detailed in the Operation and Maintenance Plan and the Water Quality Management Plan for the project. The project includes the following routine source control BMPs (marked with an "X"):

X	N1. Education for Property Owners, Tenants and Occupants	X	S1. Provide storm drain system stenciling and signage
X	N2. Activity Restrictions		S2. Design and construct outdoor material storage areas to reduce pollution introduction
X	N3. Common Area Landscape Management	X	S3. Design and construct trash and waste storage areas to reduce pollution introduction
X	N4. BMP Maintenance	X	S4. Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control
	N5. Title 22 CCR Compliance (How development will comply)		S5. Protect slopes and channels and provide energy dissipation
	N6. Local Industrial Permit Compliance		Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)
	N7. Spill Contingency Plan		S6. Dock areas
	N8. Underground Storage Tank Compliance		S7. Maintenance bays
	N9. Hazardous Materials Disclosure Compliance		S8. Vehicle wash areas
	N10. Uniform Fire Code Implementation		S9. Outdoor processing areas
X	N11. Common Area Litter Control		S10. Equipment wash areas
X	N12. Employee Training		S11. Fueling areas
	N13. Housekeeping of Loading Docks		S12. Hillside landscaping
X	N14. Common Area Catch Basin Inspection		S13. Wash water control for food preparation areas
X	N15. Street Sweeping Private Streets and Parking Lots		S14. Community car wash racks
	N16. Retail Gasoline Outlets		

Owner has also upheld the recommended inspection and maintenance schedule for the project's LID BMPs listed below:

Underground Infiltration Chambers
Oldcastle FloGard +PLUS Catch Basin Insert Filters

This facility is in compliance with the requirements of the City of Garden Grove, the Regional Water Quality Control Board and the National Pollution Discharge Elimination System.
Copies of site inspection and maintenance reports are on file at the main Facility offices.

Facility Owner / Director_____

Printed Name:_____ Date:_____

I hereby certify that this document and any attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Facility Owner / Director_____

Printed Name:_____ Date:_____

APPENDIX J

NOTICE OF TRANSFER OF RESPONSIBILITY FOR WQMP

NOTICE OF TRANSFER OF RESPONSIBILITY

WATER QUALITY MANAGEMENT PLAN

Russell Avenue Townhomes (TR 19447)

9822 Russell Avenue
Garden Grove, CA 92844

Submission of this Notice of Transfer of Responsibility constitutes notice to the City of Garden Grove that responsibility for the Water Quality Management Plan ("WQMP") for the subject property identified below, and implementation of that plan, is being transferred from the Previous Owner (and its agent) of the site (or a portion thereof) to the New Owner, as further described below.

I. Previous Owner/ Previous Responsible Party Information

Company/ Individual Name:		Contact Person:	
Street Address:		Title:	
City:	State:	ZIP:	Phone:

II. Information About Site Transferred

Name of Project (if applicable):	
Title of WQMP Applicable to site:	
Street Address of Site (if applicable):	
Planning Area (PA) and/ or Tract Number(s) for Site:	Lot Numbers (if Site is a portion of a tract):
Date WQMP Prepared (and revised if applicable):	

III. New Owner/ New Responsible Party Information

Company/ Individual Name:		Contact Person:	
Street Address:		Title:	
City:	State:	ZIP:	Phone:

IV. Ownership Transfer Information

General Description of Site Transferred to New Owner:	General Description of Portion of Project/ Parcel Subject to WQMP Retained by Owner (if any):

Lot/ Tract Numbers of Site Transferred to New Owner:
Remaining Lot/ Tract Numbers Subject to WQMP Still Held by Owner (if any):
Date of Ownership Transfer:

Note: When the Previous Owner is transferring a Site that is a portion of a larger project/ parcel addressed by the WQMP, as opposed to the entire project/parcel addressed by the WQMP, the General Description of the Site transferred and the remainder of the project/ parcel not transferred shall be set forth as maps attached to this notice. These maps shall show those portions of a project/ parcel addressed by the WQMP that are transferred to the New Owner (the Transferred Site), those portions retained by the Previous Owner, and those portions previously transferred by Previous Owner. Those portions retained by Previous Owner shall be labeled as "Previously Transferred".

V. Purpose of Notice of Transfer

The purposes of this Notice of Transfer of Responsibility are: 1) to track transfer of responsibility for implementation and amendment of the WQMP when property subject to the WQMP is transferred from the Previous Owner to the New Owner, and 2) to facilitate notification to a transferee of property subject to a WQMP that such New Owner is now the Responsible Party of record for the WQMP for those portions of the site that it owns.

VI. Certifications

A. Previous Owner

I hereby certify that _____is no longer the owner of the Transferred Site as described in Section II above. I have provided the New Owner with a copy of the WQMP applicable to the Transferred Site that the New Owner is acquiring from the Previous Owner.

Printed Name of Previous Owner Representative:	Title:
Signature:	Date:

B. New Owner

I hereby certify that _____is the owner of the Transferred Site, as described in Section II above, that I have been provided a copy of the WQMP, and that I have been informed and understand the New Owner's responsibilities related to the WQMP, its implementation, and Best Management Practices associated with it. I understand that by signing this notice, the New Owner is accepting all ongoing responsibilities for implementation and amendment of the WQMP for the Transferred Site, which the New Owner has acquired from the Previous Owner.

Printed Name of New Owner Representative:	Title:
Signature:	Date:

APPENDIX K

PRELIMINARY HYDROLOGY REPORT FOR TTM 19447, DATED OCTOBER 28, 2025

CA ENGINEERING, INC.

Planning • Engineering • Surveying

PRELIMINARY HYDROLOGY REPORT

FOR

T.T.M. 19447

9822 Russell Avenue

City of Garden Grove, CA

Date: October 28th, 2025



PLANS PREPARED UNDER THE SUPERVISION OF:

Fred Cornwell, P.E. - R.C.E 45591 Date 10/28/25

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1.0 INTRODUCTION

The purpose of this report is to present the hydrology analysis and drainage calculations for a proposed residential development located at 9822 Russell Avenue, in the City of Garden Grove, California. The site proposes to construct 26 townhomes and related improvements on approximately 1.80 acres. This report will determine the existing and proposed storm water runoff rates from the project site and determine the impact on the existing surrounding drainage facilities,

2.0 EXISTING DRAINAGE CONDITIONS

The project site is located in the City of Garden Grove, California, and is comprised of approximately 1.80 acres (78,537 square feet), and is located in a predominantly residential development area. The rectangular site is bounded by Russell Avenue to the north (beyond which are residential buildings), Sunnyside Elementary School to the east, Kerry Street to the west (beyond which are residential buildings), and residential buildings and a church to the south.

The northwest portion of the site is currently occupied by buildings housing a church and a preschool, and there is a small storage shed located near the southwest corner of the site. The remainder of the site is covered in asphalt drive aisles and parking areas, concrete hardscape, and landscaping.

The project site is rectangular in shape and has a relatively flat topography that generally slopes southwesterly with elevations ranging from about 74 to 72 feet above mean sea level (msl). Surface drainage sheet flows to either Russell Avenue or Kerry Street and is conveyed westerly and southerly until entering the storm drain system downstream via a catch basin on Donegal Drive near the Trask Avenue intersection. The project area currently has no water quality or drainage mitigation devices installed on-site.

3.0 PROPOSED DRAINAGE CONDITIONS

The drainage for the proposed project generally follows the existing flow characteristics. The site has been divided into four drainage areas, identified as Areas 1-4. Storm flows from each area will be collected via curb & gutters in the drive aisles and drain to one of four curb-opening catch basins. Drainage in the non-drive aisle areas will be captured via proposed area drains. All of the captured drainage will be directed to one of three underground infiltration BMP facilities that will be sized to treat the Design Capture Volume (DCV) as defined in the Technical Guidance Document for the WQMP.

During larger storm events, as with existing conditions, drainage for the proposed project will outlet onto either Russell Avenue or Kerry Street. In Area 1, the excess flows will bubble out of the Area 1 catch basin and be discharged to Russell Avenue via a parkway culvert. In Area 2, the excess flows will bubble out of the Area 2 catch basin and be discharged to Russell Avenue via the project driveway entrance. Overflow drainage for Areas 3 and 4 will bubble out of the Area 3 catch basin and be discharged to Kerry Street via a parkway culvert.

4.0 METHODOLOGY

The hydrology calculations for the study were completed using AES software based on the Orange County Hydrology Manual methodology. The Rational Method was used to determine the peak discharges for the pre-and post-developed conditions and can be found in Appendix “A” (existing) & Appendix “B” (proposed).

These peak flow rates for the 2, 10 and 100 year storm events will be compared in the results section of this report found below. The hydrologic sub areas and flow paths that produce these rates are shown on the Existing (Exhibit A) & Proposed (Exhibit B) hydrology maps.

5.0 HYDRAULICS

Note, the hydraulic calculations including the catch basin and pipe sizing will be analyzed in the Final Hydrology Report.

6.0 WATER QUALITY

The BMP facilities will be sized to capture and treat the Design Capture Volume (DCV) per the Technical Guidance Document as published by the County of Orange. The underground infiltration BMP facilities will be sized to store a total of 5,760 cubic feet of stormwater, which is in excess of the total DCV of 3,736 cubic feet.

Since there are no hydraulic conditions of concern (HCOC's), the flow will not have to be detained. When a larger storm event occurs that increases the runoff to a point where the underground infiltration BMP facilities are full, the excess flows be discharged to Russell Avenue or Kerry Street via parkway culverts or the driveway entrance.

7.0 FLOOD PLAIN DESIGNATION

The site falls within a Zone "X" designation under the FEMA Map 06059C0138J, dated December 3, 2009. Zone X (Shaded Orange Area) represents areas determined 0.2% annual chance flood hazard, area of 1% annual chance flood with average depth less than one foot or with drainage areas less than one square mile.

8.0 RESULTS

The results of the Existing and Proposed conditions for the existing site outlet location as shown on the hydrology maps are as follows:

	Existing Condition			Proposed Condition					Increase/ (Decrease)	%
	A1	∑A2/A3	TOTAL	A1	A2	A3	A4	TOTAL	-	-
Area	0.54 AC	1.26 AC	**1.80 AC**	0.48 AC	0.73 AC	0.42 AC	0.17 AC	**1.80 AC**	-	-
2 Year Storm	0.94 CFS	1.66 CFS	**2.60 CFS**	0.83 CFS	1.13 CFS	0.73 CFS	0.31 CFS	**3.00 CFS**	0.40 CFS	15.4%
10 Year Storm	1.69 CFS	3.01 CFS	**4.70 CFS**	1.51 CFS	2.05 CFS	1.33 CFS	0.56 CFS	**5.45 CFS**	0.75 CFS	16.0%
100 Year Storm	2.58 CFS	4.63 CFS	**7.21 CFS**	2.31 CFS	3.15 CFS	2.05 CFS	0.85 CFS	**8.36 CFS**	1.15 CFS	16.0%

Under proposed conditions, flows for the 2 year storm is increased by 15.4%, flows for the 10 year storm is increased 16.0%, and flows for the 100 year storm is increase by 16.0% when compared to existing conditions.

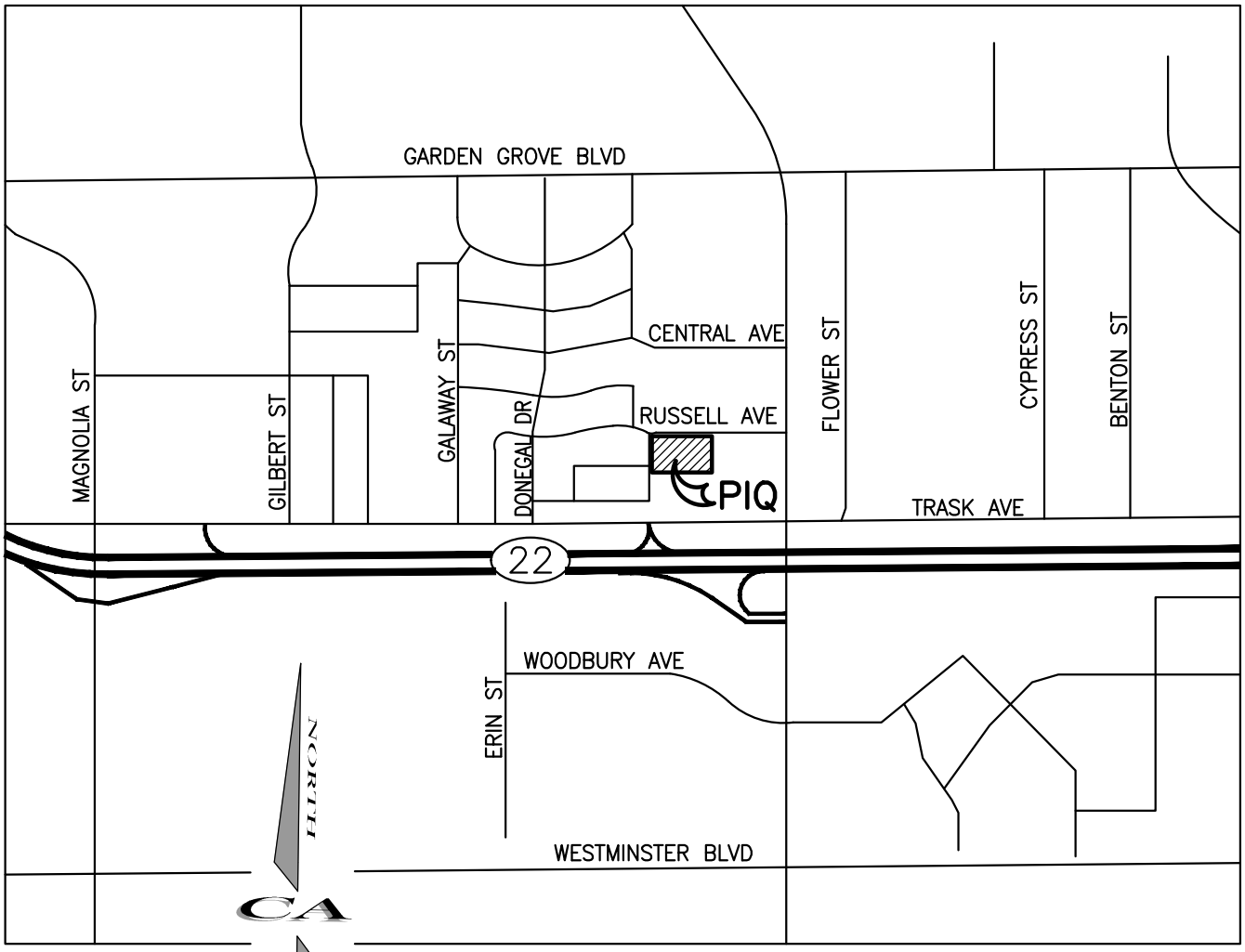
9.0 CONCLUSION

To meet water quality requirements, the DCV will be captured onsite with four curb inlet catch basins and treated in underground infiltration BMP facilities. During larger storm events, as with existing conditions, drainage for the proposed project will outlet onto Russell Avenue & Kerry Street.

During a 100 year storm event, existing flows (7.21 CFS) will be increase by 1.15 CFS under proposed conditions (8.36 CFS). For the 10 year storm event, existing flows (4.70 CFS) will be increased by 0.75 CFS under proposed conditions (5.45 CFS). For the 2 year storm event, existing flows (2.60 CFS) will be increased by 0.40 CFS under proposed conditions (3.00 CFS).

Since proposed flows are slightly increased from the existing flows, the proposed project site will have no significant impact on the existing surrounding drainage facilitates.

10.0 VICINITY MAP



VICINITY MAP

NOT TO SCALE

11.0 SOIL MAP



Map Scale: 1:1,010 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 19, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2024—Jul 1, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
163	Metz loamy sand	B	4.8	100.0%
Totals for Area of Interest			**4.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDICES

APPENDIX A: EXISTING RATIONAL METHOD, 2, 10, & 100 YEAR STORM FREQUENCY OUTPUT FILES.

```
_____
 ************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
          (c) Copyright 1983-2008 Advanced Engineering Software (aes)
              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                           Analysis prepared by:




  ************************** DESCRIPTION OF STUDY *************************
 * EXISTING CONDITION                                                    *
 * 2 YR STORM                                                            *
 *                                                                       *
  ************************************************************************

   FILE NAME: 491-22EX.DAT
   TIME/DATE OF STUDY: 13:24 10/27/2025
 ========================================================================
   USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
 ========================================================================
                      --*TIME-OF-CONCENTRATION MODEL*--

   USER SPECIFIED STORM EVENT(YEAR) =    2.00
   SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
   SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
   *DATA BANK RAINFALL USED*
   *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*

   *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
      HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
      WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)   (FT)    (n)
 ===  =====  =========  =================  ======  ===== ====== ===== =======
   1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

   GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
     1. Relative Flow-Depth =  0.00 FEET
        as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
     2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
   *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
    OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
   *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

 ************************************************************************
   FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
 ------------------------------------------------------------------------
   >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
   >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ========================================================================
   INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
   ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

   Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```

```
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.955
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30     0.100    36    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.94
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      0.94

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.617
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    36    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.30
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      1.30

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.491
  SUBAREA LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    36
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      1.53
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.82
  AVERAGE FLOW DEPTH(FEET) =   0.15   FLOOD WIDTH(FEET) =   14.53
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.36   Tc(MIN.) =   10.34
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    0.46
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       1.66

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.15   FLOOD WIDTH(FEET) =   15.47
  FLOW VELOCITY(FEET/SEC.) =   1.82   DEPTH*VELOCITY(FT*FT/SEC) =   0.28
```

```
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.34
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       1.66
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                            Analysis prepared by:

 ************************* DESCRIPTION OF STUDY *************************
* EXISTING CONDITION                                                    *
* 10 YR STORM                                                           *
*                                                                       *
 ************************************************************************

  FILE NAME: 491-22EX.DAT
  TIME/DATE OF STUDY: 13:28 10/27/2025
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   10.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ==================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
  ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.507
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30      0.100    56    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.69
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      1.69
```

```
****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.902
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    56    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.35
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      2.35

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.685
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      2.77
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   1.90
  AVERAGE FLOW DEPTH(FEET) =   0.18   FLOOD WIDTH(FEET) =   21.41
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.31   Tc(MIN.) =   10.29
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    0.84
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       3.01

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.19   FLOOD WIDTH(FEET) =   22.34
  FLOW VELOCITY(FEET/SEC.) =   1.93   DEPTH*VELOCITY(FT*FT/SEC) =   0.36
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.29
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       3.01
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                            Analysis prepared by:

 ************************* DESCRIPTION OF STUDY ************************
* EXISTING CONDITION                                                    *
* 100 YR STORM                                                          *
*                                                                       *
 ************************************************************************

  FILE NAME: 491-22EX.DAT
  TIME/DATE OF STUDY: 13:28 10/27/2025
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.    (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ==================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   173.00
  ELEVATION DATA: UPSTREAM(FEET) =     73.40  DOWNSTREAM(FEET) =     72.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.455
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.345
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.54      0.30      0.100    76    6.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.58
  TOTAL AREA(ACRES) =      0.54   PEAK FLOW RATE(CFS) =      2.58
```

```
****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   300.00
  ELEVATION DATA: UPSTREAM(FEET) =     74.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.981
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.423
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.91      0.30     0.100    76    8.98
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.60
  TOTAL AREA(ACRES) =      0.91   PEAK FLOW RATE(CFS) =      3.60

****************************************************************************
  FLOW PROCESS FROM NODE      4.00 TO NODE      5.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =     72.80
  DOWNSTREAM NODE ELEVATION(FEET) =     71.70
  CHANNEL LENGTH THRU SUBAREA(FEET) =   149.00
  "V" GUTTER WIDTH(FEET) =   5.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.050   MANNING'S N = .0140
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.01000
  MAXIMUM DEPTH(FEET) =   0.50
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.110
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.35      0.30     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      4.24
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.02
  AVERAGE FLOW DEPTH(FEET) =   0.21   FLOOD WIDTH(FEET) =   26.72
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.23   Tc(MIN.) =   10.21
  SUBAREA AREA(ACRES) =    0.35       SUBAREA RUNOFF(CFS) =    1.29
  EFFECTIVE AREA(ACRES) =    1.26     AREA-AVERAGED Fm(INCH/HR) =   0.03
  AREA-AVERAGED Fp(INCH/HR) =   0.30  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =        1.3         PEAK FLOW RATE(CFS) =       4.63

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.21   FLOOD WIDTH(FEET) =   27.97
  FLOW VELOCITY(FEET/SEC.) =   2.04   DEPTH*VELOCITY(FT*FT/SEC) =   0.44
  LONGEST FLOWPATH FROM NODE      3.00 TO NODE      5.00 =     449.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.3  TC(MIN.) =     10.21
  EFFECTIVE AREA(ACRES) =      1.26  AREA-AVERAGED Fm(INCH/HR)=  0.03
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       4.63
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

APPENDIX B: PROPOSED RATIONAL METHOD, 2, 10 & 100 YEAR STORM FREQUENCY OUTPUT FILES.

```
_____________________________________________________________________________
 ****************************************************************************
              RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
             (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
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              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                            Analysis prepared by:




  ************************** DESCRIPTION OF STUDY *************************
 * PROPOSED CONDITION                                                     *
 * 2 YR STORM                                                             *
 *                                                                        *
  ************************************************************************

   FILE NAME: 491-22PR.DAT
   TIME/DATE OF STUDY: 16:44 10/27/2025
 ============================================================================
   USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
 ============================================================================
                       --*TIME-OF-CONCENTRATION MODEL*--

   USER SPECIFIED STORM EVENT(YEAR) =    2.00
   SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
   SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
   *DATA BANK RAINFALL USED*
   *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*

   *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
      HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
      WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
 ===  =====  =========  =================  ======  ===== ====== ===== =======
   1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

   GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
     1. Relative Flow-Depth =  0.00 FEET
        as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
     2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
   *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
    OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
   *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

 ****************************************************************************
   FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
 ----------------------------------------------------------------------------
   >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
   >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ============================================================================
   INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
   ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

   Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```

```
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.981
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    36    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.83
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      0.83

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  1.773
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    36    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.13
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      1.13

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.001
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    36    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.73
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      0.73

****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
```

```
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  *   2 YEAR RAINFALL INTENSITY(INCH/HR) =  2.056
  SUBAREA Tc AND LOSS RATE DATA(AMC  I ):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.17      0.30     0.200    36    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.31
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.31
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.31
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
          (c) Copyright 1983-2008 Advanced Engineering Software (aes)
              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                           Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* PROPOSED CONDITION                                                      *
* 10 YR STORM                                                             *
*                                                                         *
 *************************************************************************

  FILE NAME: 491-22PR.DAT
  TIME/DATE OF STUDY: 16:50 10/27/2025
==============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==============================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   10.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.553
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
```

```
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    56    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.51
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      1.51

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.180
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    56    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.05
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      2.05

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.589
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    56    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      1.33
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      1.33

****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.688
```

```
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
        LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"        B        0.17      0.30      0.200    56    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.56
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.56
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.56
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
             RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
            (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
          (c) Copyright 1983-2008 Advanced Engineering Software (aes)
              Ver. 15.0  Release Date: 04/01/2008  License ID 1420

                           Analysis prepared by:




 ************************** DESCRIPTION OF STUDY **************************
* PROPOSED CONDITION                                                      *
* 100 YR STORM                                                            *
*                                                                         *
 *************************************************************************

  FILE NAME: 491-22PR.DAT
  TIME/DATE OF STUDY: 16:51 10/27/2025
==============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==============================================================================
                     --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =   6.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.85
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE      1.00 TO NODE      2.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.20

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.308
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.416
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
```

```
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.48      0.30     0.200    76    6.31
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.31
  TOTAL AREA(ACRES) =      0.48   PEAK FLOW RATE(CFS) =      2.31

****************************************************************************
  FLOW PROCESS FROM NODE      3.00 TO NODE      4.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   253.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.50  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.655
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.847
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.73      0.30     0.200    76    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      3.15
  TOTAL AREA(ACRES) =      0.73   PEAK FLOW RATE(CFS) =      3.15

****************************************************************************
  FLOW PROCESS FROM NODE      5.00 TO NODE      6.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   178.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.00  DOWNSTREAM(FEET) =     72.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.470
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"       B        0.42      0.30     0.200    76    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      2.05
  TOTAL AREA(ACRES) =      0.42   PEAK FLOW RATE(CFS) =      2.05

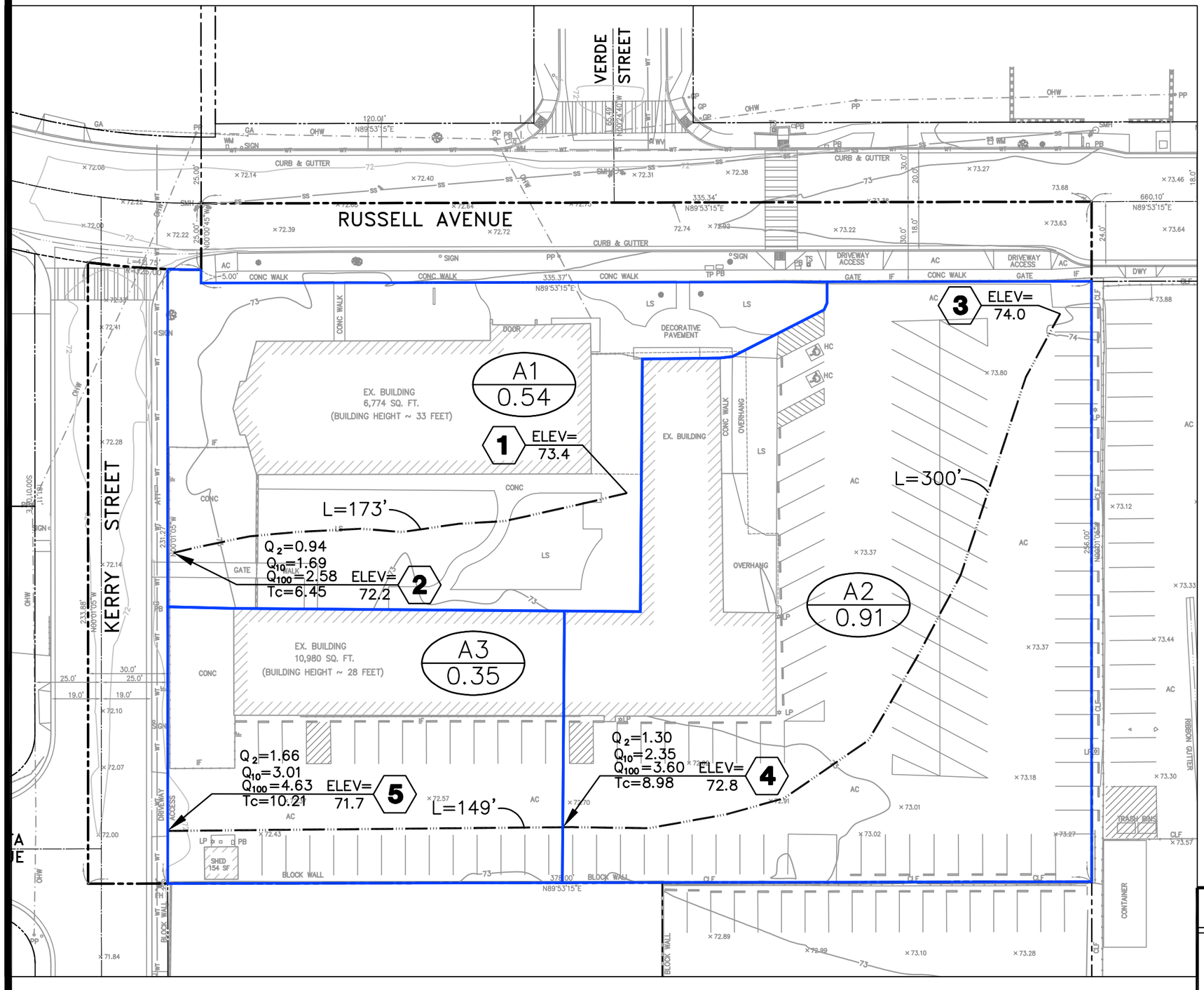
****************************************************************************
  FLOW PROCESS FROM NODE      7.00 TO NODE      8.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   162.00
  ELEVATION DATA: UPSTREAM(FEET) =     75.40  DOWNSTREAM(FEET) =     73.30

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.913
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.620
```

```
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/       SCS SOIL   AREA      Fp         Ap      SCS   Tc
        LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  RESIDENTIAL
  "11+ DWELLINGS/ACRE"        B        0.17      0.30      0.200    76    5.91
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.30
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
  SUBAREA RUNOFF(CFS) =      0.85
  TOTAL AREA(ACRES) =      0.17   PEAK FLOW RATE(CFS) =      0.85
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        0.2  TC(MIN.) =      5.91
  EFFECTIVE AREA(ACRES) =      0.17  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap = 0.200
  PEAK FLOW RATE(CFS)   =       0.85
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

EXHIBITS

EXHIBIT A: EXISTING CONDITION HYDROLOGY MAP



LEGEND:

DISCHARGE AT NODE (Q_{100} cfs) — NODE NUMBER

Q=13.41 EL= 527.8 (4)

Tc=11.37

TIME OF CONCENTRATION — F.S. ELEVATION AT NODE(ft)

SUBAREA BOUNDARY

L=205'

FLOWPATH

ENTIRE SITE = SOIL TYPE B

A2 / 1.83 — SUBAREA DESIGNATION / TRIBUTARY AREA (AC.)

NORTH

CA

GRAPHIC SCALE

0 20 50 80

(IN FEET)
1 inch = 40 ft.

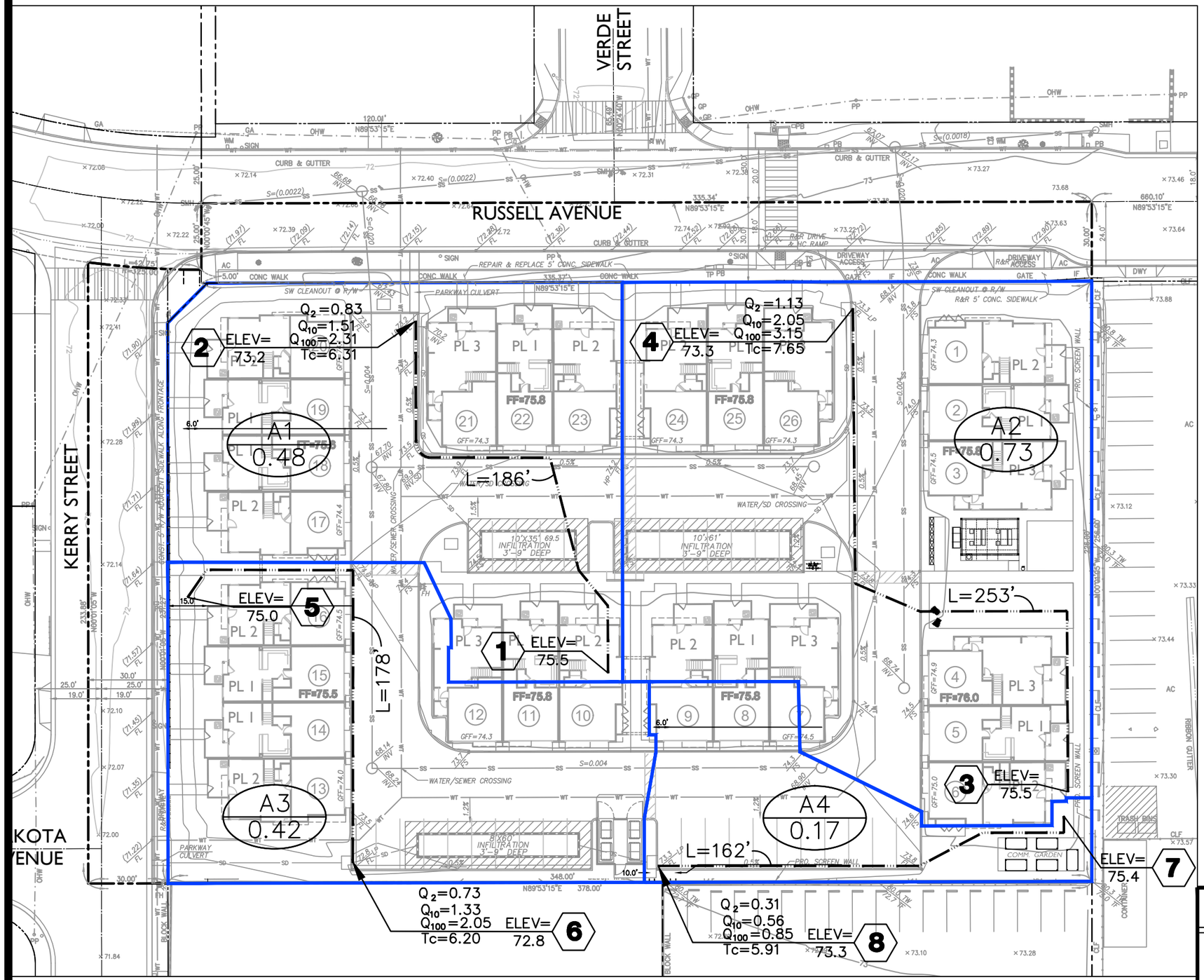
CITY OF GARDEN GROVE

HYDROLOGY MAP (EXISTING CONDITION)

9822 RUSSELL AVENUE
GARDEN GROVE, CA 92844

S:\491-22 Garden Grove_russell\HYDRO\491-22 HYDRO EX.dwg Last Modified: 27 Oct 2025 - 11:04am
Plotted on: 28 Oct 2025 - 2:40pm by cward

EXHIBIT B: PROPOSED CONDITION HYDROLOGY MAP



LEGEND:

DISCHARGE AT NODE (Q_{100} cfs) — NODE NUMBER

Q=13.41 EL= 527.8 (4)

Tc=11.37

TIME OF CONCENTRATION

F.S. ELEVATION AT NODE(ft)

SUBAREA BOUNDARY

L=205'

FLOWPATH

ENTIRE SITE = SOIL TYPE B

A2 / 1.83

SUBAREA DESIGNATION

TRIBUTARY AREA (AC.)

NORTH

CA

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

CITY OF GARDEN GROVE

HYDROLOGY MAP (PROPOSED CONDITION)

9822 RUSSELL AVENUE GARDEN GROVE, CA 92844

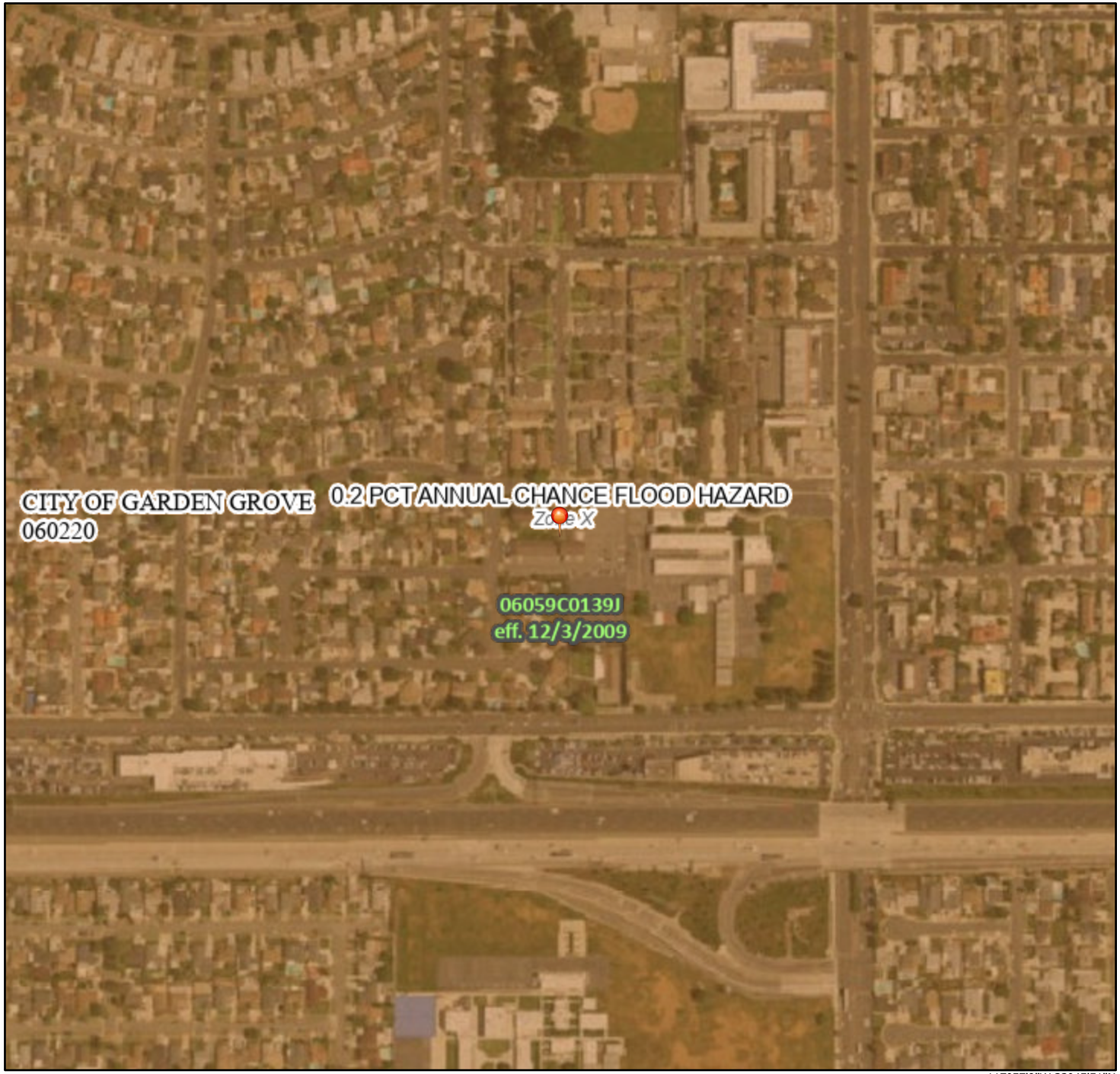
S:\491-22 Garden Grove russell\HYDRO\491-22 HYDRO PRO.dwg Last Modified: 28 Oct 2025 - 5:12pm
Plotted on: 03 Nov 2025 - 6:00pm by cward

EXHIBIT C: FIRM MAP

National Flood Hazard Layer FIRMette

FEMA

117°57'47"W 33°46'20"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

117°57'9"W 33°45'51"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

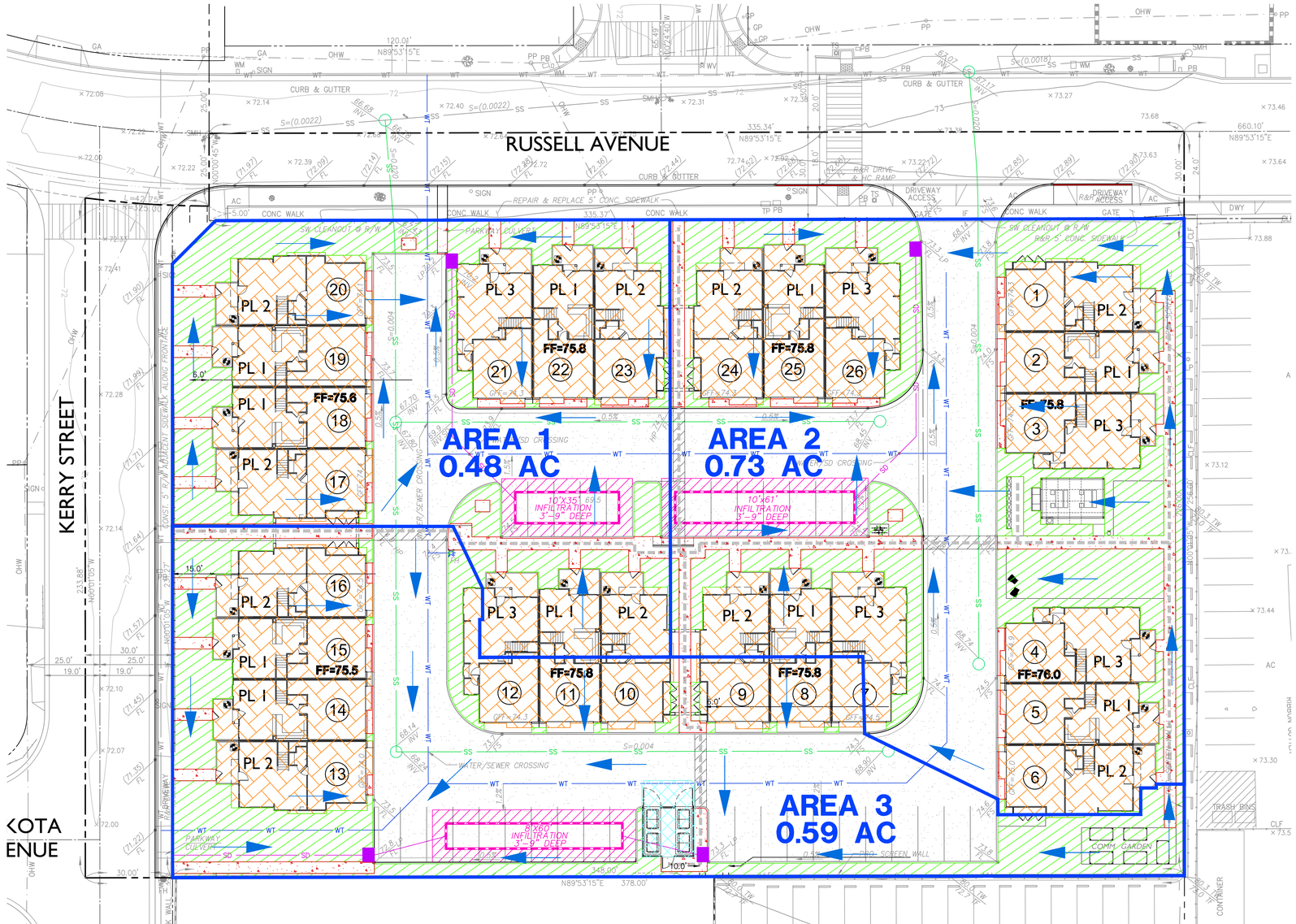
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/29/2025 at 1:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT D: WQMP SITE PLAN



BMP LEGEND

- DRAINAGE AREAS — **AREA 1**
- FLOW DIRECTION
- UNDERGROUND STORM DRAIN INFILTRATION CHAMBER
- LANDSCAPE AREA EFFICIENT IRRIGATION
  LANDSCAPE AREA RUNOFF–MINIMIZING DESIGN
- TRASH ENCLOSURE
- BUILDING
- CONCRETE HARDSCAPE
- ASPHALT CONCRETE DRIVE AISLES
- CATCH BASIN INSERT FILTERS
- PROPOSED STORM DRAIN
- PROPOSED SEWER
- EXISTING SEWER
- PROPOSED WATER
- EXISTING WATER

PROJECT DATA:

TOTAL SITE AREA OF PROPOSED DEVELOPMENT: 1.80 AC (78,537 SF)

BUILDING FOOTPRINT: 30,930 SF
WALKWAYS / CONC. GUTTER / DOCK AREAS: 8,096 SF
DRIVEWAYS / DRIVE AISLES / PARKING AREAS: 23,233 SF

16,278 SF LANDSCAPING PROVIDED
(20.7% PERVIOUS AREA)

CURRENT USE: COMMERCIAL
PROPOSED USE: RESIDENTIAL

WATERSHED:
ANAHEIM BAY – HUNTINGTON HARBOR

WATER QUALITY CALCULATIONS

FORMULAS

C = 0.75 * IMP % + 0.15
D = DESIGN CAPTURE STORM DEPTH (FIGURE III.1) = 0.77
Dremainder = D - Dhsc = 0.77 - 0 = 0.77
DCV = C * Dremainder * AREA (AC) * 43,560SF/AC * 1/12
A = DCV / Dp
INFILTRATION BASIN VOLUME (cf) = PROVIDED AREA * Dp

WQMP CALCULATIONS	AREA 1	AREA 2	AREA 3	TOTAL
AREA (sf)	20,945	31,680	25,912	**78,537**
% OF TOTAL AREA	26.7%	40.3%	33.0%	**100.0%**
AREA (ac)	0.48	0.73	0.59	**1.80**
LANDSCAPE (sf)	4,264	6,678	5,336	**16,278**
IMPERVIOUS %	79.6%	78.9%	79.4%	**79.3%**
C - RUNOFF COEFFICIENT	0.75	0.74	0.75	**0.74**
D - DESIGN STORM DEPTH	0.77	0.77	0.77	-
D-Remainder	0.77	0.77	0.77	-
DCV - DESIGN CAPTURE VOLUME (cf)	1,006	1,510	1,237	**3,753**
Dp - PONDING DEPTH (ft)	3.75	3.75	3.75	-
A - REQUIRED INFILTRATION BASIN AREA (sf)	268	403	330	-
PROVIDED INFILTRATION BASIN AREA (sf)	350	610	480	-
INFILTRATION BASIN VOLUME (cf)	1,313	2,288	1,800	-

NORTH

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PREPARED BY:

CA ENGINEERING, INC.
Planning • Engineering • Surveying
4101 BIRCH ST., STE 140
NEWPORT BEACH, CA 92660
949-724-9480 949-724-9484 FAX

OWNER:

MELIA HOMES INC.
9860 Irvine Center Drive
Irvine, CA 92618
Contact: Mr. Chad Brown
(949) 759-4367

Nov 03 2025

WATER QUALITY MANAGEMENT PLAN
BMP EXIBIT (SITE PLAN)
TR# 19447
9822 RUSSELL AVENUE
Garden Grove, CA 92844

SHEET 1 OF 1

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Plotted on: 03 Nov 2025 – 5:58pm by sweid

APPENDIX L

WATER QUALITY CONDITIONS OF APPROVAL

(TO BE INCLUDED IN FINAL WQMP)

APPENDIX M

ENGINEER'S CERTIFICATION FORM

NOISE AND VIBRATION IMPACT ANALYSIS

9822 RUSSELL AVENUE PROJECT

GARDEN GROVE, CALIFORNIA

LSA

March 2026

NOISE AND VIBRATION IMPACT ANALYSIS

9822 RUSSELL AVENUE PROJECT

GARDEN GROVE, CALIFORNIA

Submitted to:

Renee Escario
RE Consulting
5742 Calle Polvorosa
San Clemente, California 92673

Prepared by:

LSA
3210 El Camino Real, Suite 100
Irvine, California 92602
(949) 553-0666

Project No. 20252686

LSA

March 2026

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LIST OF ABBREVIATIONS AND ACRONYMS

ALUC	Airport Land Use Commission
Caltrans	California Department of Transportation
Caltrans Manual	California Department of Transportation's *Transportation and Construction Vibration Guidance Manual*
CCR	California Code of Regulations
City	City of Garden Grove
CMU	concrete masonry unit
CNEL	Community Noise Equivalent Level
D	distance from the receiver to a piece of equipment
dB	decibel(s)
dBA	A-weighted decibel(s)
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FTA Manual	Federal Transit Administration's 2018 *Transit Noise and Vibration Impact Assessment Manual*
HVAC	heating, ventilation, and air conditioning
in/sec	inches per second
JWA	John Wayne Airport
L_{50}	median noise level
L_{dn}	day-night average noise level
L_{eq}	equivalent continuous sound level
L_{max}	maximum instantaneous sound level
L_V	vibration velocity
Noise Element	Noise Element of the City of Garden Grove General Plan
PPV	peak particle velocity

project	9822 Russell Avenue Project
RMS	root-mean-square
SR-22	California State Route 22
V	root-mean-square velocity amplitude

INTRODUCTION

LSA prepared this Noise and Vibration Impact Analysis to evaluate the potential noise and vibration impacts and reduction measures associated with the proposed 9822 Russell Avenue Project (project) in Garden Grove, California. This report is intended to satisfy the City of Garden Grove's (City) requirement for a project-specific noise impact analysis by examining the impacts of the project site and evaluating noise reduction measures that the project may require.

PROJECT LOCATION

The project site is at 9822 Russell Avenue, in the central portion of Garden Grove. The site is approximately 0.12 mile north of State Route 22 (SR-22) and one block west of Brookhurst Street, both of which provide regional access to the site. Direct access to the site is provided by Russell Avenue to the north and Kerry Street to the west.

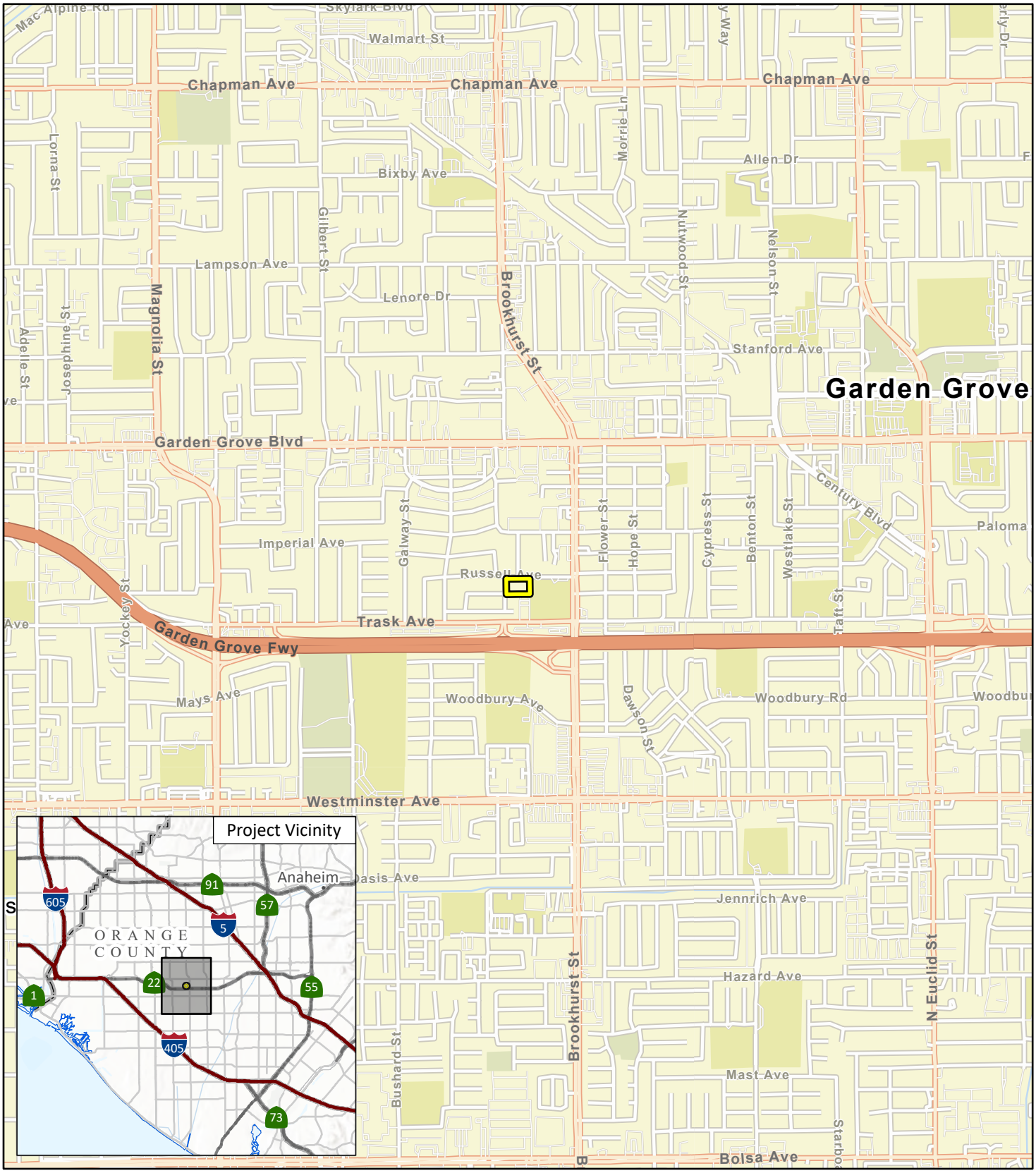
The project site is identified as Assessor Parcel Number 098-081-19 and is within the United States Geologic Survey *Anaheim* 7.5 Minute Series Topographic Quadrangle, and within Section 5, Township 5 South, Range 10. Figure 1 illustrates the regional and project locations.

EXISTING SITE CONDITIONS

The 1.81-acre project site is currently developed with a church, preschool, and daycare facility; a parking lot; and landscaping areas. The existing on-site development consists of three buildings that include a church structure located adjacent to Russel Avenue that is approximately 33 feet in height and topped with a church steeple and cross, and two buildings (a one-story and a two-story) that include a preschool/daycare and office areas. The two buildings are connected by a covered breezeway and the maximum height of the two-story preschool/office building is 28 feet.

The church sanctuary consists of 7,700 square feet, the office and meeting rooms used by the church total 7,892 square feet, and the preschool/daycare is 2,875 square feet, which totals 18,467 square feet of building space on the project site.

The project site has General Plan Land Use designation of Low Density Residential (LDR). The General Plan states that the LDR land use designation is characterized by detached, single-unit structures and accessory dwelling units, and allows up to 11 dwelling units per acre. The site is zoned Single-Family Residential (R-1). Section 9.08.020.020 of the Municipal Code states that the R-1 zone is intended to provide for the establishment and promotion of single-family detached residences on individual lots and compatible associated activities. Section 9.08.020.020 of the Municipal Code details that churches, child daycare centers, religious schools, educational institutions are permitted within the R-1 zone with a Conditional Use Permit.



LSA

FIGURE 1

9822 Russell Avenue Project

Project Location

SOURCE: Esri Street Map 2026

I:\2025\20252686\GIS\Pro\9822 Russell Avenue Project\9822 Russell Avenue Project.aprx (Fig 1 - Project Location)
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EXISTING LAND USES IN THE PROJECT AREA

The project site is within a developed and urban area and is adjacent to roadways, residential, school, and church uses as described below:

- **North:** Russell Avenue is adjacent to the north of the site followed by multifamily residential uses that have a General Plan land use and zoning designation of R-2 (Limited Multiple Residential).
- **East:** Sunnyside Elementary School is adjacent to the east of the site on land that has a General Plan land use and zoning designation of Open Space (O-S).
- **South:** Single-family residences and a church parking lot are adjacent to the south on land that has a General Plan land use and zoning designation of Single-Family Residential (R-1).
- **West:** Kerry Street is adjacent to the west of the site followed by single-family residences on land that has a General Plan land use and zoning designation of Single-Family Residential (R-1).

The nearest sensitive receptors are the existing residential uses approximately 10 feet south of the project site boundary.

PROJECT DESCRIPTION

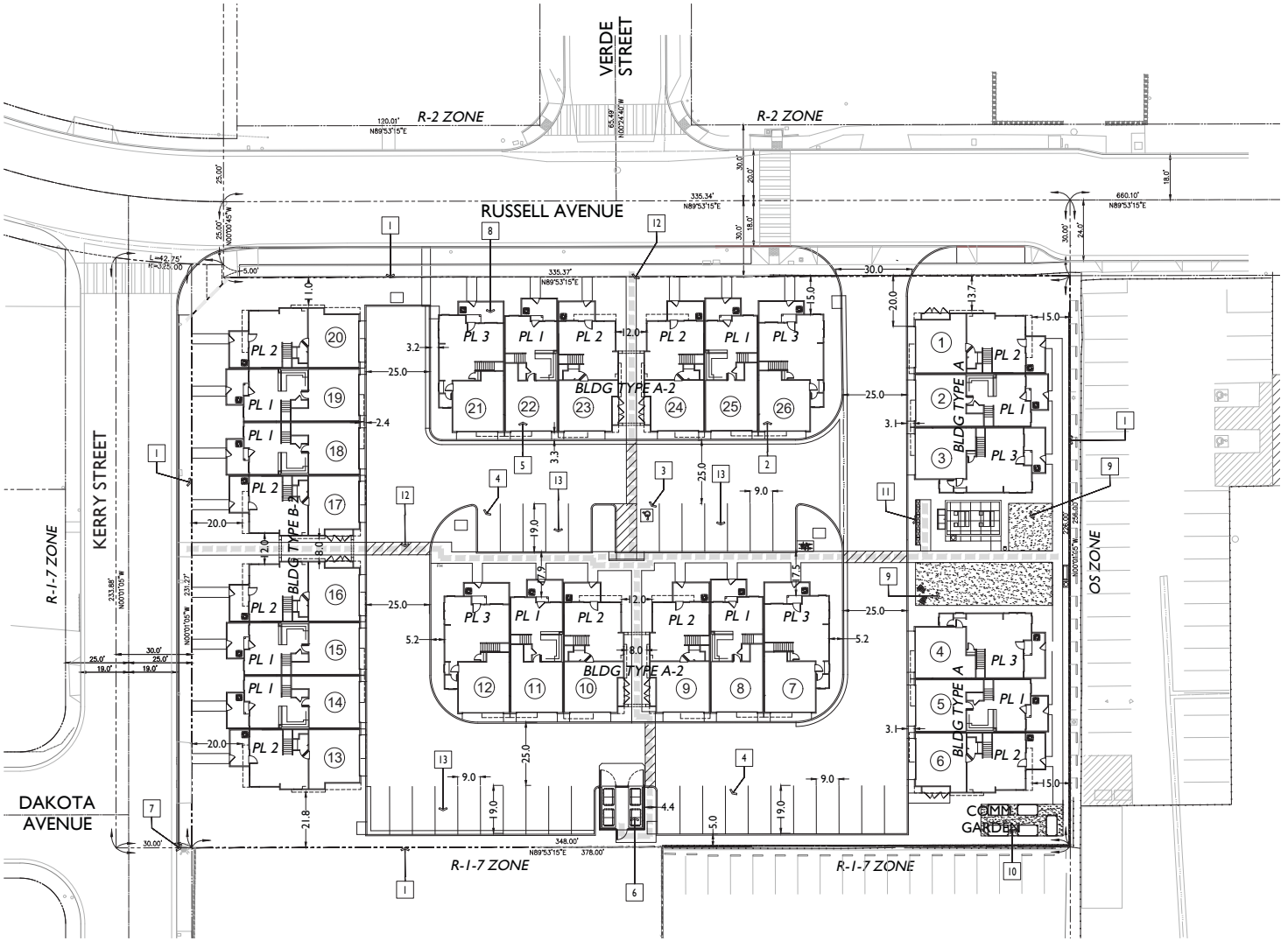
The project would demolish the existing church, preschool, and daycare facility building and improvements on the project site and construct 26 two-story townhome residences, open space/recreation, and parking. The project would include parking, open space, ornamental landscaping, and associated infrastructure. Figure 2 shows the site plan.

The two-story residential buildings would have a maximum height of 29 feet 9 inches. The project would result in a density of 14.4 dwelling units per acre. The residences would have a two-car garage and a ground-level patio that would be delineated by 3-foot, 6-inch-high vinyl fencing.

The townhome structures would be set back a minimum of 20-feet from the Kerry Street right-of-way, 11 feet from the 5-foot-wide sidewalk along Russell Avenue along the building sides, and 15 feet from building frontages facing Russell Avenue. In addition, building structures would be a minimum of 20 feet from the single-family residences to the south and a minimum of 15 feet from the eastern property line.

The project includes a 3,750 square foot central active open space recreation area with shade structures, barbecues with buffet countertops, picnic seating, a community garden with raised planter boxes, open turf, bench seating, and shade trees.

The project would install 6-foot-high concrete masonry unit (CMU) walls along the south and east site boundaries. In addition, the front patio area of each residence would be delineated by a 3-foot, 6-inch-high vinyl fencing while providing Americans with Disabilities Act path of travel through the site.



LSA

FIGURE 2

0 45 90
FEET

SOURCE: Suma Architechture

I:\2025\20252686\G\Site_Plan.ai (1/26/2026)

9822 Russell Avenue Project

Site Plan

The project applicant would install new, on-site water and sewer lines, which would connect to the existing 6-inch-diameter water main in Russell Avenue and the existing 8-inch sewer main within Russell Avenue to the north of the project site.

The project would install a new on-site drainage system to accommodate the proposed site plan. Stormwater runoff would be captured by catch basins that would route runoff to biofiltration treatment devices prior to infiltration into site soils.

Construction activities for the project would take place over 11 months in the following stages: (1) demolition and removal of existing structures/asphalt/pavement; (2) site preparation, which includes clearing any remaining infrastructure, utilities, and trenching for the new utilities/services; (3) grading and excavation; (4) building construction; and (5) landscape installation, paving, and application of architectural coatings.

The City's Municipal Code Chapter 8.47 limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. No construction work would be permitted on Sundays or federal holidays.

NOISE AND VIBRATION FUNDAMENTALS

CHARACTERISTICS OF SOUND

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, whereas loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a sound wave, which results in the tone's range from high to low. Loudness is the strength of a sound, and it describes a noisy or quiet environment; it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity is the average rate of sound energy transmitted through a unit area perpendicular to the direction in which the sound waves are traveling. This characteristic of sound can be precisely measured with instruments. The analysis of the project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

MEASUREMENT OF SOUND

Sound intensity is measured with the A-weighted decibel (dBA) scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound, similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike the linear scale (e.g., inches or pounds), are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense than 0 dB, and 30 dB is 1,000 times more intense than 0 dB. Thirty decibels (30 dB) represent 1,000 times as much acoustic energy as 0 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the sound's loudness. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound levels dissipate exponentially with distance from their noise sources. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations), the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source sound levels decrease 4.5 dB for each doubling of distance in a relatively flat environment with absorptive vegetation.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous

sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A-weighted decibels. CNEL is the time-weighted average noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the relaxation. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City uses the CNEL noise scale for long-term traffic noise impact assessment.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category includes audible impacts, which are increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

PHYSIOLOGICAL EFFECTS OF NOISE

Physical damage to human hearing begins at prolonged exposure to sound levels higher than 85 dBA. Exposure to high sound levels affects the entire system, with prolonged sound exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of sound exposure above 90 dBA would result in permanent cell damage. When the sound level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of sound is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by a feeling of pain in the ear (i.e., the threshold of pain). A sound level of 160–165 dBA will result in dizziness or a loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less developed areas.

Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of sound measurement that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, hertz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., the number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted unless reported otherwise.)
L_{01}, L_{10}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period, respectively.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time. Usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content, as well as the prevailing ambient noise level.

Sources: (1) *Technical Noise Supplement* (Caltrans 2013); (2) *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
Caltrans = California Department of Transportation
FTA = Federal Transit Administration

Table B: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	—
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	—
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	—
Near Freeway Auto Traffic	70	Moderately Loud	Reference level
Average Office	60	Quiet	One-half as loud
Suburban Street	55	Quiet	—
Light Traffic; Soft Radio Music in Apartment	50	Quiet	One-quarter as loud
Large Transformer	45	Quiet	—
Average Residence without Stereo Playing	40	Faint	One-eighth as loud
Soft Whisper	30	Faint	—
Rustling Leaves	20	Very Faint	—
Human Breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Source: Compiled by LSA (2022).

FUNDAMENTALS OF VIBRATION

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may not be discernible, but without the effects associated with the shaking of a building there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile-driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet of the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet as detailed in the Federal Transit Administration's (FTA) 2018 *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however,

construction of the project could result in ground-borne vibration that may be perceptible and annoying. Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise.

Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile-driving to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS is best for characterizing human response to building vibration, and PPV is used to characterize the potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where "L_v" is the vibration velocity in decibels (VdB), "V" is the vibration amplitude, and "V_{ref}" is the reference velocity amplitude, or 1 x 10^{-6} inches per second (in/sec) used in the United States.

REGULATORY SETTING

APPLICABLE NOISE STANDARDS

The applicable noise standards governing the project site include the criteria in the California Code of Regulations, the Noise Element of the City's General Plan (Noise Element) and the City's Municipal Code.

California Code of Regulations

Interior noise levels for residential habitable rooms are regulated by Title 24 of the California Code of Regulations (CCR) California Noise Insulation Standards. Title 24, Chapter 12, Section 1206.4, of the 2019 California Building Code requires that interior noise levels attributable to exterior sources not exceed 45 dBA CNEL/L_{dn} in any habitable room. A habitable room is a room used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable rooms for this regulation (CCR Title 24, Chapter 12, Section 1206.4).

City of Garden Grove

Noise Element of the General Plan

The City's General Plan Noise Element (City of Garden Grove 2008) has established exterior noise standards to identify and prevent the creation of incompatible land uses due to noise. For multifamily residential land uses, a noise environment of 50 to 65 dBA CNEL is "normally acceptable" and 60 to 70 dBA CNEL is considered to be conditionally acceptable. For low density, single-family, and duplex residential land uses, a noise environment of 50 to 60 dBA CNEL is "normally acceptable" and 55 to 70 dBA CNEL is conditionally acceptable. If a land use falls into the conditionally acceptable category, then new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

The Noise Element includes the following policies that are applicable to the project:

- **Policy N-1.1:** Require all new residential construction in areas with an exterior noise level greater than 55 dBA to include sound attenuation measures.
- **Policy N-1.2**: Incorporate a noise assessment study into the environmental review process, when needed for a specific project for the purposes of identifying potential noise impacts and noise abatement procedures.
- **Policy N-1.3:** Require noise reduction techniques in site planning, architectural design, and construction, where noise reduction is necessary consistent with the standards in Tables 7-1 and 7-2, Title 24 of the California Code of Regulations, and Section 8.47 of the Municipal Code.
- **Policy N-1.5:** Require the design of mixed-use structures to incorporate techniques to prevent the transfer of noise and vibration from the commercial to residential use.

Municipal Code

The City's Municipal Code establishes the following applicable standards applicable to noise. Section 8.47.040 states that ambient base noise levels contained in Table C shall be used as the basis for determining noise levels in excess of those allowed by this chapter unless the actual measured ambient noise level occurring at the same time as the noise under review is being investigated exceeds the ambient base noise level contained in Table C. When the actual measured ambient noise level exceeds the ambient base noise level, the actual measured ambient noise level shall be used as the basis for determining whether or not the subject noise exceeds the level allowed by this section. In situations where two adjoining properties exist within two different use designations, the most restrictive ambient base noise level will apply. Sections 8.47.040 and 8.47.050(C) state that the noise standard for a cumulative period of more than 30 minutes in any hour is the ambient base noise level plus 5 dBA, as measured at the property line of the noise generation property.

Table C: Ambient Base Noise Levels

Use Categories	Use Designations	Ambient Base Noise Level	Noise Level Standard	Time of Day
Sensitive	Residential Use	55 dBA	60 dBA	7:00 a.m. - 10:00 p.m.
		50 dBA	55 dBA	10:00 p.m. - 7:00 a.m.
Conditionally Sensitive	Institutional Use	65 dBA	70 dBA	Any Time
	Office-Professional Use	65 dBA	70 dBA	Any Time
	Hotels and Motels	65 dBA	70 dBA	Any Time

Source: City of Garden Grove (2025).
Note: The noise standard is the higher of the ambient base noise level or the measured ambient noise level, plus 5 dBA.
dBA = A-weighted decibel(s)

Construction noise is exempt from the provisions within the Municipal Code except as set forth in Section 8.47.060(D). Subsection D states that construction work within 500 feet from a residential area is prohibited outside the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. No construction work shall be permitted on Sundays or federal holidays.

Federal Transit Administration

The City does not have daytime construction noise level limits for activities within the specified hours of Section 8.47.060(D). Therefore, to determine potential California Environmental Quality Act noise impacts, construction noise was assessed using criteria from the FTA Manual. Table D shows the FTA's Detailed Assessment Construction Noise Criteria based on the composite noise levels per construction phase.

Table D: Detailed Assessment Daytime Construction Noise Criteria

Land Use	Daytime 1-hour L_{eq} (dBA)
Residential	80
Commercial	85
Industrial	90

Source: FTA (2018).
dBA = A-weighted decibel(s)
FTA = Federal Transit Administration
L_{eq} = equivalent continuous sound level

APPLICABLE VIBRATION STANDARDS

California Department of Transportation

Vibration standards included in the California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* (Caltrans Manual) (2020) are used in this analysis for ground-borne vibration impacts on human annoyance and building damage. The criteria for environmental impact from ground-borne vibration are based on the maximum levels for a single event and the RMS vibration level. Table E provides the criteria for assessing the potential for interference or annoyance from vibration levels in a building.

Table E: Interpretation of Vibration Criteria for Detailed Analysis

Human Response	Vibration Level (RMS in/sec)
Barely perceptible	0.01
Distinctly perceptible	0.04
Strongly perceptible	0.10
Severe	0.40

Source: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
Caltrans = California Department of Transportation
in/sec = inch/inches per second
RMS = root-mean-square

Table F lists the potential vibration building damage criteria associated with construction activities, as suggested in the Caltrans Manual. Caltrans guidelines show that a vibration level of up to 0.3 in/sec in PPV is considered safe for older residential structures and would not result in any construction vibration damage. Vibration levels of up to 0.5 in/sec in PPV are considered safe for newer residential structures and modern industrial or commercial buildings.

Table F: Construction Vibration Damage Criteria

Structure / Condition	PPV (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.08
Fragile buildings	0.10
Historic and some old buildings	0.25
Older residential structures	0.30
New residential structures	0.50
Modern industrial / commercial buildings	0.50

Source: *Transportation and Construction Vibration Guidance Manual,* Table 19 (Caltrans 2020).
Caltrans = California Department of Transportation PPV = peak particle velocity
in/sec = inch/inches per second

OVERVIEW OF THE EXISTING NOISE ENVIRONMENT

The primary existing noise sources in the project area include vehicle traffic on SR-22, Russell Avenue, Kerry Street, and other local roads in the project vicinity.

AMBIENT NOISE MEASUREMENTS

Long-Term Noise Measurements

To assess existing noise levels, LSA conducted two long-term noise measurements in the vicinity of the project site. The long-term (24-hour) noise level measurements were conducted on December 9 and 10, 2025, using two Larson Davis Spark 706RC dosimeters. Table G provides a summary of the measured hourly noise levels from the long-term noise level measurements. Appendix A provides noise measurement sheets. Figure 3 shows the long-term monitoring locations.

Table G: Existing Noise Level Measurements

Location Number	Location Description	Daytime Noise Levels[1] (dBA L_{eq})	Evening Noise Levels[2] (dBA L_{eq})	Nighttime Noise Levels[3] (dBA L_{eq})	Average Daily Noise Levels (dBA CNEL)
LT-1	9822 Russell Avenue, Garden Grove. On the northwest corner of the project site, on a tree. Approximately 940 feet from the SR-22 centerline, 30 feet from the Kerry Street centerline, and 45 feet from the Russell Avenue centerline.	54.6-61.9	57.7-58.7	54.3-64.0	66.8
LT-2	9822 Russell Avenue, Garden Grove. Near the southeast corner of the project site, on a light pole. Approximately 780 feet from the SR-22 centerline.	56.8-63.8	59.7-62.7	59.4-66.8	69.8

Source: Compiled by LSA (2026).
[1] Daytime Noise Levels = noise levels during the hours of 7:00 a.m. to 7:00 p.m.
[2] Evening Noise Levels = noise levels during the hours of 7:00 p.m. to 10:00 p.m.
[3] Nighttime Noise Levels = noise levels during the hours of 10:00 p.m. to 7:00 a.m.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level
SR-22 = California State Route 22

EXISTING AIRCRAFT NOISE

Aircraft flyovers may be audible on the project site due to aircraft activity in the vicinity. The nearest airports to the project are the Joint Forces Training Base Los Alamitos (60 dBA), located 5 miles to the west, Fullerton Municipal Airport (60 dBA), located 7.2 miles to the north, and John Wayne Airport (JWA), located 7.9 miles to the southeast. The project site is outside the 60 dBA CNEL noise contours of all three airports based on the Airport Land Use Commission (ALUC) Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos (ALUC 2017), the ALUC Airport Environs Land Use Plan for Fullerton Municipal Airport (ALUC 2019), and the JWA Airport 2022 Annual Community Noise Equivalent Level Contours (JWA 2024). Additionally, there are no helipads or private airstrips within 2 miles of the project area. Due to the distance of the project site from the nearest airport, this analysis does not further discuss impacts related to aircraft operations.



LSA

LEGEND

Project Site Boundary

LT-1 Long-term Noise Monitoring Location

0 75 150

FEET

SOURCE: Google Earth (2025)

I:\2025\20252686\G\Noise_Locs.ai (1/26/2026)

FIGURE 3

9822 Russell Avenue Project

Noise Monitoring Locations

PROJECT IMPACTS

SHORT-TERM CONSTRUCTION NOISE IMPACTS

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise-exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to 84 dBA L_{max}), the effect on longer-term ambient noise levels would be small compared to existing daily traffic volumes on Russell Avenue. The results of the California Emissions Estimator Model for the proposed project indicate that, during the demolition phase, the acoustical equivalent traffic volume would be 1,765 passenger car equivalent vehicles. Based on the Orange County Highway Design Manual (County of Orange 2005), the traffic volume on residential collector streets such as Russell Avenue, assumed to be the main construction access, is between 1,200 and 6,000 vehicles (average of 3,600 vehicles). When adding 1,765 to the existing average daily trips, the increase is 1.8 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during construction. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. Construction phases for the project would include demolition, site preparation, grading, building construction, paving, and architectural coating on the project site. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table H lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, taken from the Federal Highway Administration's (FHWA) *FHWA Roadway Construction Noise Model* (FHWA 2006).

In addition to the reference maximum noise level, the usage factor provided in Table H is used to calculate the hourly noise level impact for each piece of equipment based on the following equation:

$$L_{eq}(equip) = E.L. + 10\log(U.F.) - 20\log\left(\frac{D}{50}\right)$$

"L_{eq} (equip)" is the L_{eq} at a receiver resulting from the operation of a single piece of equipment over a specified time period,

"E.L." is the noise emission level of the particular piece of equipment at a reference distance of 50 feet,

"U.F." is the usage factor that accounts for the fraction of time that the equipment is in use over the specified period of time, and

"D" is the distance from the receiver to the piece of equipment.

Each piece of construction equipment operates as an individual point source. Using the following equation, a composite noise level can be calculated when multiple sources of noise operate simultaneously:

$$Leq\ (composite) = 10 * \log_{10}\left(\sum_{1}^{n} 10^{\frac{Ln}{10}}\right)$$

Using the equations from the methodology above, the reference information in Table H, and the construction equipment list provided, the composite noise levels of each construction phase were calculated. The project construction composite noise levels at a distance of 50 feet would range from 76 dBA L_{eq} to 87 dBA L_{eq}, with the highest noise levels during the site preparation and paving phases.

Table H: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)[1]	Maximum Noise Level (L_{max}) at 50 ft[2]
Auger Drill Rig	20	84
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Jackhammers	20	85
Paver	50	77
Pickup Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Trencher	50	80
Welder	40	73

Source: *FHWA Roadway Construction Noise Model User's Guide,* Table 1 (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
[2] Maximum noise levels were developed based on Specification 721.560 from the Central Artery/ Tunnel program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous sound level

Once composite noise levels are calculated, reference noise levels can then be adjusted for distance using the following equation:

$$Leq\ (at\ distance\ X) = Leq\ (at\ 50\ feet) - 20 * \log_{10}\left(\frac{X}{50}\right)$$

In general, this equation shows that doubling the distance would decrease noise levels by 6 dBA, and halving the distance would increase noise levels by 6 dBA.

Table I shows the nearest sensitive uses to the project site, their distances from the center of construction activities, and composite noise levels expected during construction. These noise level projections do not consider intervening topography or barriers. Appendix B provides construction equipment calculations.

Table I: Potential Construction Noise Impacts at Nearest Receptor

Receptor (Location)	Composite Noise Level (dBA L_{eq}) at 50 ft[1]	Distance (ft)[2]	Composite Noise Level (dBA L_{eq})
Residential Uses (North)	87	160	76
School (East)		175	76
Residential Uses/School (South)		120	79
Residential Uses (West)		220	74

Source: Compiled by LSA (2026).

[1] The composite construction noise level represents the site preparation and paving phases, which are expected to result in the greatest noise levels as compared to other phases.

[2] The assessment distance is associated with the average condition, identified by the distance from the center of construction activities to the property line of the surrounding uses.dBA = A-weighted decibels

ft = foot/feet

L_{eq} = equivalent continuous sound level

Although construction noise will vary, it is expected that composite noise levels during construction at the nearest off-site residential uses and the school to the south would approach 79 dBA L_{eq} during daytime hours. These predicted noise levels would only occur when all construction equipment is operating simultaneously and, therefore, are assumed to be rather conservative in nature. Although construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area under existing conditions, the noise impacts would cease once project construction is completed.

The proposed project will be required to comply with the construction hours specified in the City's Municipal Code Section 8.47.060(D), which states that construction activities are prohibited between 7:00 p.m. and 7:00 a.m. on Monday through Friday or 6:00 p.m. and 9:00 a.m. on Saturday or anytime on Sundays or federal holidays, such that the sound creates a noise disturbance across a residential or commercial property line.

As it relates to off-site uses, construction-related noise impacts would remain below the 80 dBA L_{eq} construction noise level criteria, as established by the FTA for residential land uses for the average daily condition as modeled from the center of the project site and therefore would be considered less than significant.

SHORT-TERM CONSTRUCTION VIBRATION IMPACTS

This construction vibration impact analysis discusses the level of human annoyance using vibration levels in RMS and assesses the potential for building damage using vibration levels in PPV (in/sec). This is because vibration levels calculated in RMS are best for characterizing human response to building vibration, and vibration level in PPV is best for characterizing the potential for damage.

Table J shows the PPV and RMS values at 25 feet from the construction vibration source. As shown in Table J, bulldozers and other heavy-tracked construction equipment (expected to be used for this project) generate approximately 0.089 in/sec PPV or 0.062 in/sec RMS of ground-borne vibration when measured at 25 feet, based on the Caltrans Manual. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings, and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Table J: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	RMS (in/sec)[1]
Pile Driver (Impact), Typical	0.644	0.451
Pile Driver (Sonic), Typical	0.170	0.119
Vibratory Roller	0.210	0.147
Hoe Ram	0.089	0.062
Large Bulldozer[2]	**0.089**	**0.062**
Caisson Drilling	0.089	0.062
Loaded Trucks (Dumpers/Tenders)[2]	**0.076**	**0.053**
Jackhammer	0.035	0.025
Small Bulldozer[2]	**0.003**	**0.002**

Source: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
[1] RMS vibration velocity is 70 percent of maximum PPV.
[2] Equipment shown in **bold** is expected to be representative of the equipment used on site.
Caltrans = California Department of Transportation
ft = foot/feet
in/sec = inches per second
L_V = vibration velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square

The formula for vibration transmission is provided below, and Tables K and L, below, provide a summary of off-site construction vibration levels. The material dampening coefficient, "n", ranges between 1.1 and 1.5 depending on soil type and distance from equipment.

$$PPV_{equip} = PPV_{ref} \times (25/D)^{n}$$

Table K: Potential Construction Vibration Annoyance Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (in/sec RMS) at 25 ft[1]	Distance (ft)[2]	Vibration Level (in/sec RMS)
Residential Uses (North)	0.062	180	0.007
School (East)		240	0.005
Residential Uses (South)		125	0.011
Residential Uses (West)		225	0.006

Source: Compiled by LSA (2026).
[1] The reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The assessment distance is associated with the average condition, identified by the distance from the center of construction activities to the nearest buildings within the surrounding uses.
ft = foot/feet
in/sec = inches per second
RMS = root-mean-square

Table L: Potential Construction Vibration Damage Impacts at Nearest Receptor

Receptor (Location)	Reference Vibration Level (in/sec PPV) at 25 ft[1]	Distance (ft)[2]	Vibration Level (in/sec PPV)
Residential Uses (North)	0.089	75	0.017
School (East)	0.089	65	0.021
Residential Uses (South)	0.089	10	0.352
	0.089	20[3]	0.124
	0.003	10	0.012
Residential Uses (West)	0.089	50	0.027

Source: Compiled by LSA (2026).
[1] This reference vibration level is associated with a large bulldozer, which is expected to be representative of the heavy equipment used during construction.
[2] The assessment distance is associated with the peak condition, identified by the distance from the perimeter of construction activities to surrounding structures.
[3] A distance of 20 ft from the perimeter of large equipment construction activity to the nearest structure to the south would apply with the implementation of Mitigation Measure (MM) NOI-1.
in/sec = inches per second
ft = foot/feet
PPV = peak particle velocity

As previously shown in Table E, the threshold at which vibration levels would result in annoyance would be 0.04 in/sec RMS. Based on the information provided in Table K, vibration levels are expected to approach 0.011 in/sec RMS at the closest receptors and would not exceed the annoyance thresholds.

As discussed above, the standards indicate that the construction vibration damage criterion is 0.3 in/sec PPV for older residential buildings. Based on the information provided in Table L, the

closest structures to construction activities are the residential uses to south, which are approximately 10 feet from the southern property line. Using the reference data from Table J and the equation above, it is expected that vibration levels generated by large bulldozers and other large equipment would generate ground-borne vibration levels of up to 0.352 in/sec PPV at the closest structures to the south of the project site. This vibration level would exceed the 0.3 in/sec PPV threshold considered safe for older residential structures. Mitigation measure MM NOI-1, shown below, would limit the use of large construction equipment such as large bulldozers within 10 feet of the southern property line, which would result in a 20-foot setback from the closest structures and would reduce vibration levels to 0.124 in/sec PPV at the closest structures to the south of the project site. This vibration level would not exceed the 0.3 in/sec PPV threshold considered safe for older residential structures. Vibration levels at all other buildings would be lower. Therefore, with the implementation of MM NOI-1, construction would not exceed the vibration damage threshold, and impacts would be less than significant.

MM NOI-1 The Community Development Director, or designee, shall verify prior to issuance of demolition or grading permits, that the construction plans require that the construction contractor restrict the use of heavy construction equipment (i.e., greater than 80,000 pounds), vibratory rollers, large, loaded trucks, and large dozers within 10 feet of the southern property line. Instead, smaller, rubber-tired bulldozers (less than 80,000 pounds) shall be used within this area during project construction to reduce vibration levels.

LONG-TERM OFF-SITE TRAFFIC NOISE IMPACTS

Traffic noise is the major noise source in the project area. Other sources of noise in the project area would be low or intermittent and would not contribute to or reach the levels of noise generated by traffic.

The project trip generation was obtained from the *Level of Service (LOS) Screening Analysis for 9822 Russell Ave, Garden Grove Project* (EPD Solutions, Inc. 2025). Based on the trip generation, the existing church and daycare center use is estimated to generate a total of 219 daily vehicle trips, and the proposed project is estimated to generate a total of 161 daily passenger vehicle trips. Considering both the existing use and the proposed project, the project would result in a net decrease of 58 daily passenger vehicle trips. This would not generate an increase in noise on the surrounding streets. Therefore, project-related traffic would not have an impact on off-site sensitive receptors, and no noise reduction measures are required.

LONG-TERM OFF-SITE STATIONARY NOISE IMPACTS

The project would include ground-floor heating, ventilation, and air conditioning (HVAC) equipment that could operate 24 hours per day. The HVAC equipment would generate noise levels of approximately 66.5 dBA L_{eq} at 5 ft based on previous measurements conducted by LSA for similar residential units. A group of four HVAC units would generate noise levels of approximately 72.5 dBA L_{eq} at 5 ft. The nearest HVAC units to off-site sensitive uses would be approximately 68 feet from the residential property line to the west. Attenuating for distance would reduce the noise level by 22.7 dBA. Noise levels of 49.8 dBA generated from on-site HVAC units would not exceed the City's

exterior daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) 30-minute (L_{50}) noise standards of 60 dBA and 55 dBA, respectively, for residential uses. All other sensitive receptors are farther from the proposed HVAC equipment. Additionally, noise levels to the south and east would be further reduced by the proposed six-foot-high CMU walls along the south and east site boundaries. Therefore, no off-site noise impacts from on-site HVAC equipment would occur. No noise reduction measures are required.

LONG-TERM TRAFFIC-RELATED VIBRATION IMPACTS

The proposed project would not generate vibration levels related to on-site operations. In addition, vibration levels generated from project-related traffic on the adjacent roadways are unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. Based on a reference vibration level of 0.076 in/sec PPV, structures greater than 20 feet from the roadways would experience vibration levels below the most conservative standard of 0.12 in/sec PPV; therefore, vibration levels generated from project-related traffic on the adjacent roadways would be less than significant, and no reduction measures are required.

ON-SITE LAND USE COMPATIBILITY ANALYSIS

The proposed project is in an area where parcels surrounding the project site are currently in use. For this reason, this analysis relies on the existing measured noise levels as well as future predicted noise levels to provide the most accurate description of the noise environment related to traffic noise impacts.

As described in the Noise Element, the City a noise level of up to 65 dBA CNEL is considered normally acceptable for the exterior of multifamily noise-sensitive uses. As described in Title 24, Chapter 12, Section 1206.4 of the California Building Code, the State has a noise standard of a 45 dBA CNEL for interior habitable rooms.

ON-SITE EXTERIOR NOISE IMPACTS

Based on the monitoring results shown in Table G, existing traffic noise levels at the project site range from 66.8 dBA CNEL near the northwestern project boundary to 69.8 dBA CNEL near the southeastern project boundary. Traffic noise from SR-22 is the dominant source of noise in the vicinity of the project site.

The main amenity areas where humans would spend time include the common open space recreation area near the eastern edge of the project site as well as the ground-level patios of the proposed townhomes. The project would install 6-foot-high CMU walls along the south and east site boundaries. Based on the distance of SR-22 to the project site, a 6-foot-high wall is expected to provide an approximately 5 dBA noise reduction, which would reduce levels at the exterior habitable areas to 64.8 dBA CNEL. This noise level would be below the General Plan acceptable level of 65 dBA CNEL, and no additional reduction measures would be required.

ON-SITE INTERIOR NOISE IMPACTS

In addition to the exterior noise level standards, the project must demonstrate compliance with the interior noise standard of 45 dBA CNEL. The traffic noise levels would approach 69.8 dBA CNEL near the southern façade of the proposed building closest to SR-22.

Based on the United States Environmental Protection Agency's Protective Noise Levels (1974), with windows and doors open, interior noise levels at the units along the southern boundary would be 58 dBA (i.e., 70 dBA - 12 dBA = 58 dBA). In addition, the proposed project includes HVAC systems that would allow windows to remain closed. Based on reference information from transmission loss test reports for Greenworld Windows (2018), the necessary additional reduction of 13 dBA can be achieved with standard residential building construction and standard windows with a minimum Sound Transmission Class 28, which would yield an interior noise level below 45 dBA CNEL. No noise reduction measures would be required.

REFERENCES

Airport Land Use Commission (ALUC). 2017. *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*. August 17.

_____. 2019. *Airport Environs Land Use Plan for Fullerton Municipal Airport*. February 21.

California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement*.

_____. 2020. *Transportation and Construction Vibration Guidance Manual*. April.

City of Garden Grove. 2008. *General Plan Noise Element*. May.

_____. 2025. Garden Grove Municipal Code, Volume I, Chapter 8.47 – Noise Control. Website: https://ecode360.com/42527417#42527417 (accessed March 2026).

County of Orange. 2005. Orange County Highway Design Manual. June.

EPD Solutions, Inc. 2025. *Level of Service (LOS) Screening Analysis for 9822 Russell Ave, Garden Grove Project.* December 19.

Federal Highway Administration (FHWA). 2006. *FHWA Roadway Construction Noise Model User's Guide.* January. Washington, D.C. Website: www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf (accessed March 2026).

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. Office of Planning and Environment. Report No. 0123. September.

Greenworld Windows. 2018. Various Transmission Loss Reports.

John Wayne Airport. 2024. Annual CNEL Noise Contours. Website: https://www.ocair.com/about/administration/access-noise/reports-resources/ (accessed March 2026).

United States Environmental Protection Agency (EPA). 1974. *Protective Noise Levels*.

APPENDIX A

NOISE MONITORING DATA

Noise Measurement Survey – 24 HR

Project Number: 20252686
Project Name: Russell Site Residential

Test Personnel: Corey Knips
Equipment: LD Spark 703+ (SN: 20224)

Site Number: LT-1

Date: From 12/9/2025 To 12/10/2025
Time: From 11:00 a.m. To 11:00 a.m.

Site Location: 9822 Russell Avenue, Garden Grove, CA. On the northwest corner of the project site, on a tree. Approximately 940 feet from the California State Route 22 (SR-22) centerline, 30 feet from the Kerry Street centerline, and 45 feet from the Russell Avenue centerline.

Primary Noise Sources: Traffic on SR-22 and very light traffic on Russell Avenue and Kerry Street.

Comments:

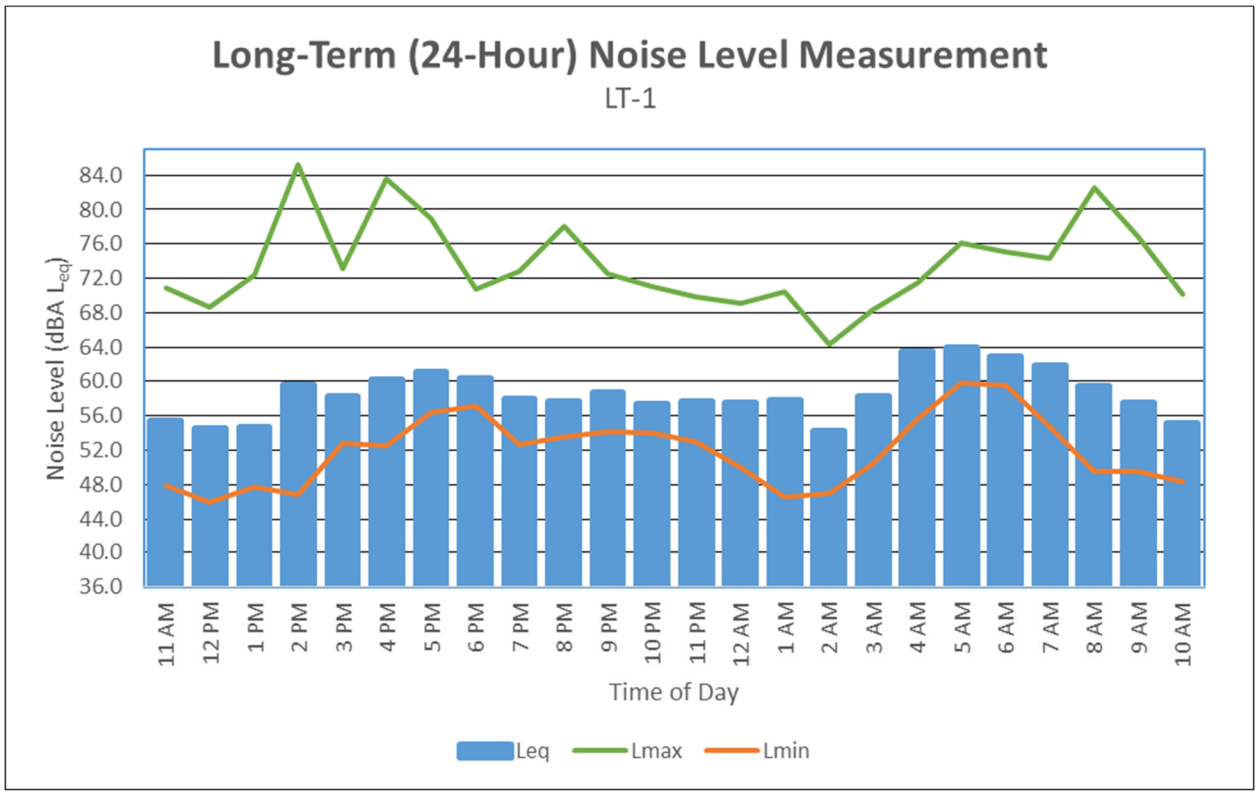
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
11:00 AM	12/9/2025	55.4	70.9	47.9
12:00 PM	12/9/2025	54.6	68.6	46.0
1:00 PM	12/9/2025	54.7	72.4	47.8
2:00 PM	12/9/2025	59.6	85.2	46.8
3:00 PM	12/9/2025	58.2	73.1	52.8
4:00 PM	12/9/2025	60.2	83.6	52.5
5:00 PM	12/9/2025	61.1	79.0	56.4
6:00 PM	12/9/2025	60.3	70.7	57.1
7:00 PM	12/9/2025	57.9	72.8	52.6
8:00 PM	12/9/2025	57.7	78.0	53.5
9:00 PM	12/9/2025	58.7	72.5	54.1
10:00 PM	12/9/2025	57.4	71.0	54.0
11:00 PM	12/9/2025	57.7	69.8	53.0
12:00 AM	12/10/2025	57.4	69.1	50.0
1:00 AM	12/10/2025	57.8	70.4	46.6
2:00 AM	12/10/2025	54.3	64.3	47.0
3:00 AM	12/10/2025	58.3	68.3	50.4
4:00 AM	12/10/2025	63.5	71.5	55.7
5:00 AM	12/10/2025	64.0	76.1	59.8
6:00 AM	12/10/2025	62.9	75.0	59.6
7:00 AM	12/10/2025	61.9	74.3	54.7
8:00 AM	12/10/2025	59.4	82.5	49.5
9:00 AM	12/10/2025	57.5	76.9	49.6
10:00 AM	12/10/2025	55.1	70.1	48.3

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: 20252686
Project Name: Russell Site Residential

Test Personnel: Corey Knips
Equipment: LD Spark 706RC (SN: 17637)

Site Number: LT-2

Date: From 12/9/2025 To 12/10/2025
Time: From 11:00 a.m. To 11:00 a.m.

Site Location: 9822 Russell Avenue, Garden Grove, CA. Near the southeast corner of the project site, on a light pole. Approximately 780 feet from the California State Route 22 (SR-22) centerline.

Primary Noise Sources: Traffic on SR-22, noise from school to the east, and occasional parking lot noise (on-site and from adjacent uses to the east and south).

Comments:

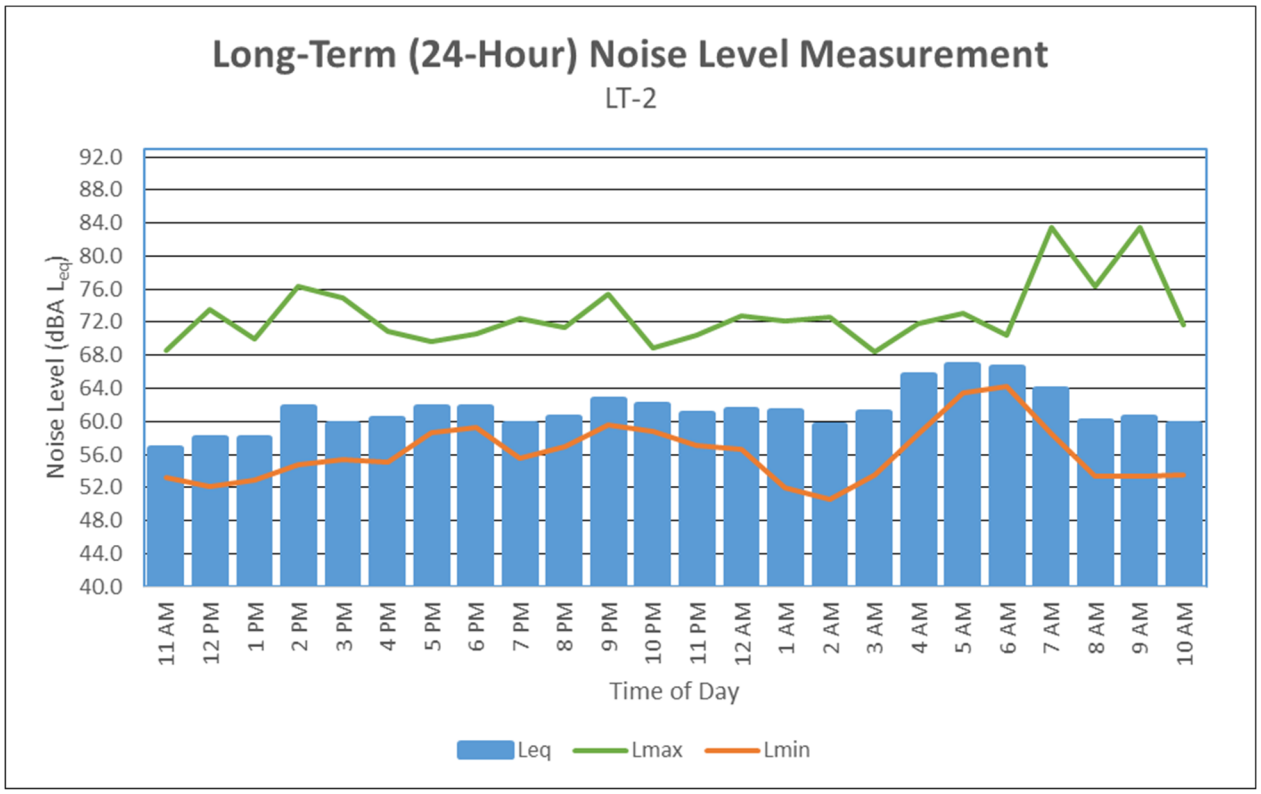
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
11:00 AM	12/9/2025	56.8	68.6	53.2
12:00 PM	12/9/2025	58.0	73.6	52.2
1:00 PM	12/9/2025	57.9	69.9	52.9
2:00 PM	12/9/2025	61.6	76.3	54.7
3:00 PM	12/9/2025	59.7	75.0	55.4
4:00 PM	12/9/2025	60.3	70.9	55.1
5:00 PM	12/9/2025	61.7	69.7	58.7
6:00 PM	12/9/2025	61.7	70.6	59.2
7:00 PM	12/9/2025	59.7	72.4	55.5
8:00 PM	12/9/2025	60.4	71.3	56.9
9:00 PM	12/9/2025	62.7	75.4	59.5
10:00 PM	12/9/2025	62.0	68.9	58.8
11:00 PM	12/9/2025	60.9	70.4	57.1
12:00 AM	12/10/2025	61.3	72.7	56.6
1:00 AM	12/10/2025	61.3	72.1	52.0
2:00 AM	12/10/2025	59.4	72.6	50.5
3:00 AM	12/10/2025	61.1	68.4	53.5
4:00 AM	12/10/2025	65.5	71.8	58.5
5:00 AM	12/10/2025	66.8	73.0	63.4
6:00 AM	12/10/2025	66.4	70.4	64.3
7:00 AM	12/10/2025	63.8	83.4	58.5
8:00 AM	12/10/2025	60.0	76.3	53.4
9:00 AM	12/10/2025	60.4	83.4	53.4
10:00 AM	12/10/2025	59.7	71.6	53.5

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



APPENDIX B

CONSTRUCTION NOISE LEVEL CALCULATIONS

Construction Traffic Noise Calculator

Construction Phase	One-Way Worker Trip/Day	One Way Vendor Trip/Day	One Way Hauling Trip/Day	Total
Demolition	13	0	44	57
Site Preparation	23	0	0	23
Grading	13	0	31	44
Building Construction	19	2.8	0	21.8
Paving	13	0	0	13
Architectural Coating	3.7	0	0	3.7
Maximum				**44**

Phase Number	Phase Name	Number of Days
1	Demolition	20
2	Site Preparation	2
3	Grading	4
4	Building Construction	200
5	Paving	10
6	Architectural Coating	15

Roadway	Speed	Existing Volume	MT Factor	HT Factor
Russell Avenue	25	3,600	12.6	39.8

Speed (mph)	MT Factor	HT Factor
25	12.6	39.8
30	8.9	26.3
35	7.1	19.1
40	5.8	15.1
45	5	12.9
50	4.5	11.5
55	4.1	10.4
60	3.7	9.6
65	3.5	8.9

	Worker Trip/Day	Vendor Trip/Day	Hauling Trip/Day	Total
Demolition	13	0	1,752	1765
Site Preparation	23	0	0	23
Grading	13	0	1,234	1247
Building Construction	19	74	0	93
Paving	13	0	0	13
Architectural Coating	4	0	0	4

Chosen Phase	Demolition
Total Equivalent Vehicles	1,765
Noise Increase (dBA)	**1.73**

Construction Calculations

Phase: Demolition

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Dozer	1	85	40	50	0.5	85	81
Concrete Saw	1	90	20	50	0.5	90	83
Front End Loader	1	80	40	50	0.5	80	76
					Combined at 50 feet	**92**	**86**
					Combined at Receptor 160 feet	**81**	**76**
					Combined at Receptor 175 feet	**81**	**75**
					Combined at Receptor 120 feet	**84**	**78**
					Combined at Receptor 220 feet	**79**	**73**

Phase: Site Preparation

Equipment[2]	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Dozer	1	85	40	50	0.5	85	81
Tractor	1	84	40	50	0.5	84	80
Grader	1	85	40	50	0.5	85	81
Dump Truck	1	84	40	50	0.5	84	80
					Combined at 50 feet	**91**	**87**
					Combined at Receptor 160 feet	**80**	**76**
					Combined at Receptor 175 feet	**80**	**76**
					Combined at Receptor 120 feet	**83**	**79**
					Combined at Receptor 220 feet	**78**	**74**

Phase: Grading

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Grader	1	85	40	50	0.5	85	81
Tractor	1	84	40	50	0.5	84	80
Dozer	1	85	40	50	0.5	85	81
					Combined at 50 feet	**89**	**85**
					Combined at Receptor 160 feet	**79**	**75**
					Combined at Receptor 175 feet	**79**	**75**
					Combined at Receptor 120 feet	**82**	**78**
					Combined at Receptor 220 feet	**77**	**73**

Phase:Building Construction

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Crane	1	85	16	50	0.5	85	77
Man Lift	1	85	20	50	0.5	85	78
Generator	1	82	50	50	0.5	82	79
Tractor	1	84	40	50	0.5	84	80
Welder / Torch	1	73	40	50	0.5	73	69
					Combined at 50 feet	**90**	**85**
					Combined at Receptor 160 feet	**80**	**75**
					Combined at Receptor 175 feet	**79**	**74**
					Combined at Receptor 120 feet	**83**	**77**
					Combined at Receptor 220 feet	**77**	**72**

Phase: Paving

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Paver	1	85	50	50	0.5	85	82
Roller	1	85	20	50	0.5	85	78
Concrete Mixer Truck	1	85	40	50	0.5	85	81
Tractor	1	84	40	50	0.5	84	80
					Combined at 50 feet	**91**	**87**
					Combined at Receptor 160 feet	**81**	**76**
					Combined at Receptor 175 feet	**80**	**76**
					Combined at Receptor 120 feet	**83**	**79**
					Combined at Receptor 220 feet	**78**	**74**

Phase:Architectural Coating

Equipment	Quantity	Reference (dBA) 50 ft Lmax	Usage Factor[1]	Distance to Receptor (ft)	Ground Effects	Noise Level (dBA) Lmax	Leq
Compressor (air)	1	80	40	50	0.5	80	76
					Combined at 50 feet	**80**	**76**
					Combined at Receptor 160 feet	**70**	**66**
					Combined at Receptor 175 feet	**69**	**65**
					Combined at Receptor 120 feet	**72**	**68**
					Combined at Receptor 220 feet	**67**	**63**

[1]- Percentage of time that a piece of equipment is operating at full power.

[2]- These four pieces of equipment represent a typical condition for this phase.

dBA – A-weighted Decibels

L_{max} – Maximum Level

L_{eq} – Equivalent Level

To:	City of Garden Grove
From:	Maryam Javanmardi, Simon Lin, EIT, Meghan Macias, TE EPD Solutions, Inc.
Date:	3/17/2026
Site:	9822 Russell Ave, Garden Grove, CA
Subject:	Vehicles Miles Traveled (VMT) Screening Analysis for 9822 Russell Ave, Garden Grove Project EPD Project Number 25-142



Project Overview

This technical memorandum provides an evaluation of the proposed residential project (the Project) located at 9822 Russell Avenue in the central portion of the City of Garden Grove. The site is approximately 0.12 miles north of State Route 22 (SR-22) and one block west of Brookhurst Street, both of which provide regional access to the site. Local and direct access to the site is provided by Russell Avenue to the north and Kerry Street to the west. The purpose of this analysis is to determine if an in-depth vehicle miles traveled (VMT) analysis (VMT) would be required for the Project, or if it screens out per the City of Garden Grove's VMT Guidelines. This memo evaluates the Project using the City of Garden Grove *Traffic Impact Analysis (TIA) Guidelines for Vehicles Miles Traveled and Level of Service Assessment* (City's TIA Guidelines) (May 2020).

Project Description

The Project site is identified as Assessor's Parcel Number (APN) 098-081-19 and is located within the United States Geologic Survey (USGS) Anaheim 7.5 Minute Series Topographic Quadrangle and within Section 5, Township 5 South, Range 10. The 1.81-acre Project site is currently developed with a church, preschool, daycare facility, parking lot, and landscaping areas. The church sanctuary is 7,700 square feet, the office and meeting rooms used by the church total 7,892 square feet, and the preschool/daycare is 2,875 square feet, which totals 18,467 square feet of building space on the site. The existing preschool/daycare facility (Orangefield Child Development Center) is for children ages 2 to 6 years and has a licensed capacity for 60 students.[1]

The Project requests approval from the City of Garden Grove to demolish the existing church, preschool, and daycare facility building and associated improvements on the Project site and construct 26 two-story townhome residences with open space/recreation and parking. Each residential unit would have three or four bedrooms, ranging in size from approximately 1,442 square feet to 1,800 square feet, and each unit would have a two-car garage. The 26 residences on the 1.81-acre site would result in a density of 14.4 units per acre. Development of the Project would include parking, open space, ornamental landscaping, and associated infrastructure.

The Project requests the approval of a General Plan Amendment to change the land use from Low-Density Residential (LDR) to Low-Medium Density Residential (LMR), which allows residential densities between 11 and 21 dwelling units per acre. The Project also includes a zone change to change the site zoning from R-1

[1] California Department of Social Services. (2025). *Facility Detail: Orangefield Child Development Center*. Accessed: https://www.ccld.dss.ca.gov/carefacilitysearch/FacDetail/304371054

to Planned Unit Development (PUD) with a general R-2 (Limited Multiple Residential) zoning designation used as the base guiding standards. The proposed Project Site Plan is shown in Figure 1, included at the end of this document.

Project Trip Generation

The proposed Project trip generation was calculated using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition* (2025). The existing church building was analyzed using the Church land use (ITE Land Use Code 560), the preschool/daycare facility was analyzed using the Day Care Center land use (ITE Land Use Code 565), and the proposed Project was analyzed using the Multifamily Housing land use (ITE Land Use Code 220).

Table 1 presents the trip generation estimates for the existing uses and the proposed Project. The existing uses are estimated to generate approximately 219 daily trips, including 37 trips during the AM peak hour and 38 trips during the PM peak hour. The proposed Project is anticipated to generate approximately 161 daily trips, with 11 trips during the AM peak hour and 14 trips during the PM peak hour. Overall, the Project would result in 58 fewer daily trips, including 26 fewer trips during the AM peak hour, and 24 fewer trips during the PM peak hour.

Table 1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
560 Church[1]		1000 Sq. Ft. GFA	6.78	0.23	0.14	0.37	0.18	0.25	0.43
565 Day Care Center[2]		1000 Sq. Ft. GFA	39.3	5.77	5.11	10.88	5.05	5.7	10.75
220 Multifamily Housing (Low-Rise)[3]		Dwelling Units	6.21	0.1	0.31	0.41	0.32	0.2	0.52
Project Trip Generation									
Existing Uses Trip Generation									
Church[1]	15.59	1000 Sq. Ft. GFA	106	4	2	6	3	4	7
Day Care Center[2]	2.88	1000 Sq. Ft. GFA	113	16	15	31	15	16	31
Proposed Project Trip Generation									
Multifamily Housing (Low-Rise)[3]	26	Dwelling Units	161	3	8	11	9	5	14
Total Existing Trip Generation			**219**	**20**	**17**	**37**	**18**	**20**	**38**
Total Project Trip Generation			**161**	**3**	**8**	**11**	**9**	**5**	**14**
Total Net New Trip Generation			-58	-17	-9	-26	-9	-15	-24

[1]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 560 - Church (Average Rate)

[2]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 565 - Day Care Center (Average Rate)

[3]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 220 - Multifamily Housing (Low-Rise) (Average Rate)

Vehicle Miles Traveled Screening

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts, aiming to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In response, Section 15064.3, *Determining the Significance of Transportation Impacts*, was added to the CEQA Guidelines which states that VMT is the most appropriate measure of transportation impacts and shall apply statewide beginning on July 1, 2020.

The *CEQA Assessment – VMT Analysis* section of the City's TIA Guidelines provides VMT screening thresholds to identify projects that would be considered to have a less-than-significant impact on VMT and therefore could be screened from further analysis. If a project meets one of the following criteria, then the VMT impact of the project would be considered less than significant and no further analysis of VMT would be required:

1. Transit Priority Area (TPA) Screening.
2. Low VMT Area Screening.
3. Project Type Screening.

The applicability of each criterion to the project is discussed below.

Screening Criteria 1 – Transit Priority Area Screening (TPA)[2]: According to the City's TIA Guidelines, projects located in a TPA may be presumed to have a less-than-significant impact. The City's Guidelines also state that a project may not meet the screening threshold if the following project or location specific criteria are met:

- Has a floor area ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate or high-income residential units.

The Project site is located approximately 327 feet (0.062 miles) from Bus Stop ID 2187 and 500 feet (0.095 miles) from Bus Stop ID 2208, both served by Orange County Transportation Authority (OCTA) Route 35. This route does not operate at 20-minute or better headways during weekday peak periods (6:00–9:00 AM and 3:00–7:00 PM), thus the area does not qualify as a "major transit stop," and therefore does not meet the definition of a TPA. As a result, the Project does not meet the TPA screening criteria.

Screening Criteria 2 – Low VMT Area Screening: The City's TIA Guidelines use the Orange County Traffic Analysis Model (OCTAM) travel demand forecasting model to determine if a project is located in a low VMT generating area. Per these guidelines, projects located in Zone 1 areas, *Lower Than VMT Threshold*, can be presumed not to have a significant VMT impact and can be screened from VMT analysis.

[2] A TPA is defined as a half-mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definition below:

AB 2553 - The bill defines a major transit stop to mean a site containing an existing rail or bus rapid transit station, a ferry terminal served by either a bus or rail transit service, the intersection of 2 or more major bus routes with a frequency of service interval of 20 minutes or less during the morning and afternoon peak commute periods, or other major transit stops that are included in the applicable regional transportation plan.

As identified in Exhibit 4.14-5 of the Focused General Plan Update and Zoning Amendments Draft EIR (included as Figure 2, *Low VMT Area Screening*), the Project site is located within Zone 2, *Lower Than County Average*. Therefore, the site is in an area that has a lower than County average VMT but higher than the City of Garden Grove's VMT Threshold, and cannot be assumed to be less than significant. Therefore, the Project does not meet the Low VMT Area screening criteria.

Screening Criteria 3 – Project Type Screening: The City of Garden Grove Traffic Impact Analysis Guidelines identify specific land uses that qualify for Project Type Screening. Residential development is not included among the listed project types; therefore, the proposed townhome development does not qualify for Screening Criteria 3.

However, the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018, updated January 22, 2019) prepared by the Governor's Office of Planning and Research states that projects replacing existing VMT-generating land uses and resulting in a net decrease in VMT compared to existing conditions would not result in a significant transportation impact.

As shown in Table 1, the Project located in Orange County Transportation Analysis Model (OCTAM) Version 5.1 Transportation Analysis Zone (TAZ) 539 would generate 58 fewer daily trips than the existing uses on the Project site. Table 2 shows that this reduction in trips would result in a decrease of approximately 446 VMT within the Project's TAZ. Therefore, the proposed Project would replace existing VMT-generating land uses and result in a net decrease in VMT. Based on this reduction, the Project would result in a less-than-significant VMT impact, and no additional VMT analysis would be required.

Table 2: Project Net VMT

OCTAM 5.1			Project Site	TAZ 539
	Trips Generated	**TAZ Average Trip Length[1]**	**Total VMT[2]**	**Total VMT[1]**
With Existing Use	219	7.70	1,685	124,325
With Proposed Project	161	7.70	1,239	123,879
Net VMT			**-446**	**-446**

[1] Source: OCTAM 5.1

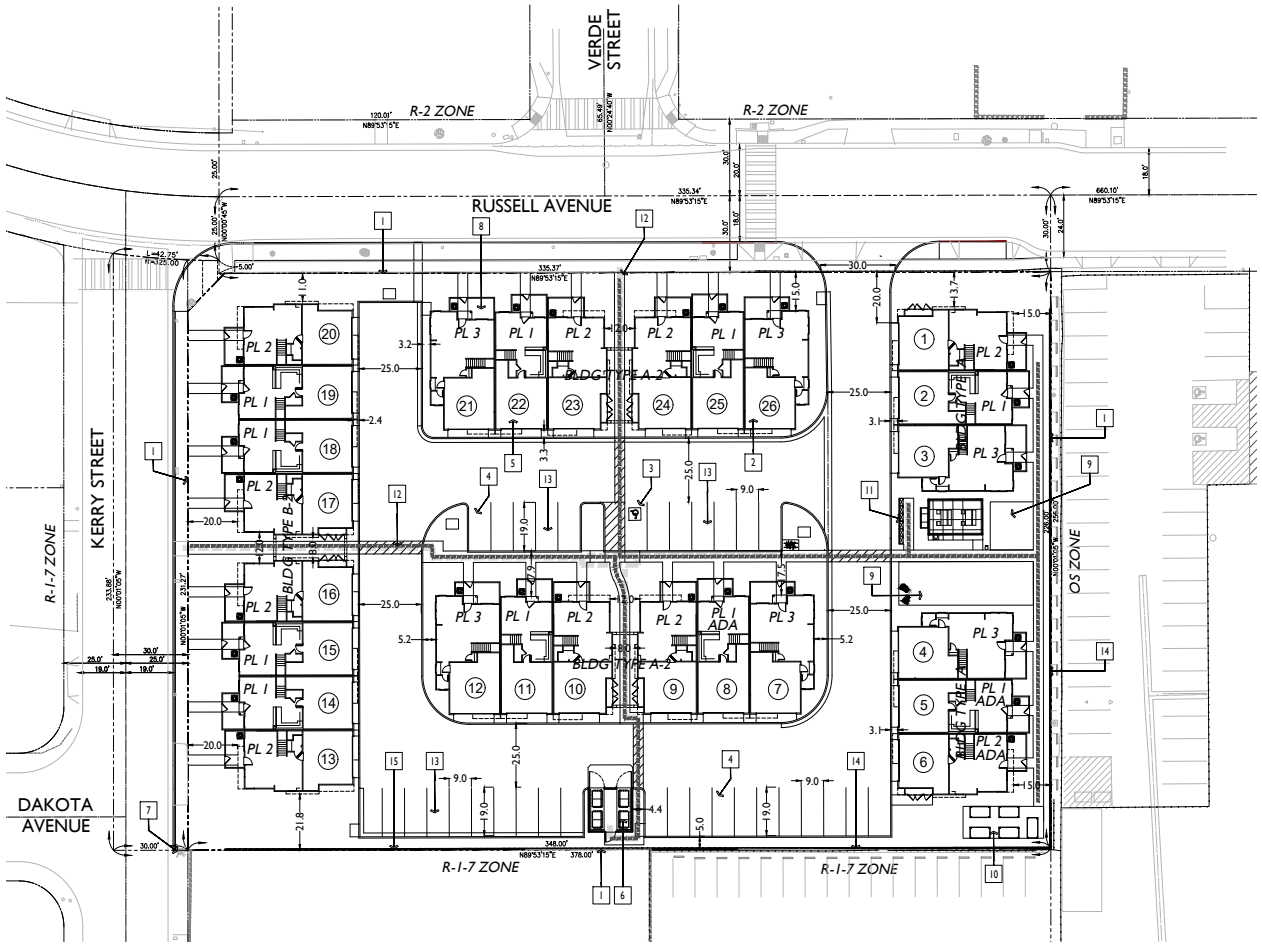
[2] VMT is calculated as Trips Generated*Average Trip Length

Summary

The Project was evaluated using the City of Garden Grove's TIA Guidelines to determine the need for a VMT analysis. The Project would replace existing VMT-generating uses and result in a net reduction of 58 daily trips and 446 VMT compared to existing conditions. Based on the Governor's Office of Planning and Research Technical Advisory, the Project would result in a less-than-significant VMT impact, and no additional VMT analysis is required.

If you have any questions about this analysis, please contact us at (949) 796-1180 or techservices@epdsolutions.com.

Figure 1: Proposed Project Site Plan



PROJECT SUMMARY

A.P.N.	098-081-19
EXISTING G.P.	LOW DENSITY RESIDENTIAL (LDR)
EXISTING ZONE	SINGLE FAMILY RESIDENTIAL (R-1-7)
PROPOSED G.P.	LOW MEDIUM DENSITY RESIDENTIAL (LMDR)
PROPOSED ZONE	PLANNED UNIT DEVELOPMENT (PUD)
TOTAL UNITS	26 UNITS
SITE AREA	78,537 S.F. / 1.8 AC
DENSITY	14.4 DU/AC
LOT COVERAGE	43.2% (50% ALLOWED)
BUILDING HEIGHT	30'

DWELLING UNIT SUMMARY

				PRIV. YD.
PL 1	10	1,442 SF	3 BD	111 S.F.
PL 2	10	1,652 SF	3BD/LOFT-OPT 4BD	104 S.F.
PL 3	6	1,800 SF	4 BD	136 S.F.

PARKING SUMMARY

GARAGE STALLS (20' X 20', 2 CAR)	52 STALLS
GUEST STALLS (9' X 19')	33 STALLS
TOTAL PARKING PROVIDED	85 STALLS

3 & 4 BEDROOMS - 3.25 STALLS/UNIT REQUIRED
TOTAL PARKING REQUIRED 84.5 STALLS

ELECTRIC VEHICLE CHARGING SUMMARY
REQUIRED = 1 / DWELLING UNIT = 26 EV GARAGE STALLS
TOWN-HOUSES W/ ATTACHED PRIVATE GARAGES SHALL COMPLY WITH 2025 CGBSC 4.106.4.1.

LOT COVERAGE

BLDG TYPE A FOOTPRINT =	3,239 S.F. X 2 =	6,478 S.F.
BLDG TYPE A-2 FOOTPRINT =	6,478 S.F. X 2 =	12,956 S.F.
BLDG TYPE B-2 FOOTPRINT =	8,364 S.F. X 1 =	8,364 S.F.
BUILDING COVERAGE	=	27,798 S.F.
TRASH ENCLOSURE	=	312 S.F.
OPEN PARKING STALLS	=	5,795 S.F.

LOT COVERAGE = 33,905 S.F. / 78,537 S.F. = 0.432 OR 43.2%

OPEN SPACE SUMMARY (SEE SHEET OS)

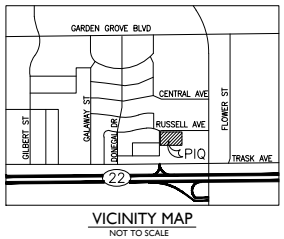
COMMON AREA - ACTIVE	3,695 S.F. (142/U)
PRIVATE YARDS (EXCL. UNITS 13-20)	2,106 S.F. (6' MIN. DIM.)
PASSIVE OPEN AREA (5,802 S.F. X 50%)	2,901 S.F. (10' MIN. DIM.)
TOTAL OPEN SPACE PROVIDED	8,702 S.F. (335 S.F./UNIT)

ACCESSIBLE UNIT SUMMARY (MULTISTORY, PRIVATELY FUNDED)
REQUIRED = 10% OF MULTISTORY DWELLINGS PER CBC 1102A.3.1
26 DU X 10% = 3 REQUIRED ACCESSIBLE UNIT
PROVIDED = 3 ACCESSIBLE UNITS (UNIT NO'S. 5, 6 AND 8)

BUILDING CODE SUMMARY

CALIFORNIA RESIDENTIAL CODE (2025 CRC)	
OCCUPANCY TYPE	R3/U
NUMBER OF STORIES	2
CONSTRUCTION TYPE	V-B
FIRE SPRINKLERS	NFPA 13D (CRC R313.1)

KEYNOTES
1. PROPERTY LINE
2. 2-STORY ROW TOWNHOME, TYP.
3. ACCESSIBLE PARKING STALL - 9' X 19' (TYP.) VAN W/ 8' WIDE STRIPING (PASSENGER SIDE)
4. STANDARD OPEN GUEST STALL - 9' X 19' (TYP.)
5. 2-CAR GARAGE (20' X 20' MIN.)
6. COVERED COMMUNITY TRASH ENCLOSURE
7. PUBLIC FIRE HYDRANT
8. PRIVATE PATIO, TYP.
9. COMMON OPEN SPACE AREA
10. COMMUNITY GARDEN AREA
11. COMMUNITY MAILBOX LOCATION
12. ADA PATH OF TRAVEL
13. WATER QUALITY AREA (INFILTRATION CHAMBERS) - SEE CIVIL PLANS
14. NEW CONCRETE BLOCK WALL - REFER TO LANDSCAPE PLANS
15. EXISTING CONCRETE BLOCK WALL TO BE REMOVED AND REPLACED



VICINITY MAP
NOT TO SCALE

GARDEN GROVE | 9822 RUSSELL - 2 STORY TOWNHOMES | SITE PLAN

MELIA HOMES
9860 Irvine Center Dr
Irvine, CA 92618
(949) 759-4367

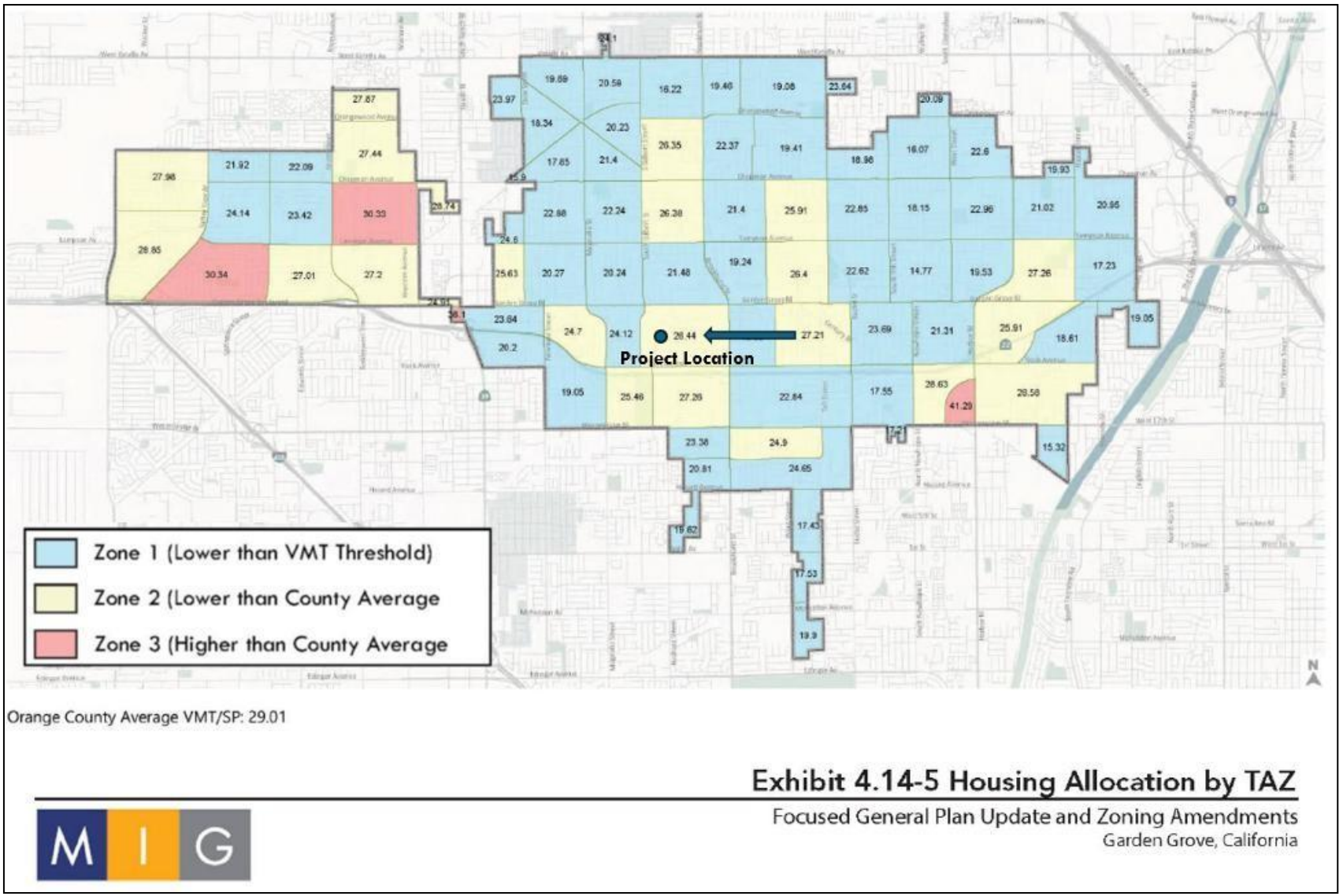
0 20 40 60

JAN 12, 2026

SUMMA ARCHITECTURE
5256 S. Mission Road, Ste. 404
Bonsall, CA 92003
www.summarch.com p.760.724.1198

SP

Figure 2: Low VMT Area Screening



ATTACHMENT 4

RESOLUTION NO. 6138-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE RECOMMENDING THAT THE CITY COUNCIL ADOPT A MITIGATED NEGATIVE DECLARATION AND AN ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM FOR THE RUSSELL AVENUE TOWNHOME PROJECT AT 9822 RUSSELL AVENUE, ASSESSOR'S PARCEL NO. 098-081-19.

WHEREAS, Melia Homes, Inc., the applicant, submitted a request to develop a 1.8-acre site with a new multiple-family residential project consisting of twenty-six (26) residential units, along with associated site improvements, on a property located southeast corner of Russell Avenue and Kerry Street, at 9822 Russell Avenue, Assessor's Parcel No. 098-081-19 (the "Property"); and

WHEREAS, the applicant has requested the following approvals to facilitate the proposed development: (i) a General Plan Amendment to change the Land Use Designation of the subject property from LDR (Low Density Residential) to LMR (Low Medium Residential); (ii) a Zoning Pap Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to establish standards of development to facilitate the development of the Project; (iv) a Site Plan to construct twenty-six (26) two-story townhomes and associated site improvements; and (v) a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. In addition, revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01 which previously allowed for the operation of an elementary school, and operation of a wireless facility, respectively, on the subject property, is proposed. Collectively, these actions are referred to herein as the "Project"; and

WHEREAS, pursuant to the California Environmental Quality Act, California Public Resources Code Section 21000 et seq. ("CEQA") and CEQA's implementing guidelines, California Code of Regulations, Title 14, Section 15000 et seq., an Initial Study was prepared for the proposed Project and it has been determined that the proposed Project qualifies for a Mitigated Negative Declaration as the proposed Project with the proposed mitigation measures cannot, or will not, have a significant effect on the environment; and

WHEREAS, a Mitigation Monitoring and Reporting Program has been prepared and is attached to the Mitigated Negative Declaration listing the mitigation measures to be monitored during Project implementation; and

WHEREAS, the Mitigated Negative Declaration with mitigation measures was prepared, circulated, and noticed in accordance with CEQA, and CEQA's implementing guidelines; and

WHEREAS, concurrent with its adoption of this Resolution, the Planning Commission also adopted Resolution No. 6139-26 recommending that the City Council approve General Plan Amendment No. GPA-001-2026, Amendment No.

A-046-2026, and Planned Unit Development No. PUD-020-2026, and Resolution No. 6140-26 recommending that the City Council approve Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447, subject to specified Conditions of Approval; and

WHEREAS, at its regular meeting held May 21, 2026, the Planning Commission of the City of Garden Grove held a duly noticed public hearing and considered the report submitted by City staff and all oral and written testimony presented regarding the Project, the Initial Study, and the proposed Mitigated Negative Declaration and associated Mitigation Monitoring and Reporting Program.

NOW, THEREFORE, BE IT RESOLVED, FOUND AND DETERMINED as follows:

1. Pursuant to the California Environmental Quality Act CEQA), Public Resources Code Section 21000 et. seq., and the CEQA guidelines, 14 California Code of Regulations Sec. 15000 et. seq., an Initial Study was prepared, and it has been determined that the Project qualifies for a Mitigated Negative Declaration because the Project, with the proposed mitigation measures cannot, or will not, have a significant effect on the environment. The Mitigated Negative Declaration with mitigation measures was prepared, circulated, and noticed in accordance with CEQA and CEQA's implementing guidelines.

2. The Planning Commission has considered the proposed Mitigated Negative Declaration together with comments received during the public review process.

3. The Planning Commission finds that the Mitigated Negative Declaration reflects the City's independent judgment and analysis.

4. The Planning Commission finds on the basis of the whole record before it, including the Initial Study and comments received, that there is no substantial evidence that the Project, with the proposed mitigation measures, will have a significant effect on the environment.

5. The Planning Commission hereby recommends the City Council adopt the Mitigated Negative Declaration and the associated Mitigation Monitoring and Reporting Program for the Project (Exhibit “A”).

EXHIBIT "A"

MITIGATION MONITORING AND REPORTING PROGRAM

Introduction

The California Environmental Quality Act (CEQA) requires a lead or public agency that approves or carries out a project for which an Initial Study/Mitigated Negative Declaration (IS/MND) has been adopted which identifies one or more significant adverse environmental effects and where findings with respect to changes or alterations in the project have been made, to adopt a "…reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA, Public Resources Code Sections 21081, 21081.6).

A Mitigation Monitoring and Reporting Program (MMRP) is required to ensure that adopted mitigation measures are successfully implemented for the 9822 Russell Avenue Townhome Project (Project). The City of Garden Grove is the Lead Agency for the project and is responsible for implementation of the MMRP. This MMRP for the project identifies the parties that will be responsible for monitoring implementation of the individual mitigation measures in the MMRP.

Mitigation Monitoring and Reporting Program

This MMRP for the Project applies, variably, during all Project phases, including design, construction, and operation, as indicated. The attached table identifies the mitigation program required to be implemented by the City for the 9822 Russell Avenue Townhome Project. The table identifies the mitigation measures required by the City to mitigate or avoid significant adverse impacts associated with the implementation of the Project, the timing of implementation, and the responsible party or parties for monitoring compliance.

The MMRP also includes a column that will be used by the compliance monitor (individual responsible for monitoring compliance) to document when implementation of the measure is completed. As mitigation measures are completed, the compliance monitor will sign and date the MMRP, indicating that the required actions have been completed.

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MITIGATION MONITORING AND REPORTING PROGRAM
9822 RUSSELL AVENUE TOWNHOME PROJECT

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
AESTHETICS			
Lighting. Project plans and specifications shall comply with City standard Conditions of Approval for lighting, which states that all lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building and Occupancy Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	
AIR QUALITY			
SCAQMD Rule 402 – Nuisance. The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The Project shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits and during demolition and grading activities.	City of Garden Grove Building and Safety Division	
SCAQMD Rule 403 – Fugitive Dust. The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403 as implemented by the City's standard Condition of Approval, which includes dust minimization measures, the use of electricity from power poles rather than diesel or gasoline powered generators, and the use of methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment, where feasible.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits and during demolition and grading activities.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
SCAQMD Rule 1113 – Architectural Coatings. The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of Volatile Organic Compound) and/or High Pressure Low Volume (HPLV) applications shall be used.	Requirement to be included in Construction Plans, Specifications, and Permits. Verified prior to issuance of Construction Permits that involve architectural coatings and during architectural coating activities.	City of Garden Grove Building and Safety Division	
BIOLOGICAL RESOURCES			
Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515. The Project construction COA plans and specifications shall identify compliance with the following City standard Condition of Approval. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3515 of the California Fish and Game regulations, which require the protection of active nests of all bird species, prior to the removal of any on-site landscaping, including the removal of existing trees. Prior to commencement of grading activities and issuance of any building permits, the City Community Development Director, or designee, shall verify that all Project grading and construction plans are consistent with the requirements of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515, as stated above, that pre-construction surveys have been completed (if needed) and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits involving vegetation removal.	City of Garden Grove Planning Services Division	
CULTURAL RESOURCES			
Archaeological Resources. The Project construction plans and specifications shall identify compliance with the following City standard Condition of Approval. During construction, if archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified archaeologist, acceptable to the City to evaluate and determine appropriate treatment for the specimen or resource, and work in the vicinity of the discovery shall	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
halt until appropriate assessment and treatment of the resource is determined by the archeologist (work can continue elsewhere on the Project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the archaeologist shall be implemented by the applicant at its own cost.			
Human Remains. In the event that human remains are encountered on the Project site, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. Prior to the issuance of grading permits, the City shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits and during ground disturbing activities.	City of Garden Grove Building and Safety Division	
ENERGY			
CalGreen Compliance. The Project plans and specifications shall implement compliance with the CALGreen Building Code as included in the City's GGMC Section 18.04.010 to ensure efficient use of energy. CALGreen specifications are required to be incorporated into building plans as a condition of building permit approval.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division	
California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3). The Project construction plans and specifications shall implement compliance with CCR Title 13, Motor Vehicles, Section 2449(d)(3), which states that no vehicle or engines may idle for more than 5 consecutive minutes. The idling limit does not apply to queuing and necessary operation to accomplish work for which the vehicle/equipment was designed.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division	
GEOLOGY AND SOILS			
California Building Code. The Project plans and specifications shall comply with City standard Conditions of Approval for the California Building Code (CBC) and implement compliance with the CBC as included in GGMC Title 18, Building Codes and Regulations. All work shall comply with the latest edition of the California CBC at time of permit application to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading and Building Permits.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
specifications for the Project are required to be incorporated into grading and building plans and specifications prior to issuance of grading and building permits.			
Mitigation Measure PAL-1: Paleontological Resources. Construction plans and specifications shall state that in the event that potential paleontological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified paleontologist (who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist) has evaluated the find. If a fossil is determined to be significant, the qualified paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school. If any fossil remains are discovered, the qualified paleontologist shall make a recommendation whether monitoring shall be required for the continuance of earth moving activities. Prior to issuance of grading permits, the City shall verify that all Project grading and construction plans specify the requirements herein related to the unanticipated discovery of paleontological resources. After completion of the salvage and curation of any resources, the qualified paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Community Development Director, or designee, and the Natural History Museum of Los Angeles County.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
GREENHOUSE GAS EMISSIONS			
AB 1881 Landscaping. The Project Conditions of Approval would require compliance with AB 1881 landscaping requirements (included in the GGMC in Section 9.12.040.085 and pursuant to the Title 24 regulations in GGMC Section 18.04.010.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	
HAZARDS AND HAZARDOUS MATERIALS			
Fire Master Plan: The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements, including but not limited to the Fire Master Plan.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division Orange County Fire Authority (OCFA)	
Asbestos Containing Materials. The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 1403. If asbestos is found, the Project applicant shall follow all procedural requirements and regulations of SCAQMD Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition Permit.	City of Garden Grove Building and Safety Division	
Lead Based Paint. The Project Plans and specifications shall implement compliance with the provisions of the Code of Federal Regulations Title 29, Section 1926.62, California Code of Regulations Title 8 Section 1532.1, and Cal/OSHA's Lead in Construction Standard to require a lead-based paint survey be conducted, and if lead-based paint is found, the Project applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. Cal-OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition Permit.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
HYDROLOGY AND WATER QUALITY			
Stormwater Pollution Prevention Plan. Prior to grading permit issuance, the Project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) in accordance with the County Drainage Area Management Plan (DAMP). The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other DAMP requirements to comply with the National Pollutant Discharge Elimination System (NPDES) regulations to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Garden Grove staff or its designee to confirm compliance.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division, and Public Works Engineering Division	
Water Quality Management Plan. Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all post-construction, site design, source control, and treatment control Best Management Practices (BMPs) that will be incorporated into the development project in order to minimize the adverse effects on receiving waters. The WQMP shall comply with GGMC Section 6.40.050, the Orange County DAMP, and the Santa Ana Region, Regional Water Quality Control Board (RWQCB) requirements in effect at the time permitting.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division, and Public Works Engineering Division	
NOISE			
Construction Noise. Project construction plans and specifications shall detail that construction activities shall occur in compliance with GGMC Section 8.47.060(d), which states that it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any construction or repair work on buildings, structures, or projects, including construction-related vehicles arriving, idling, or being loaded/unloaded at or near a construction site, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device outside of the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction or repair work shall be permitted on Sundays or federal holidays.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition, Grading, and Construction Permits and during these activities.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
Mitigation Measure NOI-1: Construction Vibration. Prior to issuance of demolition or grading permits, the Community Development Director, or designee, shall verify that the construction plans require that the construction contractor restrict the use of heavy construction equipment (i.e., greater than 80,000 pounds), vibratory rollers, large loaded trucks, and large dozers within 10 feet of the southern property line. Instead, smaller, rubber-tired bulldozers (less than 80,000 pounds) shall be used within this area during Project construction to reduce vibration levels.	Requirement to be included in Project Plans and Mechanical Specifications. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division	
PUBLIC SERVICES			
Schools Development Impact Fee: The Project will be required to pay applicable development fees levied by the Garden Grove Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.407) to offset these impacts on school facilities resulting from new development.	Requirement to be included in Project Plans and Conditions of Approval. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division	
Park and Recreation Impact Fee: The Project will be required to pay applicable City development impact fees for park and recreational facilities pursuant to GGMC 9.44.030 In-Lieu Park Fees, which are imposed on each development project to offset the cost of providing increased park and recreation facilities.	In Project Plans and Conditions of Approval. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division Public Works Department	
TRIBAL CULTURAL RESOURCES			
Mitigation Measure TCR-1: Native American Monitoring. A. The Project plans, specifications, and grading permits shall state that the Project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh). The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed,	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Project applicant/City upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the Project applicant/City that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project applicant/City that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact any TCRs.			
Mitigation Measure TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects. A. Upon discovery of any TCRs, the Kizh monitor shall notify the City and Project applicant and all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh shall recover and retain all discovered TCRs in the form and/or manner the Kizh deems appropriate.	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	
Mitigation Measure TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects. A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.			
UTILITIES AND SERVICE SYSTEMS			
Construction Waste. The GGMC Section 18.60.040, Minimum Construction and Demolition Waste Diversion Requirements. Construction plans and specifications shall implement reuse, recycling, and/or diversion of the minimum percentage amount of designated recyclable and reusable materials as set forth by the CALGreen (Part 11 of Title 24, California Code of Regulations).	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition, Grading, and Construction Permits and during these activities.	City of Garden Grove Building and Safety Division	

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ATTACHMENT 5

RESOLUTION NO. 6139-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE RECOMMENDING THAT THE CITY COUNCIL: (1) APPROVE GENERAL PLAN AMENDMENT NO. GPA-001-2026 TO AMEND THE GENERAL PLAN LAND USE MAP TO MODIFY THE GENERAL PLAN LAND USE DESIGNATION OF THE PROPERTY LOCATED ON THE SOUTHEAST CORNER OF RUSSELL AVENUE AND KERRY STREET, AT 9822 RUSSELL AVENUE, ASSESSOR'S PARCEL NO. 098-081-19, FROM LOW DENSITY RESIDENTIAL (LDR) TO LOW MEDIUM DENSITY RESIDENTIAL (LMR); (2) APPROVE ZONING AMENDMENT NO. A-046-2026 TO AMEND THE CITY'S OFFICIAL ZONING MAP TO CHANGE THE ZONING OF THE PROPERTY FROM R-1 (SINGLE-FAMILY RESIDENTIAL) TO RESIDENTIAL PLANNED UNIT DEVELOPMENT (PUD-020-2026) ZONING WITH AN R-2 (LIMITED MULTIPLE RESIDENTIAL) BASE ZONE; AND (3) APPROVE RESIDENTIAL PLANNED UNIT DEVELOPMENT NO. PUD-020-2026 TO ESTABLISH STANDARDS OF DEVELOPMENT TO FACILITATE THE DEVELOPMENT OF A TWENTY-SIX (26) UNIT RESIDENTIAL ATTACHED CONDOMINIUM PROJECT ON THE SUBJECT SITE.

BE IT RESOLVED that the Planning Commission of the City of Garden Grove, in a regular session assembled on May 21, 2026, hereby recommends that the City Council approve General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026 for a property located on the southeast corner of Russell Avenue and Kerry Street, at 9822 Russell Avenue, Assessor's Parcel No. 098-081-19.

BE IT FURTHER RESOLVED in the matter of General Plan Amendment No. GPA-001-2026, Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026 the Planning Commission of the City of Garden Grove does hereby report as follows:

1. The subject case was initiated by Chad Brown of Melia Homes, Inc., with authorization from the property owner, Iglesia de Cristo de Restauracion.

2. The Applicant has submitted a request for a General Plan Amendment, Zoning Map Amendment, and related entitlements for a proposed 26-unit multiple-family residential Project on an approximately 1.8-acre site, located on the southeast corner of Russell Avenue and Kerry Street, at 9822 Russell Avenue, Assessor's Parcel No. 098-081-19 (the "Property").

3. The Applicant has requested the following approvals to facilitate the proposed development: (i) a General Plan Amendment to change the Land Use Designation of the subject property from LDR (Low Density Residential) to LMR (Low Medium Residential); (ii) a Zoning Map Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to establish standards of development to facilitate the development of the Project; (iv) a Site Plan for the construction of twenty-six (26) two-story

townhomes and associated site improvements; (v) a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. In addition, revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01 which previously allowed for the operation of an elementary school, and operation of a wireless facility, respectively, on the subject property is proposed. Collectively, these actions are referred to herein as the "Project".

4. Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq., and the CEQA guidelines, 14 California Code of Regulations Sec. 15000 et. seq., an initial study was prepared, and it has been determined that the proposed Project qualifies for a Mitigated Negative Declaration because the proposed Project, with implementation of the proposed mitigation measures, cannot, or will not, have a significant effect on the environment. A Mitigation Monitoring and Reporting Program (MMRP) has been prepared and is attached to the Mitigated Negative Declaration listing the mitigation measures to be monitored during Project implementation. The Mitigated Negative Declaration and MMRP were prepared and circulated in accordance with CEQA and CEQA's implementing guidelines.

5. Concurrently with its adoption of this Resolution, the Planning Commission also adopted (a) Resolution No. 6138-26 recommending that the City Council adopt a Mitigated Negative Declaration and the associated Mitigation Monitoring and Reporting Program for the Project, and (b) Resolution No. 6140-26 recommending that the City Council approve Site Plan No. SP-168-20126 and Vesting Tentative Tract Map No. TT-19447 and revoke Conditional Use Permit Nos. CUP-114-81 and CUP-55-01.

6. The Property currently has a General Plan Land Use Designation of Low Density Residential (LDR) and is zoned R-1 (Single-Family Residential). The site is currently developed with a religious facility.

7. Existing land use, zoning, and General Plan designation of property in the vicinity of the subject property have been reviewed.

8. Report submitted by the City staff was reviewed.

9. Pursuant to a legal notice, a public hearing was held on May 21, 2026, and all interested persons were given an opportunity to be heard.

10. The Planning Commission gave due and careful consideration to the matter during its meeting on May 21, 2026.

BE IT FURTHER RESOLVED, FOUND AND DETERMINED that the facts and reasons supporting the conclusion of the Planning Commission, as required under Municipal Code Section 9.32.030, are as follows:

FACTS:

The subject Property is comprised of an approximately 78,537 square-foot (1.8-acre) parcel on the southeast corner of Kerry Street and Russell Avenue. The site is currently developed with a church, preschool, and unmanned telecommunications facility, all of which would be demolished as a part of the subject request. In conjunction with the subject request, Conditional Use Permit Nos. CUP-114-81 and CUP-554-01, which allowed the operation of the preschool and the telecommunications facility, respectively, would be revoked.

The subject site has a General Plan Land Use Designation of Low Density Residential (LDR) and is zoned R-1 (Single-Family Residential). The property abuts R-1 zoned properties to the south, R-1 and R-2 (Limited Multiple Residential) zoned properties to the north across Russell Avenue, R-1 zoned properties to the west across Kerry Street, and Sunnyside Elementary School in the O-S (Open Space) zone to the east.

The Applicant is requesting: (i) a General Plan Amendment to change the Land Use Designation of the property from Low Density Residential (LDR) to Low Medium Density Residential (LMR); (ii) an Amendment to the zoning map to establish a residential PUD zone (PUD-020-2026) with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to facilitate the development of the Project; (iv) Site Plan approval to construct twenty-six (26) two-story attached multiple-family units along with associated site improvements; (v) and a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium.

Each proposed unit would be between 1,442 square feet and 1,800 square feet, and would consist of three (3) or four (4) bedrooms, three (3) bathrooms, an attached two-car garage, and a front porch. Associated site improvements would consist of a private street, visitor parking, a common recreation area, private open space areas for each unit, and site landscaping improvements.

FINDINGS AND REASONS:

General Plan Amendment

1. Proposed General Plan Amendment No. GPA-001-2026 is internally consistent with the goals, policies, and elements of the General Plan.

   The proposed General Plan Amendment No. GPA-001-2026 would amend the City of Garden Grove's General Plan Land Use Map to modify the General Plan Land Use Designation of a 1.8-acre property from Low Density Residential (LDR) to Low Medium Density Residential (LMR), in order to facilitate the development of the Project. The LMR designation is intended for the development of single-family homes, accessory dwelling units, duplexes and triplexes, condominiums, and small lot subdivisions that provide a variety of housing types; provide access to schools, parks, and other community services; provide a high-quality architectural design that preserves privacy;

provide common spaces, recreation areas and services convenient to residents; provide an excellent environment for family life; and preserve residential property values. The proposed General Plan Amendment is consistent with the goals, policies, and other elements of the General Plan, including the following goals and policies:

Goal LU-1: *The City of Garden Grove is a well-planned community with sufficient land uses and intensities to meet the needs of anticipated growth and achieve the community's vision*.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The design and proposed housing development would be specifically styled to be consistent with the adjacent neighborhood. Further, by constructing new residential units, the Project could help the City meet the anticipated growth needs in the foreseeable future, particularly in relation to the City's overall Regional Housing Needs Allocation (RHNA).

Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The proposed development would add to the mix of diverse housing types in the immediate neighborhood. Additionally, the proposed development would ensure maintenance of all common areas, such as the private drive aisle, guest parking areas, the common recreation area, and landscaping, which would be the responsibility of the Homeowner's Association (HOA). The HOA would help ensure proper maintenance that preserves the residents' real estate values and quality of life.

Policy LU-2.4: *Assure that the type and intensity of land use are consistent with those of the immediate neighborhood.*

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within a residential neighborhood, characterized by multiple-family developments to the north, across Russell Avenue, and single-family residential uses to the west across Kerry Street, and south. The proposed development, would provide a transition between the lower density single-family residential developments and the higher density multiple-family developments. The proposed development would be consistent with other residential developments in the immediate neighborhood.

Goal LU-4: *The City seeks to develop uses that are compatible with one another*.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within a residential neighborhood, characterized by multiple-family developments to the north, across Russell Avenue, and single-family residential uses to the west across Kerry Street, and south. The proposed development, would be consistent with the lower density single-family residential developments and the higher density multiple-family developments within the immediate vicinity. Therefore, the proposed development would be compatible with other uses in the immediate area.

Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within walking distance to Brookhurst Street, a major thoroughfare with commercial uses. The Project could increase the local population, and add to the consumer base for commercial services within the immediate vicinity.

Policy CD-1.1: *Enhance the positive qualities that give residential, commercial, and industrial areas their unique identities, while also allowing flexibility for innovative design.*

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The design of the proposed development is intended to transition between nearby single- and multiple-family residential uses. The proposed development would be classified as a multiple-family development, but would exude the positive qualities of more traditional single-family developments. The amended General Plan Land Use Designation would allow for a more innovative design that would not alter the visual appeal of the surrounding neighborhood.

Goal H-2: Housing supply to accommodate housing needs at all affordability levels.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) new, market-rate, for-sale housing units. This type of project would help further diversify the City's housing stock and increase housing opportunities. Additionally, the Project would increase the variety of housing types within the subject neighborhood. The number of units would further contribute to meeting the City's Regional Housing Needs Allocation (RHNA).

Policy H-3.1: Maintain land use policies and regulations that create capacity for the development of a range of residential development types that can fulfill local housing needs, including accessory dwelling units, low-density single-

family uses, moderate-density townhomes and middle housing, higher-density apartments and condominiums, senior housing, and mixed-use Projects.

The proposed General Plan Amendment would facilitate the construction of twenty-six (26) new, market-rate, for-sale townhome units. The proposed density for the Project would be approximately fourteen (14.4) units per acre, a moderate density, within the allowable twenty-one (21) units per acre for the Low Medium Density Residential (LMR) Land Use Designation. Furthermore, the proposed density of approximately fourteen (14.4) units per acre is within the range of eleven (11) units per acre and sixteen (16) units per acre, which are found in the development adjacent to the Project. The General Plan Amendment would allow for additional housing capacity, in a different variety than what is readily available in the surrounding neighborhood.

2. The proposed General Plan Amendment will promote the public interest, health, safety and welfare.

   The Project would promote the public interest, health, safety, and welfare. The proposed General Plan Amendment is necessary to facilitate the development of the proposed twenty-six (26) unit residential development. The General Plan Amendment would ensure that the future use and development of the property would be consistent with the uses and developments on nearby properties. The Project could help the City with its housing goals. Specifically, the Project would also contribute to meeting the City's overall Regional Housing Needs Allocation (RHNA).

   The General Plan Amendment also would enable the redevelopment of the subject property. As a result of the Project, a Homeowner's Association would be developed, helping ensure proper maintenance and upkeep of the property. Furthermore, the Project has been reviewed by the Community Development Department, Orange County Fire Authority, and Public Works Department to help ensure the Project promotes public health, safety, and welfare.

3. The parcels covered by the proposed Amendment to the General Plan Land Use Map are physically suitable for the requested Land Use Designation(s), compatible with the surrounding land uses, and consistent with the General Plan.

   The proposed General Plan Amendment would amend the City of Garden Grove's General Plan Land Use Map to modify the General Plan Land Use Designation of the Property from Low Density Residential (LDR) to Low Medium Density Residential (LMR). The General Plan Amendment would facilitate the development of the Project and associated site improvements. The LMR Land Use Designation is intended in-part for the development of multiple-family residential neighborhoods, and allows for a maximum of 21.0 dwelling units per acre. The proposed Project would have a density of approximately fourteen (14.4) dwelling units per acre.

The proposed General Plan Amendment would facilitate rezoning of the subject property to a Planned Unit Development with an R-2 (Limited Multiple Residential). The Planned Unit Development would establish development standards that would govern the development of the proposed twenty-six (26) unit development. The site's proposed townhome-style residential units are similar to and create a transition between the surrounding single-family and multiple-family residential developments.

The surrounding properties have a mix of LDR and LMR General Plan Land Use Designations. Accordingly, the proposed LMR Land Use Designation would be appropriate for the site, and would ensure that the site is developed and maintained consistently with surrounding land uses. In addition, the site is of adequate size, and has access to all necessary public infrastructure to adequately serve the proposed Project.

Lastly, the application of the LMR Land Use Designation to the site would not conflict with other provisions or elements of the General Plan.

Zoning Amendment

1. Proposed Amendment No. A-046-2026 is internally consistent with the goals, policies, and elements of the General Plan.

   Under the proposed Amendment No. A-046-2026, the City's Official Zoning Map would be amended to rezone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, to ensure consistency with the proposed General Plan Land Use Designation of Low Medium Density Residential (LMR).

   The proposed PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone implements the LMR Land Use Designation. This PUD is intended to facilitate the development of the subject condominium development. The LMR Land Use Designation is intended for a range of over eleven (11.1) to twenty-one (21) dwelling units per acre. The proposed Project would consist of twenty-six (26) units, or approximately fourteen (14.4) units per acre, which is within the allowable range.

   Rezoning the site from R-1 (Single-Family Residential) to residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone is consistent with the goals and policies of the General Plan Land Use Element, including:

   Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life.

As facilitated by the proposed Amendment, the proposed development of twenty-six (26) for-sale units would add to the mix of diverse housing types in the immediate neighborhood. The proposed development would ensure maintenance of all common areas, such as the private drive aisle, guest parking areas, the common recreation area, and landscaping, which would be the responsibility of the Homeowner's Association (HOA). The HOA would help ensure proper maintenance that preserves the residents' real estate values. Furthermore, the Project would contribute to meeting the City's Regional Housing Needs Allocation (RHNA), as well as the Housing Element policies.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.

The site is located within a residential neighborhood, characterized by R-1 (Single-Family Residential) zoned properties to the west across Kerry Street, and south. To the north, the Project abuts R-2 (Limited Multiple Residential) zoned properties. Furthermore, the proposed density of approximately fourteen (14.4) units per acre is within the range of eleven (11) units per acre and sixteen (16) units per acre, which are found in the development adjacent to the Project. The proposed PUD zone with an R-2 base zone, allowing for up to twenty-one (21) units per acre is appropriate, as it will not only provide opportunities for new housing developments, but also be consistent with the surrounding neighborhood.

Goal LU-4: The City seeks to develop uses that are compatible with one another.

The 1.8-acre site is proposed to be improved with twenty-six (26) condominium units, at approximately fourteen (14.4) units per acre, which is within the allowable density of twenty-one (21) units per acre otherwise allowed under the R-2 base zoning and the proposed Low Medium Density Residential (LMR) General Plan Land Use Designation of the property. The proposed PUD would be consistent with the maximum density of twenty-one (21) units per acre. The proposed Project is within the allowed density of the LMR Land Use Designation, and is similar in scale to the adjoining residential neighborhood. The proposed design would consist of two-story units, matching the nearby single- and multiple-family residential uses. Thus, the Project would be similar in land use intensity and physical scale of the adjoining neighborhood.

Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses.

The site is located within a residential neighborhood with nearby access to Brookhurst Street, a major thoroughfare with commercial uses. Approval of the proposed Zoning Map Amendment would facilitate the redevelopment of an existing property with twenty-six (26) condominiums. The construction of

the new residential units could increase the local population, and add to the consumer base for commercial services within the immediate vicinity.

Goal H-2: Housing supply to accommodate housing needs at all affordability levels.

The proposed Project would provide twenty-six (26) new, market-rate, for-sale housing units. This type of Project would help further diversify the variety of residential uses within the subject neighborhood, the City's overall housing stock, and increase housing opportunities. The number of units would further contribute to meeting the City's Regional Housing Needs Allocation (RHNA).

Policy H-3.1: Maintain land use policies and regulations that create capacity for the development of a range of residential development types that can fulfill local housing needs, including accessory dwelling units, low-density single-family uses, moderate-density townhomes and middle housing, higher-density apartments and condominiums, senior housing, and mixed-use Projects.

Approval of the proposed Zoning Map Amendment would facilitate the development of twenty-six (26), attached, market-rate residential units. The zoning Amendment to establish residential Planned Unit Development (PUD-020-2026) zoning with an R-2 base zone would allow for this development specifically, creating additional housing capacity.

Policy CD-7.1: Encourage future development and redevelopment Projects to reinforce district scale, identity, and urban form.

The site is located in an area with adjacent single- and multiple-family residential uses. The adoption of the PUD with an R-2 base zone would help ensure the proposed development would be consistent with the existing neighborhood. Specifically, the proposed two-story townhome Project would provide a transition between the form and scale of the nearby single-family developments and the denser multiple-family uses to the north, across Russell Avenue.

2. Proposed Amendment No. A-046-2026 is deemed to promote the public interest, health, safety and welfare.

Under the proposed Amendment No. A-046-2026, the City's Official Zoning Map would be amended to rezone the Project site from R-1 (Single-Family Residential) to residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, to facilitate the development of the proposed twenty-six (26) unit Project, and to ensure consistency with the proposed General Plan Land Use Designation of Low Medium Density Residential (LMR).

The subject property is currently improved with an underutilized religious facility. As facilitated through the proposed Amendment, the property would

be developed with twenty-six (26) residential units, and associated site features. The proposed residential units would help promote the public interest, as would help the City achieve its housing goals. It also would allow the redevelopment of a property. The Project would also necessitate the creation of a Homeowner's Association, helping ensure proper maintenance into the foreseeable future. Furthermore, the Project has been reviewed by the Community Development Department, the Public Works Department, and Orange County Fire Authority to help ensure the Project would promote public health, safety, and welfare.

3. The proposed Zoning Map Amendment will ensure a degree of compatibility with surrounding properties and uses.

   Under the proposed Amendment No. A-046-2026, the City's Official Zoning Map would be amended to rezone the Project site from R-1 (Single-Family Residential) to residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, to facilitate the development of the proposed twenty-six (26) unit Project, and to ensure consistency with the proposed General Plan Land Use Designation of Low Medium Density Residential (LMR).

   The proposed Zoning Map Amendment would facilitate the development of the proposed Project. The Project's proposed townhome-style design would be compatible with the surrounding residential uses and properties. Accordingly, the R-2 base zoning designation would be appropriate for the site, and would ensure that the site is compatible with, is developed, and is maintained in continuity with surrounding land uses.

4. The parcels covered by the proposed Amendment to the Zoning Map are physically suitable for the requested Land Use Designation(s), compatible with the surrounding land uses, and consistent with the General Plan.

   Under the proposed Amendment No. A-046-2026, the City's Official Zoning Map would be amended to rezone the Project site from zoning map Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential PUD (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, to facilitate the development of the proposed twenty-six (26) unit detached condominium Project, and to ensure consistency with the proposed General Plan Land Use Designation of Low Medium Density Residential (LMR).

   The proposed Amendment would facilitate the development of the proposed twenty-six (26) unit townhome Project. The site's proposed attached single-family, townhome-style condominium units would be compatible with the surrounding area, which consists of a mix of multiple-family and single-family residential uses. Accordingly, the PUD zone with the R-2 base zone would be appropriate for the site, as it would be consistent with the variety of residential developments in the immediate area. In addition, the site has access to all

necessary public infrastructure to adequately serve the proposed development.

Planned Unit Development

1. That the location, design and proposed uses are compatible with the character of existing development in the vicinity and will be well integrated into its setting.

   The proposed residential Planned Unit Development is intended to facilitate a housing development that is more compatible with the surrounding neighborhood by creating a transition between the existing single- and multiple-family residential developments. The multiple-family residential developments across Russell Street to the north were constructed at a density of approximately sixteen (16) units per acre. Meanwhile, the single-family residential uses to the west and south were constructed at approximately eleven (11) units per acre. The proposed Project, as facilitated through the residential Planned Unit Development, would provide a density of approximately fourteen (14.4) dwelling units per acre. The proposed density would be a moderate density, within the range of densities of surrounding residential uses. Additionally, the proposed Planned Unit Development would include specific development standards that intend to allow the proposed multiple-family development appear and function more akin to a single-family residential use.

   Development standards specified in the PUD include, but are not limited to, setbacks, parking, building heights, and open space requirements. There are three (3) development standards in which the PUD would differ from the R-2 base zoning. The PUD would allow for: (1) fences in the front setback up to three-and-a-half-feet (3'-6") tall; (2) mechanical equipment (e.g., A/C condensers) within the front setback area, as long as they are screened from view; and (3) a minimum one-foot (1'-0") separation between buildings and the private street. Collectively, the PUD standards would provide greater flexibility in design, and would allow the Project to provide a transition between the other uses in the immediate vicinity.

   The Planned Unit Development would allow for the proposed development to be more consistent with the surrounding neighborhood. The proposed Planned Unit Development No. PUD-020-2026 would establish development standards that are consistent and compatible with the development standards for both single- and multiple-family residential uses.

2. That the plan will produce a stable and desirable environment and will not cause undue traffic congestion on surrounding or access streets.

   The Project proposes an internal twenty-five foot (25'-0") wide drive aisle that creates a loop from the development's entrance from Russell Street. The proposed private street would serve as the only vehicular access point to the

Project site. Each proposed unit would be improved with an attached garage, which would have access from the central drive aisle. An internal walkway system would connect the common recreation area, guest parking spaces, shared mailboxes, and trash enclosure to the development.

The on-site circulation was designed in such a manner to ensure proper access and safety for vehicles driving within the proposed development, and along the adjacent Russell Avenue. The City's Traffic Engineering Division is supportive of the Project.

3. That the provision is made for both public and private open spaces.

Each unit would provide a private recreation area with a minimum width of six feet (6'-0"). The private recreation areas would function as "front yards" or "stoops," providing an outdoor space and garden adjacent to each unit's covered main entry. Conditions of approval would require that all private recreation areas be open and unobstructed from the ground to the sky at all times, save for the provided covered entry.

Additionally, the Planned Unit Development Standards of Development propose minimum open space requirements. The Project would provide required common recreation areas in multiple locations throughout the site, to be shared amongst all of the units. The largest common open space area would be an approximately 3,015 square-foot active recreational open space area with minimum dimensions of 30'-0" in each direction. The recreation area features seating, a shade structure, and a flexible lawn space. Other open spaces would include 680 square feet of community garden space, and approximately 2,901 square feet of passive recreation space. The Project would necessitate the creation of a Homeowner's Association, which would help ensure the proper maintenance of the common spaces within the development. The Project has also been conditioned as such.

4. That provision is made for the protection and maintenance of private areas reserved for common use.

The Planned Unit Development would provide for the protection and maintenance of private areas for common use via a shared active and passive recreation areas on-site.

The Project would provide required common recreation areas in multiple locations throughout the site, to be shared amongst all of the units. The Project would provide an approximately 3,015 square-foot active recreational open space area with minimum dimensions of 30'-0" in each direction. The recreation area features seating, a shade structure, and a flexible lawn space. Other open spaces would include 680 square feet of community garden space, and approximately 2,901 square feet of passive recreation space.

5. That the quality of the Project achieved through the planned unit development zoning is greater than could be achieved through traditional zoning.

   The requested Planned Unit Development would help facilitate the development of residential units, to be sold as condominiums. Providing condominium units would allow for ownership of the proposed units, consistent with the adjacent single-family residences. In an effort to be consistent with the surrounding neighborhood, the subject Project is intending to develop a transition in the scale and scope between the adjacent single-family developments and the multiple-family residential uses across Russell Street to the north. Strictly following the R-2 base zone standards would not allow for the proposed Project to integrate within the development patterns of the existing neighborhood.

   Therefore, the proposed Planned Unit Development would be necessary to establish development standards that are more consistent and compatible with the development standards of both single- and multiple-family developments. These development standards would differ from those achieved through traditional zoning. The adoption of the Planned Unit Development would allow for the subject parcel to develop in a manner consistent with the surrounding neighborhood. Maintaining neighborhood consistency, and harmony amongst different developments, could only be achieved through the proposed PUD.

INCORPORATION OF FACTS AND FINDINGS SET FORTH IN STAFF REPORT AND OTHER RESOLUTIONS

In addition to the foregoing, the Planning Commission incorporates herein by this reference the facts and findings set forth in the staff report and in Resolution Nos. 6138-26 and 6140-26.

BE IT FURTHER RESOLVED that the Planning Commission does conclude:

1. The General Plan Amendment No. GPA-001-2026, Amendment No. A-046-2026 and Planned Unit Development No. PUD-020-2026 possess characteristics that would indicate justification of the request in accordance with Municipal Code Sections 9.32.030.D.1 (General Plan Amendment), 9.32.030.D.2 (Zone Change), and 9.12.030.020 (Planned Unit Development).

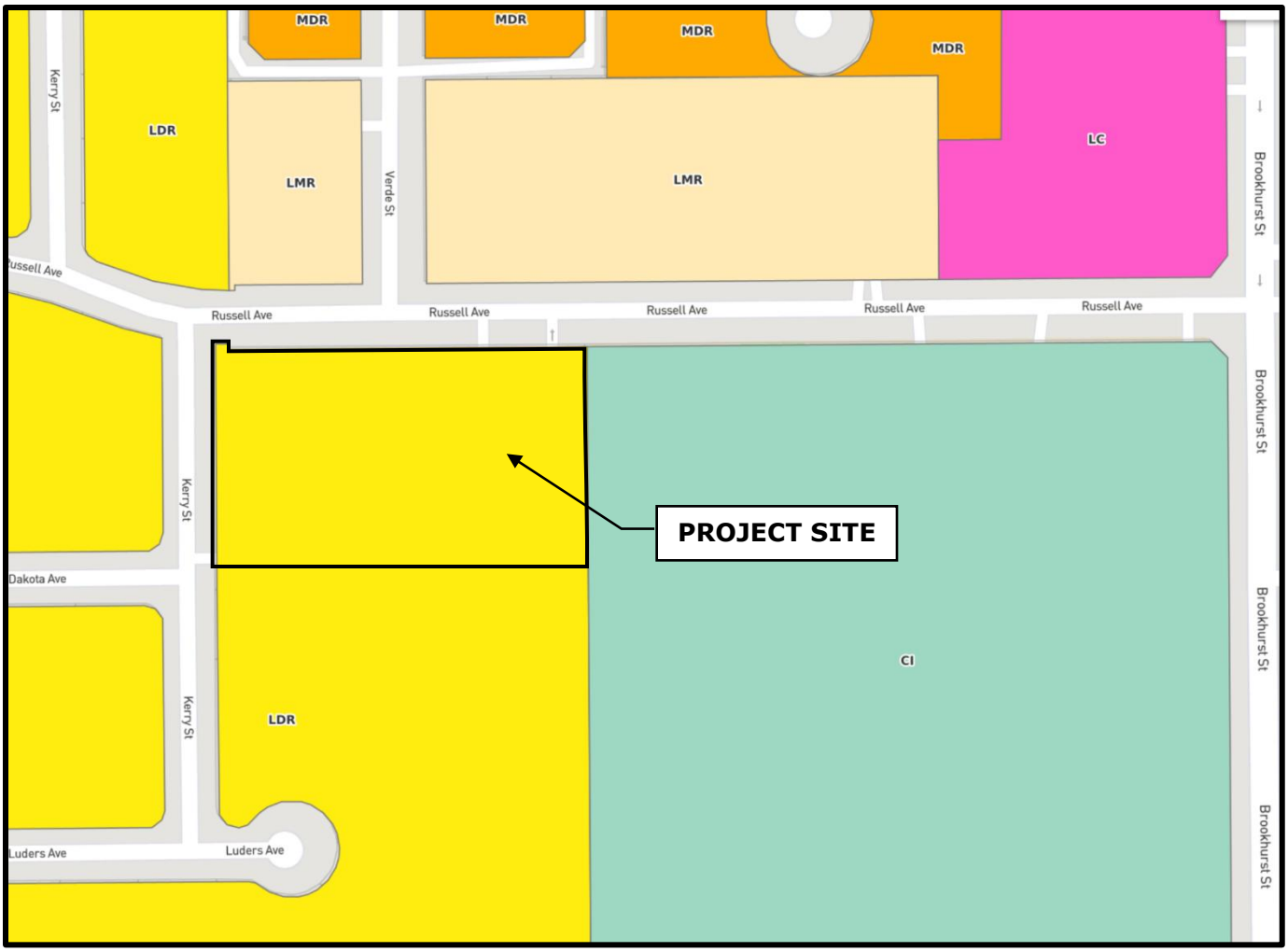
2. Upon City Council approval of General Plan Amendment No. GPA-001-2026, Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026, the City of Garden Grove General Plan Land Use Map would be amended to modify the General Plan Land Use Designation of the property from Low Density Residential (LDR) to Low Medium Density Residential (LMR), and the City's Official Zoning Map would be amended to change the zoning of the property, located at 9822 Russell Avenue, Assessor's Parcel No. 098-081-19, from R-1 (Single-Family Residential) to Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone, per the attached maps/exhibits, Exhibits "A" and "B", respectively.

3. The overall development and subsequent occupancy and operation of the site shall be subject to those environmental mitigation measures identified in the Mitigated Negative Declaration and associated Mitigation Monitoring and Reporting Program.

4. It is recommended that the Standards of Development set forth in Exhibit "C" attached to this Resolution shall apply to Planned Unit Development No. PUD-020-2026.

EXHIBIT "A"

GENERAL PLAN AMENDMENT NO. GPA-001-2026



LEGEND

Subject Site – 9822 Russell Avenue (Assessor's Parcel No. 098-081-19)

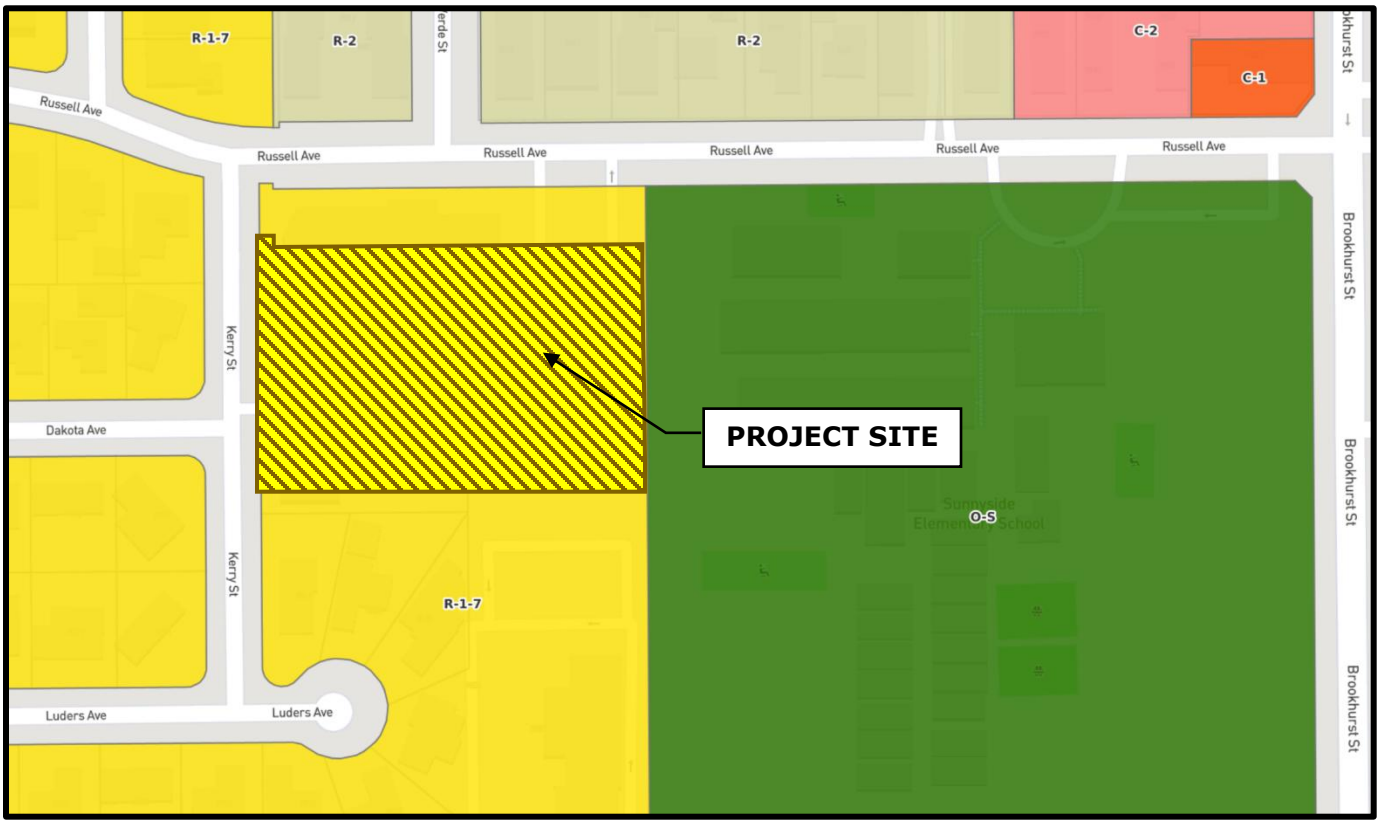
NOTES

1. CURRENT GENERAL PLAN: LOW DENSITY RESIDENTIAL (LDR)
2. PROPOSED GENERAL PLAN: LOW MEDIUM DENSITY RESIDENTIAL (LMR)

CITY OF GARDEN GROVE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING SERVICES DIVISION
MAY 2026

EXHIBIT "B"

AMENDMENT NO. A-046-2026 & PLANNED UNIT DEVELOPMENT NO. PUD-020-2026



LEGEND

Subject Site – 9822 Russell Avenue (Assessor's Parcel No. 098-081-19)

NOTES

1. CURRENT ZONING: SINGLE-FAMILY RESIDENTIAL (R-1)
2. PROPOSED ZONING: PLANNED UNIT DEVELOPMENT NO. PUD-020-2026 WITH LIMITED MULTIPLE RESIDENTIAL (R-2) BASE ZONE

CITY OF GARDEN GROVE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING SERVICES DIVISION
MAY 2026

EXHIBIT "C"

STANDARDS OF DEVELOPMENT FOR PLANNED UNIT DEVELOPMENT NO. PUD-020-2026

ATTACHMENT TO PLANNING COMMISSION RESOLUTION NO. 6139-26

SECTION I. APPLICABILITY

The provisions contained in this Planned Unit Development (PUD) supplemental text shall apply, as specified, to the multiple-family residential uses permitted under PUD-020-2026, and pursuant to the implementation provisions for PUD-020-2026 as found under Planning Commission Resolution No. 6140-26 for Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447. Except as otherwise stated in this text, the requirements and development standards applicable to development in the R-2 (Limited Multiple Residential) zone and/or other applicable zoning ordinances and regulations shall apply.

SECTION II. GENERAL DEVELOPMENT STANDARDS

1. Purpose and Intent

    a. The purpose and intent of Planned Unit Development No. PUD-020-2026 is to facilitate the development of twenty-six (26) detached residential condominium units, pursuant to the implementation provisions for PUD-020-2026 as found under Planning Commission Resolution No. 6137-26 for Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447.

2. Maximum Density

    a. The density for the subject site shall not exceed a maximum of twenty-one (21) dwelling units per acre.

3. Parking

    a. Parking for residential uses within PUD-020-2026 shall be a minimum of 3.25 spaces per unit, and shall comply with the following:

        i. Each unit shall provide an attached two-car enclosed garage with a minimum interior clearance of twenty-foot (20'-0") depth and twenty-foot (20'-0") width.

4. Development Streets

    a. The property shall maintain a minimum 25'-0" wide private-street, with direct access to Russell Avenue, for the purposes of providing access to each individual garage for each unit.

5. Common Recreation Area

    a. The combined usable private and common open/recreational space for the entire development shall equal a minimum of 300 square feet per unit. The Project shall provide a minimum of 3,600 square feet per unit of common recreation area, which is accessible to all residents within the subdivision.

    b. At least one (1) common recreation area shall have minimum dimensions of thirty feet (30'-0") wide.

6. Private Recreation Area

    a. A private recreation area shall be provided for each unit. The private recreation area shall comply with the following standards:

        i. Each dwelling unit shall have a private recreation area that shall have a minimum dimension of six feet (6-0") wide.

        ii. Private recreation areas may be located within a front, rear, or side yard setback area. Private recreation areas located within the front setback, however, shall not count toward the minimum overall combined open space requirement (300 square feet per unit) required in Section 5.a.

        iii. Private recreation areas shall be delineated via a fence, up to a maximum height of three-and-a-half feet (3'-6"). Fencing may be provided within setback areas. Adjacent to the driveway, an area for safety vision clearance shall be maintained on each side of the driveway. Such area for vision clearance shall be defined by a diagonal line beginning at the intersection of the edges of the driveway and the inside line of the required side yard and extending away from the driveway at an angle of 45 degrees to the edge of the driveway toward the side street property line of the lot.

7. Building Setbacks

    a. The following minimum setbacks shall be observed to the development's perimeter property lines, unless otherwise specified:

        i. All buildings shall maintain the following setbacks to the development property lines:

            1. Minimum twenty-foot (20'-0") front setback to all floors
            2. Minimum ten-foot (10'-0") side setback to all floors
            3. Minimum ten-foot (10'-0") street side setback to all floors
            4. Minimum ten-foot (10'-0") rear setback to all floors

5. Minimum twenty-foot (20’-0”) stepback to 2nd floors adjacent to R-1 (Single-Family Residential) zoned properties

ii. All buildings shall maintain a minimum one-foot (1’-0”) separation from the garage to the private street, and a minimum of three feet (3’-0”) from any habitable spaces to the private street.

iii. Any accessory structures provided in the common recreation space shall maintain the following setbacks to the development property lines:

1. Minimum twenty-foot (20-0”) front setback
2. Minimum ten-foot (10’-0”) side setback
3. Minimum ten-foot (10’-0”) street side setback
4. Minimum ten-foot (10’-0”) rear setback

8. Dwelling Height

a. Dwellings located adjacent to all zones, including R-1, shall not exceed a maximum building height of thirty-five feet (35’-0”), measured from adjacent finished grade to the highest point on the roof.

9. Dwelling Unit Entries

a. Each dwelling unit shall provide a minimum two-foot (2’-0”) deep covered entry on the ground level, to serve as the primary entry.

10. Mechanical Equipment

a. Ground-mounted mechanical equipment including, but not limited to, water heaters, heating, cooling or ventilating equipment, swimming pool or spa heaters, pumps or filters may be located within a front, rear, or side yard setback, provided that the equipment is screened from view from all abutting public rights-of-way, and is shielded to achieve the requirements of Garden Grove Municipal Code Chapter 8.47 (Noise Control).

11. Base Zone

a. The base zone is R-2 (Limited Multiple Residential). Except as otherwise provided these Planned Unit Development Provisions and Standards of Development, the development standards of the R-2 zoning district shall continue to apply to property within the area covered by this Planned Unit Development. In the event of any conflict between these Planned Unit Development Provisions and Standards of Development and the base zone, the provisions of these Planned Unit Development Provisions and Standards of Development shall prevail.

12. Implementation

    a. The residential Project authorized by this Planned Unit Development shall be implemented through development in compliance with Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, as approved by the Garden Grove City Council, including all related Conditions of Approval, and/or any duly approved Amendments to Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447. Minor modifications to the Site Plan and/or the Conditions of Approval to Site Plan No. SP-168-2026 and/or Vesting Tentative Tract Map No. TT-19447, which do not materially change the scope or intensity of the Project and which will not result in impacts that have not previously been addressed, may be approved by the Department Director. Amendments to Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, which do not require an Amendment to this Planned Unit Development, may be approved by the Planning Commission.

13. Project Modifications and Subsequent Development

    a. The Project reflected in Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447 was designed in accordance with the zoning and subdivisions standards in effect as of the Project application submittal date. Modifications to the approved Project and all subsequent use and development occurring after construction of the approved Project shall be subject to the zoning and development standards in effect on the date of submittal of a complete application for such modifications or subsequent development and/or commencement of such use.

ATTACHMENT 6

RESOLUTION NO. 6140-26

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE RECOMMENDING THAT THE CITY COUNCIL APPROVE SITE PLAN NO. SP-168-2026 AND VESTING TENTATIVE TRACT MAP NO. TT-19447, AND REVOKE CONDITIONAL USE PERMIT NOS. CUP-114-81 AND CUP-554-01 FOR A PROPERTY LOCATED ON THE SOUTHEAST CORNER OF RUSSELL AVENUE AND KERRY STREET, AT 9822 RUSSELL AVENUE, ASSESSOR'S PARCEL NO. 098-081-19.

BE IT RESOLVED that the Planning Commission of the City of Garden Grove, in regular session assembled on May 21, 2026, does hereby recommend that the City Council revoke Conditional Use Permit Nos. CUP-114-81 and CUP-554-01, and approve Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, for the property located on the southeast corner of Russell Avenue and Kerry Street, at 9822 Russell Avenue, Assessor's Parcel No. 098-081-19, subject to (i) the Conditions of Approval attached hereto as "Exhibit A"; (ii) City Council adoption and effectiveness of a Resolution approving General Plan Amendment No. GPA-001-2026; (iii) City Council adoption and effectiveness of an Ordinance approving Zoning Amendment No. A-046-2026 and Planned Unit Development No. PUD-020-2026; and (iv) City Council approval of a Resolution adopting a Mitigated Negative Declaration and an associated Mitigation Monitoring and Reporting Program for the Project.

BE IT FURTHER RESOLVED in the matter of Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, the Planning Commission of the City of Garden Grove does hereby report as follows:

1. The subject case was initiated by Chad Brown of Melia Homes, Inc., with authorization from the property owner, Iglesia de Cristo de Restauracion.

2. The applicant has requested the following approvals to facilitate the proposed development: (i) a General Plan Amendment to change the Land Use Designation of the subject property from LDR (Low Density Residential) to LMR (Low Medium Residential); (ii) a Zoning Pap Amendment to re-zone the subject property from R-1 (Single-Family Residential) to residential Planned Unit Development No. PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to establish standards of development to facilitate the development of the Project; (iv) a Site Plan to construct twenty-six (26) two-story townhomes and associated site improvements; and (v) a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. In addition, revocation of Conditional Use Permit Nos. CUP-114-81 and CUP-554-01 which previously allowed for the operation of an elementary school, and operation of a wireless facility, respectively, on the subject property, is proposed. Collectively, these actions are referred to herein as the "Project".

3. Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq., and the CEQA guidelines, 14 California Code of

Regulations Sec. 15000 et. seq., an initial study was prepared, and it has been determined that the proposed Project qualifies for a Mitigated Negative Declaration because the proposed Project with implementation of the proposed mitigation measures cannot, or will not, have a significant effect on the environment. A Mitigation Monitoring and Reporting Program (MMRP) listing the mitigation measures to be monitored during Project implementation has been prepared, and is attached to the Mitigated Negative Declaration. The Mitigated Negative Declaration and MMRP were prepared and circulated in accordance with CEQA, and CEQA's implementing guidelines.

4. Concurrently with its adoption of this Resolution, the Planning Commission also adopted: (A) Resolution No. 6138-26 recommending that the City Council adopt a Mitigated Negative Declaration and the associated Mitigation Monitoring and Reporting Program for the Project; and (B) Resolution No. 6139-26 recommending that the City Council approve (i) General Plan Amendment No. GPA-001-2026 to amend the General Plan Land Use Designation of the property from Low Density Residential (LDR) to Low Medium Density Residential (LMR), (ii) Zoning Amendment No. A-046-2026 to amend the City's Official Zoning Map to change the zoning of the subject property from R-1 (Single-Family Residential) to Residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, and (iii) residential Planned Unit Development No. PUD-020-2026 to establish development standards to facilitate the development of the Project. The facts and findings set forth in Resolution No. 6138-26 and Resolution No. 6139-26 are hereby incorporated into this Resolution by reference.

5. The property currently has a General Plan Land Use Designation of Low Density Residential (LDR), and is currently zoned Single-Family Residential (R-1). The subject 1.8-acre lot is currently improved with a religious facility.

6. Existing land use, zoning, and General Plan designation of property in the vicinity of the subject property have been reviewed.

7. The report submitted by City staff was reviewed.

8. Pursuant to a legal notice, a public hearing was held on May 21, 2026, and all interested persons were given an opportunity to be heard.

9. The Planning Commission gave due and careful consideration to the matter during its meeting of May 21, 2026, and considered all oral and written testimony presented regarding the Project, the Initial Study, and the Mitigated Negative Declaration.

BE IT FURTHER RESOLVED, FOUND AND DETERMINED that the facts and reasons supporting the conclusion of the Planning Commission, as required under Municipal Code Sections 9.60.020 and 9.40.060, are as follows:

FACTS:

The Project site is comprised of an approximately 78,537 square-foot (1.8-acre) parcel on the southeast corner of Kerry Street and Russell Avenue. The site is currently developed with a church, preschool, and unmanned telecommunications facility, all of which would be demolished as a part of the subject request. In conjunction with the subject request, Conditional Use Permit Nos. CUP-114-81 and CUP-554-01, which allowed the operation of the preschool and the telecommunications facility, respectively, would be revoked.

The subject site has a General Plan Land Use Designation of Low Density Residential (LDR) and is zoned R-1 (Single-Family Residential). The property abuts R-1 zoned properties to the south, R-1 and R-2 (Limited Multiple Residential) properties to the north across Russell Avenue, R-1 zone to the west across Kerry Street, and Sunnyside Elementary School in the O-S (Open Space) zone to the east.

The applicant is requesting: (i) a General Plan Amendment to change the Land Use Designation of the property from Low Density Residential (LDR) to Low Medium Density Residential (LMR); (ii) an Amendment to the zoning map to establish a residential PUD zone (PUD-020-2026) with an R-2 (Limited Multiple Residential) base zone; (iii) a residential Planned Unit Development to facilitate the development of the Project; (iv) Site Plan approval to construct twenty-six (26) two-story attached multiple-family units along with associated site improvements; (v) and a Vesting Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium.

The Site Plan would authorize the construction of twenty-six (26) condominium units across five (5) buildings, and associated site improvements. The development was designed as attached, side-by-side condominium units, which would create a townhome appearance. There would be three (3) unit types, which would vary between 1,442 square feet to 1,800 square feet, and would consist of three (3) or four (4) bedrooms, three (3) bathrooms, an attached two-car garage, and a front porch. Associated site improvements would consist of a private street, visitor parking, a common recreation area, private open space areas for each unit, and site landscaping improvements.

In accordance with the State Subdivision Map Act, the proposed Vesting Tentative Tract Map No. TT-19447 would create a one-lot subdivision for the purpose of selling each unit as a condominium. As proposed in the Vesting Tentative Tract, the Project would consist of twenty-six (26) dwelling units, and one (1) lot would consist of the common recreation and central access aisle areas. The proposed Vesting Tentative Tract Map is in conformance with the proposed PUD Standards of Development for the site, as well as the State Subdivision Map Act.

FINDINGS AND REASONS:

SITE PLAN

1. The proposed development Project is consistent, in compliance, and conformity with the applicable, objective standards, provisions, conditions or requirements of the General Plan, Title 9, or other applicable ordinances or policies of the City.

   The proposed Project would include the construction of twenty-six (26) residential units, along with associated site improvements, including, but not limited to a private street, visitor parking, private garages, common recreation areas, private open space areas, and site landscaping improvements.

   With the approval of General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026, the subject site would have a General Plan Land Use Designation of Low Medium Density Residential (LMR), and be zoned PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone. The proposed LMR General Plan Land Use Designation is intended for the development of single-family homes, accessory dwelling units, duplexes and triplexes, condominiums, and small lot subdivisions that provide a variety of housing types; provide access to schools, parks, and other community services; provide a high-quality architectural design that preserves privacy; provide common spaces, recreation areas and services convenient to residents; provide an excellent environment for family life; and preserve residential property values. The LMR Land Use Designation is implemented by the R-2 zone, which is intended to provide for a limited increase in population density by permitting multiple attached or detached dwellings on a lot. This zone is intended to provide a transition between lower density, single-family detached residences and higher-density residential or non-residential uses. Planned Unit Development No. PUD-020-2026 would establish standards of development with which the proposed Site Plan is consistent. The proposed Project would also be consistent with several goals and policies of the City's General Plan, including the following:

   Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life.

   The proposed residential development would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The proposed development would add to the mix of diverse housing types in the immediate neighborhood. Additionally, the proposed development would ensure maintenance of all common areas, such as the private drive aisle, guest parking areas, the common recreation area, and landscaping, which would be the responsibility of the Homeowner's Association (HOA). The HOA would help ensure proper maintenance that preserves the residents' real estate values and quality of life.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.

The proposed residential development would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within a residential neighborhood, characterized by multiple-family developments to the north, across Russell Avenue, and single-family residential uses to the west, and south. The proposed development, would provide a transition between the lower density single-family residential developments and the higher density multiple-family developments. The proposed development would be consistent with other residential developments in the immediate neighborhood.

Goal LU-4: The City seeks to develop uses that are compatible with one another.

The proposed residential development would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within a residential neighborhood, characterized by multiple-family developments to the north, across Russell Avenue, and single-family residential uses to the west, and south. The proposed development, would be consistent with the lower density single-family residential developments and the higher density multiple-family developments within the immediate vicinity. The proposed development would be compatible with other uses in the immediate area.

Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses.

The proposed residential development would facilitate the construction of twenty-six (26) attached, multiple-family, townhome-style residential units. The site is located within walking distance to Brookhurst Street, a major thoroughfare with commercial uses. The Project could increase the local population, and add to the consumer base for commercial services within the immediate vicinity.

Goal H-2: Housing supply to accommodate housing needs at all affordability levels.

The proposed residential development would result in the construction of twenty-six (26) new, market-rate, for-sale housing units. This type of Project would help further diversify the City's housing stock and increase housing opportunities. The number of units would further contribute to meeting the City's Regional Housing Needs Allocation (RHNA).

Policy H-3.1: Maintain land use policies and regulations that create capacity for the development of a range of residential development types that can fulfill

local housing needs, including accessory dwelling units, low-density single-family uses, moderate-density townhomes and middle housing, higher-density apartments and condominiums, senior housing, and mixed-use Projects.

The proposed residential development would facilitate the construction of twenty-six (26) new, market-rate, for-sale townhome units. The proposed density for the Project would be approximately fourteen (14.4) units per acre, a moderate density, within the allowable twenty-one (21) units per acre for the Low Medium Density Residential (LMR) Land Use Designation. The Project would result in additional housing capacity, in a different variety than what is readily available in the surrounding neighborhood.

Policy CD-7.1: Encourage future development and redevelopment Projects to reinforce district scale, identity, and urban form.

The site is located in an area with nearby single- and multiple-family residential uses. The proposed development would be consistent with the existing neighborhood. Specifically, the proposed two-story townhome Project would provide a transition between the form and scale of the nearby single-family developments and the denser multiple-family uses to the north, across Russell Avenue. The development standards of the proposed Planned Unit Development with an R-2 base zone would help ensure that the Project, despite its classification as a multiple-family development, would appear and function similarly to the nearby single-family uses.

2. The provisions of the California Environmental Quality Act have been complied with.

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq., and the CEQA guidelines, 14 California Code of Regulations Sec. 15000 et. seq., an Initial Study was prepared and it has been determined that the proposed Project qualifies for a Mitigated Negative Declaration because the proposed Project with implementation of the proposed mitigation measures cannot, or will not, have a significant effect on the environment. A Mitigation Monitoring and Reporting Program (MMRP) listing the mitigation measures to be monitored during Project implementation has been prepared, and is attached to the Mitigated Negative Declaration. The Mitigated Negative Declaration and MMRP were prepared, circulated, and noticed in accordance with CEQA and CEQA's implementing guidelines. Therefore, the applicable CEQA provisions have been complied with. Pursuant to Resolution No. 6138-26, the Planning Commission recommended that the City Council adopt a Mitigated Negative Declaration and the associated MMRP for the Project.

3. The proposed development Project will not create specific, adverse impacts, as defined in subdivision (j)(1)(A) of Government Code Section 65589.5, on public health and safety without any feasible method to satisfactorily mitigate

or avoid the specific adverse impact, other than the disapproval of the proposed Project.

The proposed twenty-six (26) residential unit development would not have specific, adverse impacts on public health and safety. The proposed Project would be: within the maximum allowable density, compatible with surrounding uses, similar in scale to the adjoining neighborhood, and consistent with land use types and intensities in the immediate neighborhood. Furthermore, the Project would contribute to meeting the City's Regional Housing Needs Allocation (RHNA), as well as the Housing Element policies.

VESTING TENTATIVE TRACT MAP

1. That the proposed map is consistent with the General Plan.

The proposed Project would include the construction of twenty-six (26) residential units, along with associated site improvements, including, but not limited to a private street, visitor parking, private garages, common recreation areas, private open space areas, and site landscaping improvements.

With the approval of General Plan Amendment No. GPA-001-2026, the subject site would have a General Plan Land Use Designation of Low Medium Density Residential (LMR). The LMR General Plan Land Use Designation is intended for the development of single-family homes, accessory dwelling units, duplexes and triplexes, condominiums, and small lot subdivisions that provide a variety of housing types; provide access to schools, parks, and other community services; provide a high-quality architectural design that preserves privacy; provide common spaces, recreation areas and services convenient to residents; provide an excellent environment for family life; and preserve residential property values. The LMR Land Use Designation is implemented by the R-2 zone, which is intended to provide for a limited increase in population density by permitting multiple attached or detached dwellings on a lot. This zone is intended to provide a transition between lower density, single-family detached residences and higher-density residential or non-residential uses. With the approval of Zoning Amendment No. A-046-2026 and Planned Unit Development No. PUD-020-2026, the subject site would be zoned PUD-020-2026 with an R-2 (Limited Multiple Residential) base zone. The proposed Project would also be consistent with several goals and policies of the City's General Plan, including the following:

Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life.

The proposed development of twenty-six (26) for-sale units would add to the mix of diverse housing types in the immediate neighborhood. The proposed Vesting Tentative Tract Map would create a one-lot subdivision for the purpose of developing the site with twenty-six (26) for-sale, attached residential

condominium units. The proposed development would help ensure maintenance of all common areas, such as the private street, guest parking areas, the common recreation areas, and street frontage landscaping, which would be the responsibility of the Homeowner's Association to ensure proper maintenance. Furthermore, the Project would contribute to meeting the City's Regional Housing Needs Allocation (RHNA), as well as the Housing Element policies.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.

The site is located within a residential neighborhood, characterized by the both for-sale and rental single- and multiple-family residential uses. The proposed Vesting Tentative Tract Map would create a one-lot subdivision for the purpose of developing the site with twenty-six (26) for-sale condominium units. The proposed subdivision would not only facilitate the production of new housing developments, but also be consistent with the surrounding neighborhood.

Goal LU-4: The City seeks to develop uses that are compatible with one another.

The 1.8-acre site is proposed to be improved with twenty-six (26) condominium units, at approximately fourteen (14.4) units per acre, which is within the allowable density of twenty-one (21) units per acre otherwise allowed under the R-2 base zoning and the LMR General Plan Land Use Designation. The proposed Project would be within the allowed density of the LMR Land Use Designation, and would be similar in scale to the adjoining residential neighborhood. The proposed subdivision would be similar in that it would allow for-sale units, akin to nearby single-family properties. Thus, the Project would be similar both in land use intensity and physical scale of the adjoining residential neighborhood.

2. That the design and improvement of the proposed subdivision is consistent with the General Plan.

The subject site has a proposed General Plan Land Use Designation of LMR (Low Medium Density Residential). The applicant is requesting Vesting Tentative Tract Map No. TT-19447 approval to create a one-lot subdivision for the purpose of developing the site with twenty-six (26) for-sale, attached residential condominium units (14.4 units per acre). The LMR Land Use Designation is intended for the development of single-family homes, accessory dwelling units, duplexes and triplexes, condominiums, and small lot subdivisions that provide a variety of housing types; provide access to schools, parks, and other community services; provide a high-quality architectural design that preserves privacy; provide common spaces, recreation areas and services convenient to residents; provide an excellent environment for family life; and preserve residential property values. Thus, by proposing twenty-six

(26) for-sale condominium units, the Project would be consistent with the State Subdivision Map Act, and the General Plan.

3. That the site is physically suitable for the proposed type of development.

The site would be physically suitable for the type of development proposed by the developer, and complies with the spirit and intent of the LMR General Plan Land Use Designation. The proposed 1.8-acre site would consist of twenty-six (26) two-story units, which would be allowed under the proposed R-2 base zone, and would be consistent with the General Plan. The residential Planned Unit Development has been designed in a manner that is compatible with the surrounding neighborhood. As designed, the site would be able to accommodate twenty-six (26) units, along with parking, landscaping, private and common recreation areas, setbacks, and building height standards. Therefore, the property would be sufficient in size to accommodate the proposed development.

4. That the requirements of the California Environmental Quality Act have been satisfied.

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq., and the CEQA guidelines, 14 California Code of Regulations Sec. 15000 et. seq., an Initial Study was prepared, and it has been determined that the proposed Project qualifies for a Mitigated Negative Declaration because the proposed Project with implementation of the proposed mitigation measures cannot, or will not, have a significant effect on the environment. A Mitigation Monitoring and Reporting Program (MMRP) has been prepared and is attached to the Mitigated Negative Declaration. The Mitigated Negative Declaration and MMRP were prepared and circulated in accordance with CEQA and CEQA's implementing guidelines. Therefore, all applicable CEQA requirements have been satisfied.

5. That the site is physically suitable for the proposed density of the development.

The subject property would have a General Plan Land Use Designation of LMR as a result of the proposed General Plan Amendment. The R-2 base zone, as proposed under Zoning Map Amendment No. A-046-2026 and Planned Unit Development No. PUD-020-2026, in conjunction with the LMR Land Use Designation, would allow a residential density up to twenty-one (21) units per acre. The proposed Project would consist of twenty-six (26) units which would equate to approximately fourteen (14.4) units per acre, within the allowable density. The proposed PUD development standards have also been designed to be consistent with the surrounding residential neighborhoods. As designed, the site would be able to accommodate twenty-six (26) units, along with parking, landscaping, private and common recreation areas, setbacks, and other development standards of the proposed PUD. Therefore, the property would be physically suitable for the proposed density of the development, as

allowed under the LMR Land Use Designation, and the proposed PUD-020-2026 with R-2 base zoning.

6. That the design of the subdivision and the proposed improvements are not likely to cause serious public health problems.

   The design of the residential subdivision and the proposed improvements would not be likely to cause serious public health problems. Additionally, certain conditions of approval, Planned Unit Development Standards of Development, and the Mitigation Monitoring and Reporting Program would be in place to further safeguard public health. The proposed subdivision has been designed to comply with the intent of the LMR General Plan Land Use Designation, and the R-2 (Limited Multiple Residential) base zone. City Departments, including the Traffic Division, Water Division, Engineering Division, the Planning Services Division, and the Orange County Fire Authority (OCFA) have reviewed the proposed development, and have applied conditions of approval to help minimize potential impacts that the Project may have on the community, including public health.

7. That the design of the subdivision and the proposed improvements will not conflict with easements of record or easements established by court judgment acquired by the public at large for access through or use of property within the proposed subdivision; or, if such easements exist, that alternate easements for access or for use will be provided, and that these will be substantially equivalent to the ones previously acquired by the public.

   The design of the residential subdivision and the proposed improvements would not conflict with easements of record, or easements established by court judgment acquired by the public at large for access through or use of property within the proposed subdivision. The Project has been designed to avoid development over existing easements.

8. That the design and improvement of the proposed subdivision are suitable for the uses proposed, and the subdivision can be developed in compliance with the applicable zoning regulations.

   Under the proposed Zoning Map Amendment No. A-046-2026, the City's Official Zoning Map would be amended to rezone the Project site from R-1 (Single-Family Residential) to residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone, to facilitate the development of the proposed twenty-six (26) unit Project, and to ensure consistency with the existing General Plan Land Use Designation of Low Medium Density Residential (LMR).

   The proposed Zoning Map Amendment would facilitate the development of the proposed twenty-six (26) unit condominium Project. The site's proposed attached, townhome-style housing is compatible with the surrounding area, which consists of a mixture of single- and multiple-family residential uses.

Accordingly, the PUD zone with the R-2 base zone would be appropriate for the site, as it would be consistent with the variety of residential developments in the immediate area. In addition, the site would have access to all necessary public infrastructure to adequately serve the proposed development.

The design and improvement of the subdivision, as proposed under Vesting Tentative Tract Map No. TT-19447 would be suitable for the twenty-six (26) proposed residential units. The proposed subdivision has been specifically designed to accommodate the twenty-six (26) residential units on the subject property, and to create a one-lot subdivision for the purpose of selling each unit as a condominium. Therefore, the design and improvement of the proposed subdivision would be suitable for the proposed use, and the subdivision can be developed in compliance with the LMR Land Use Designation, and the proposed residential PUD (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone.

9. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating and cooling opportunities in the subdivision.

To the extent feasible, the Project has been designed in accordance with Government Code Section 66473.1, such as to allow for passive or natural heating opportunities in the subdivision design, to encourage the orientation of structures to take advantage of shade and prevailing breezes, to allow solar access for passive heating and opportunities for placement of shade trees and other vegetation for cooling.

10. That the design, density and configuration of the subdivision strikes a balance between the effect of the subdivision on the housing needs of the region and of public service needs that the character of the subdivision is compatible with the design of existing structures.

The proposed Vesting Tentative Tract Map No. TT-19447 would create a one-lot subdivision to sell each of the twenty-six (26) proposed residential units as a condominiums. The Project has been reviewed in relation to the housing needs and goals of the City, and is compatible with the existing developments in the immediate vicinity. The proposed development would increase the number of residential units, and further the goals of the Housing Element of the General Plan. The proposed subdivision would allow for the sale of each proposed residential unit. Moreover, the Project would comply with the density requirements of the proposed General Plan lad use designation, as well as the proposed Residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone.

11. That the lot sizes of the subdivision are substantially the same as the lot sizes within the general area.

The proposed Vesting Tentative Tract Map No. TT-19447 would create a one-lot subdivision to sell each of the twenty-six (26) proposed residential units as

a condominiums. The proposed subdivision would allow for the sale of each proposed residential unit. Moreover, the Project would comply with the density requirements of the proposed General Plan Land Use Designation, as well as the proposed Residential Planned Unit Development (PUD-020-2026) zoning with an R-2 (Limited Multiple Residential) base zone.

12. The subject property is not located within a state responsibility area or a very high fire hazard severity zone, the proposed subdivision is served by local fire suppression services, and the proposed subdivision meets applicable design, location, and ingress-egress requirements.

    The subject property is not located within a state responsibility area or a very high fire hazard severity zone. The Orange County Fire Authority (OCFA) has reviewed the proposed subdivision, and found that the Project would be adequately served by local fire suppression services, and the proposed subdivision would meet applicable design, location, and ingress-egress requirements. Furthermore, the Project has been conditioned to comply with all OCFA requirements relating to fire suppression services, and emergency access.

13. The discharge of waste from the proposed subdivision into the existing sewer system will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board. The conditions of approval for on and off-site improvements will ensure permitted capacity of the public sewer system is not exceeded.

    The Water Services Division has reviewed the Project, and found that there would be sufficient sewer capacity to support the Project. So long as the Project adheres to the Conditions of Approval, as recommended, the Water Services Division does not anticipate that the discharge of waste from the proposed subdivision will result in any violation of California Regional Water Quality Control Board requirements.

INCORPORATION OF FACTS AND FINDINGS SET FORTH IN THE STAFF REPORT AND OTHER RESOLUTIONS

In addition to the foregoing, the Planning Commission incorporates herein by this reference the facts and findings set forth in the staff report and in Resolution Nos. 6138-26 and 6139-26.

BE IT FURTHER RESOLVED that the Planning Commission does conclude:

1. The Site Plan and Vesting Tentative Tract Map possess characteristics that would justify the request in accordance with Municipal Code Sections 9.32.030.D.3 (Site Plan), Section 9.40.060 (Tentative Maps), and 9.60.020 (Review of Housing Development Projects).

2. In order to fulfill the purpose and intent of the Municipal Code and thereby promote the health, safety, and general welfare, it is recommended that the attached Conditions of Approval (Exhibit "A") shall apply to Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447.

3. It is recommended that Conditional Use Permit Nos. CUP-114-81 and CUP-554-01 be revoked.

EXHIBIT "A"

Site Plan No. SP-168-2026 & Vesting Tentative Tract Map No. 19447

9822 Russell Avenue

CONDITIONS OF APPROVAL

General Conditions

1. Each owner of the property shall execute, and the applicant shall record against the property, a "Notice of Discretionary Permit Approval and Agreement with Conditions of Approval," as prepared by the City Attorney's Office, within thirty (30) days of approval. This Conditional Use Permit runs with the land and is binding upon the property owner, his/her/its heirs, assigns, and successors in interest. The applicant understands and agrees that its agreement to adhere to and implement these Conditions of Approval is consideration for the City Council's determination to approve General Plan Amendment No. GPA-001-2026, Zoning Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026 to change the land use designation and zoning of the subject site to facilitate the applicant's proposed development project.

2. All Conditions of Approval set forth herein shall be binding on and enforceable against each of the following, and whenever used herein, the term "applicant" shall mean and refer to each of the following: the project applicant, Melia Homes, Inc., the current property owner, Iglesia de Cristo de Restauracion, the future owner(s) and tenants(s) of the property, and each of their respective successors and assigns. The applicant and subsequent owner of the property shall adhere to the conditions of approval for the life of the project, regardless of property ownership. Except for minor modifications authorized to be approved by the Community Development Director pursuant to Condition No. 4, any changes of the Conditions of Approval require approval by the appropriate City hearing body.

3. Site Plan No. SP-168-2026 only authorizes the development of a twenty-six (26) unit, attached townhomes, as depicted on the plans submitted by the applicant and made a part of the record of the May 21, 2026 Planning Commission proceedings and the _____ __, 2026, City Council proceedings, subject to these Conditions of Approval. Vesting Tentative Tract Map No. 19447 authorizes the creation of a one-lot subdivision for the purpose of selling each unit as condominium, as depicted on the vesting tentative tract map submitted by the applicant and made a part of the record of the May 21, 2026 Planning Commission proceedings and the _____, 2026 City Council proceedings, subject to these Conditions of Approval. Approval of this Site Plan and Vesting Tentative Tract Map shall be contingent upon approval of General Plan Amendment No. GPA-001-2026, Zoning Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026, and shall not

be construed to mean any waiver of applicable and appropriate zoning and other regulations; and wherein not otherwise specified, all requirements of the City of Garden Grove Municipal Code shall apply.

4. The approved plans are an integral part of the decision approving this Conditional Use Permit. Minor modifications to the approved site plan, floor plan, and/or these Conditions of Approval may be approved by the Community Development Director, in his or her discretion. Proposed modifications to the approved floor plan, site plan, or Conditions of Approval that would result in the intensification of the project or create impacts that have not been previously addressed, and which are determined by the Community Development Director not to be minor in nature shall be subject to approval of new and/or amended land use entitlements by the applicable City hearing body.

5. All conditions of approval shall be implemented at the applicant's expense, except where specified in the individual condition.

Engineering Division

Project Design

6. A geotechnical study prepared by a registered geotechnical engineer must be submitted to the City and approved by the City Engineer prior to the issuance of grading or building permits. The report shall analyze the liquefaction potential of the site and make recommendations. The report shall analyze sub-surface issues related to the past uses of the site, including sub-surface tanks, basements, and septic facilities. Any soil or groundwater contamination shall be remediated prior to the issuance of a building permit per the requirements of the Orange County Health Department, and the mitigation requirements of governing regulatory requirements. The report shall make recommendations for foundations and pavement structural section design of interior streets and parking spaces. The report shall also test and analyze soil conditions for LID (Low Impact Development) principles, and the implementation of water quality for storm water runoff, including potential infiltration alternatives, soil compaction, saturation, permeability, and groundwater levels. The applicant shall implement the recommendations identified in the geotechnical study / report.

7. Prior to the issuance of any grading or building permits, the applicant shall submit to the City for review and approval a final design Water Quality Management Plan (WQMP) that:

    a. Addresses required mitigation Site Design Best Management Practices (BMPs) based upon the latest Santa Ana Regional Water Quality Control Board (SARWQCB) approved Drainage Area Management Plan (DAMP), as identified in the geotechnical report recommendations and findings,

including, but not limited to, infiltration minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas as required by the latest adopted County of Orange Technical Guidance Document (TGD).

b. BMP's shall be sized per the requirements of the latest Technical Guidance Documents.

c. Incorporates the applicable Routine Source Control BMPs as defined in the DAMP.

d. Incorporates structural and Treatment Control BMPs as defined in the DAMP.

e. Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs.

f. Identifies the entity that will be responsible for long-term operation and maintenance of the Treatment Control BMPs.

g. Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

h. Provides a hydrological analysis with scaled map as well as hydrologic and hydraulic calculations to size storm drains per the Orange County RDMD standards.

8. Parkway culverts shall be designed per City of Garden Grove Standard Plan B-209. Storm drain lateral pipe connections to City-maintained storm drains within City rights-of-way shall be RCP with a minimum diameter of 18 inches (1'-6").

9. Grading plans prepared by a registered Civil Engineer are required. As required under Section 107 of the California Building Code (CBC), the grading plan shall be based on a current survey of the site, including a boundary survey, topography on adjacent properties up to thirty feet (30'-0") outside the boundary, and designed to preclude cross lot drainage. Minimum grades shall be 0.50% for concrete flow lines and 1.25% for asphalt. The grading plan shall also include water and sewer improvements. The grading plan shall include a coordinated utility plan showing all existing utility facilities, easements, and proposed utility facilities. All on-site improvements shall be tied by horizontal dimensional control to the property boundary, as established by the survey. A minimum uninterrupted twenty-foot (20'-0") wide throat access to the site is required from the street for the project, and shall meet the requirements of the California Fire Code throughout the site. Vehicle maneuvering, as demonstrated by AutoTurn along private streets and access ways, shall be

demonstrated on the grading plan. Street improvement plans shall conform to all format and design requirements of the City Standard Drawings and Specifications.

10. All vehicular access drives to the site shall be provided in locations approved by the City Traffic Engineer. (Policies and Procedures – TE-17)

11. The applicant shall coordinate with the Planning Services Division and Orange County Fire Authority (OCFA) to identify proper emergency vehicle access to the site, and shall provide the Engineering Division a copy of the approval letters upon first submittal of the grading and street improvement plans.

12. The applicant shall complete the following for the tract map:

    a. Prior to recordation of a final tract map, the surveyor/engineer preparing the map shall tie the boundary of the map into the Horizontal Control System established by the County Surveyor in a manner described in Sections 7-9-330 and 7-9-337 of the Orange County Subdivision Code, and Orange County Subdivision Manual, Subarticle 18. The surveyor/engineer shall submit record information to the City on AutoCad DWG format.

    b. Prior to recordation of a final tract map, the surveyor/engineer preparing the map shall submit to the County Surveyor a digital graphic file of said map in a manner described in Sections 7-9-330 and 7-9-337 of the Orange County Subdivision Code, and Orange County Subdivision Manual, Subarticle 18. The surveyor/engineer shall submit record information to the City on AutoCad DWG format.

    c. Prior to issuance of a grading permit, the applicant shall submit to the Engineering Division an updated title report along with copies of the recorded instruments listed in the title report, reference maps used to prepare legal description, and the plat for review and approval of the parcel map.

    d. All subdivision mapping shall be concurrently reviewed by the City Engineering Division and the County of Orange Survey Department. The applicant shall forward all plan check comments received from the County of Orange Survey Department to the City of Garden Grove's Engineering Division upon receipt from the county.

13. Any new drive approaches to the site shall be constructed in accordance with Garden Grove Standard B-121 as they conform to land use and roadway designation.

14. The grading plan shall depict an accessibility route for the ADA pathway in conformance with the requirements of the Department of Justice standards, latest edition, and Section 1110A of the California Building Code.

15. All trash container areas shall meet the following requirements per City of Garden Grove Standard B-502, State-mandated commercial organic recycling law, including AB 1826, SB 1383 and its implementing regulations, and any other applicable State recycling laws related to refuse, recyclables, and/or organics:

    a. The trash container areas shall be paved with an impervious surface, designed not to allow run-on mixing of drainage from adjoining areas, designed to divert drainage from adjoining roofs and pavements to be directed around the area for trash roll out, and screened or walled to prevent off-site transport of trash by water or wind.

    b. The trash container areas shall provide a solid roof or awning to prevent direct precipitation into the enclosure.

    c. The connection of trash area drains to the municipal storm drain system is prohibited. Drainage from the enclosure may be directed to a conforming grease or contaminant interceptor.

    d. Potential conflicts with fire code access requirements and garbage pickup routing for access activities shall be considered in implementation of design and source control. See CASQA Storm Water Handbook Section 3.2.9 and BMP Fact Sheet SD-32 for additional information.

    e. The trash enclosure and containers shall be located to allow pick-up and maneuvering, including turnarounds, in the area of enclosures, and concrete aprons for roll-out areas.

    f. Pursuant to State-mandated commercial organic recycling law-AB 1826, the applicant is required to coordinate storage and removal of the organics waste with the local recycling/trash company.

    g. Pursuant to applicable State-mandated laws, the applicant is required to contact and coordinate with the operations manager of the local recycling/trash company (Republic Services, 800-700-8610) to ensure the trash enclosure includes the appropriate size and number of containers for the disposal of items such as, but may not limited to, municipal solid waste (MSW), recyclables, and organic green waste.

    h. Based on the amount of waste disposed, per week, the applicant shall coordinate with the local recycling/trash company to ensure the adequate frequency of trash pick-up is serviced to the site for municipal

solid waste (MSW), recyclables, and organic green waste, including any other type of waste.

i. The applicant shall ensure large bulky items, intended for coordinated and scheduled pick-up by the local recycling/trash company, are not placed in areas that encroach into drive aisles, parking spaces, pedestrian pathways, or areas in the front of the property including areas in public rights-of-way (e.g., street, sidewalk), during and after construction. Any large bulk items shall be out of public vantage points.

j. The requirements for the trash enclosure and design criteria are bound and coordinated with the Water Quality Management Plan (WQMP), as depicted on the project grading plan, which shall be incorporated into the WQMP by narrative description, exhibits, and an Operation and Maintenance Plan (O&M).

16. Any new or required block walls and/or retaining walls shall be shown on the grading plans, both in plan-view and cross-sections. Cross-sections shall show vertical and horizontal relations of improvements (existing and proposed) on both sides of property lines. Required wall heights shall be measured vertically from the highest adjacent finished grade. Block walls shall be designed in accordance to City of Garden Grove Standard B-504, B-505, B-506, and B-508, or designed by a professional registered engineer. In addition, the following shall apply:

a. The color and material of all proposed block walls, columns, and any other fencing shall be approved by the Planning Services Division prior to installation.

b. Openings for drainage through walls shall be shown in section details, and approved by the City Engineer. Cross-lot drainage is not allowed.

17. The applicant shall remove any existing substandard driveway approaches, curbs, sidewalks, ADA ramps, pavement sections, tree well and landscaping, and construct Russell Avenue frontage improvements as identified below. All landscape, irrigation, sidewalk, and lighting improvements installed within the public right-of-way shall require the approval of the City Engineer, Street Division, and Planning Services Division, and shall be maintained by the applicant (and/or Homeowner's Association, once formed) for the life of the project.

a. The existing substandard driveways on Russell Avenue shall be removed and replaced with a new curb, gutter, landscape, and sidewalk per City standards and specifications.

b. The new driveway approach to the site on Russell Avenue shall be constructed in accordance with Garden Grove Standard B-120.

c. The applicant shall install red curb near the driveway approach on Russell Avenue per the approved site plan.

d. The applicant shall remove the existing improvements fronting the project on Russell Avenue, and construct new five-foot (5'-0") wide sidewalk panels in accordance with City of Garden Grove Standard B-105. The applicant or the applicant's contractor(s) shall verify the placement limits of sidewalk concrete panels with the public works inspector prior to start of construction.

e. The applicant shall construct the curb and gutter when replacing any existing driveway approaches along the property frontage on Russell Avenue in accordance with City Standard Plan B-114.

f. The applicant shall locate all existing public utilities across the property frontage and within the property boundary of the project prior to commencement of grading operation and mobilization.

g. The applicant shall coordinate with the Planning Services Division and Public Works Department, Street Division before placing any type of tree within the public right-of-way and proposed landscape area.

h. The applicant shall remove and reconstruct the southerly existing ADA ramp per Caltrans Standard No. A88A or A88B on Russell Avenue near the traffic signal, if required, to ensure proper accommodation of the new driveway radial wing.

i. Street signs shall be installed as required and approved by the City Traffic Engineer.

18. The applicant shall remove any existing substandard driveway approaches, curbs, sidewalks, ADA ramps, pavement sections, tree well and landscaping, and construct Kerry Street frontage improvements as identified below. All landscape, irrigation, sidewalk, and lighting improvements installed within the public right-of-way shall be maintained by the applicant and shall require the approval of the City Engineer, Street Division, and Planning Services Division.

a. The existing substandard driveway on Kerry Street shall be removed and replaced with new rolled curb/gutter, landscape, and sidewalk per City standards and specifications.

b. Two (2) new wheelchair ramps and landings shall be constructed per the latest Caltrans Standard Plan No. A88A at the southwest and southeast corners of Russell Avenue and Kerry Street.

c. The applicant shall remove all existing landscaping and improvements along the project frontage on Kerry Street, and replace them with new

five-foot (5'-0") wide sidewalk panels. The new sidewalk shall provide a continuous connection to the proposed ADA ramp, and the existing sidewalk at the southeast corner of Russell Avenue and Kerry Street, in accordance with City of Garden Grove Standard B-105.

d. The applicant shall locate all existing public utilities across the property frontage and within the property boundary of the project prior to commencement of grading operation and mobilization.

e. The applicant shall coordinate with the Planning Services Division and Public Works Street Division before placing any type of tree within the public right-of-way and proposed landscape area.

f. Street signs shall be installed as required and approved by the City Traffic Engineer.

19. Any proposed new landscaping in the public rights-of-way shall be approved by the Planning Services Division and maintained by the applicant/property owner(s).

20. Driveway widths shall be in accordance with City's Traffic Engineering Policy TE-8 (Driveway Opening Policy).

21. Sight Distance Standards shall be in accordance with City's Traffic Policy & Procedures TE-13. All structures and walls shall be designed to ensure proper vision clearance for cars entering or leaving the driveway and parking areas. No structure, wall or fence shall cause an exceedance of the applicable site distance standards set forth in City Traffic Engineering Policy TE-13.

22. The Site Plan shall comply with the completed Development Review and Comment Sheet prepared pursuant to the City's Traffic Policy & Procedures TE-17 and provided to the applicant.

23. Private Property Tow Away Sign Design shall be in accordance with City's Traffic Policy & Procedures TE-19.

24. No Parking Fire Lane Sign Design shall be in accordance with City's Traffic Policy & Procedures TE-20.

25. Parking lot layout shall be in accordance with City Standards B-311 and B-312.

26. Off-street parking requirements for residential uses shall be in accordance with the parking provisions in the Standards of Development for Planned Unit Development No. PUD-020-2026 and the City of Garden Grove's Traffic Policies and Procedures TE-17 Development Review and Comments Sheet.

Permit Issuance

27. The applicant shall be subject to Traffic Mitigation Fees, In-Lieu Park Fees, Drainage Facilities Fees, Water Assessment Fees, and other applicable mitigation fees identified in Chapter 9.44 and Garden Grove Council Resolution No. 9401-01 (or successor Resolution(s)) of the Garden Grove Municipal Code, along with all other applicable fees duly adopted by the City. Except as otherwise provided pursuant the Garden Grove Municipal Code or State law, the amount of said fees shall be calculated based on the City's current fee schedule at the time of permit issuance.

28. A separate street permit is required for work performed within public rights-of-way.

29. Grading fees shall be calculated based on the current fee schedule at the time of grading permit issuance.

30. The applicant shall identify a temporary parking site(s) for construction crew and construction trailers office staff prior to issuance of a grading permit. No construction parking is allowed on local streets. Construction vehicles shall be parked off traveled roadways in a designated parking area. Parking areas, whether on- or off-site, shall be included and covered by the erosion control plans.

31. Prior to issuance of a grading permit, the applicant shall submit and obtain approval of a worksite traffic control plan for all the proposed improvements within the public rights-of-way, which shall be subject to the review and approval of the City Traffic Engineer. Construction vehicles should be parked off traveled roadways in a designated parking area. Parking areas, whether onsite or offsite, shall be included and covered by the erosion control plans. Parking areas, whether onsite or offsite, shall be included and covered by the erosion control plans and the Storm Water Pollution Prevention Plan (SWPPP).

32. In accordance to City of Garden Grove Municipal Code Section 9.48.030, the applicant is required to underground all existing and proposed on- and off-site utility facilities fronting the project. All existing improvements and utilities shall be shown as part of the grading submittal package in the topography section. In accordance to City of Garden Grove Municipal Code Section 9.48.050, the applicant may elect to pay the City an in-lieu fee to offset the developer's fair share of the costs of undergrounding the off-site utilities.

Project Construction/Operation

33. The applicant shall coordinate with City's Public Works Department (Engineering, Water Services, and Streets Divisions) to set up appointments for preconstruction inspections for all on- and off-site improvements, prior to commencement of grading operation and mobilization.

34. In accordance with the Orange County Storm Water Program manual, the applicant shall provide dumpsters on-site during construction, unless an Encroachment Permit is obtained for placement in the street.

35. The applicant shall be responsible for protecting all existing horizontal and vertical survey controls, monuments, ties (centerline and corner), and benchmarks located within the limits of the project. If any of the above require removal, relocation, or re-setting, the applicant shall, prior to any construction work, and under the supervision of a California-licensed Land Surveyor, establish sufficient temporary ties and benchmarks to enable the points to be reset after completion of construction. Any ties, monuments and benchmarks disturbed during construction shall be reset per Orange County Surveyor Standards after construction. The applicant shall also re-set the tie monuments where curb or curb ramps are removed and replaced, or new ramps are installed. The applicant shall be liable for, at their expense, any resurvey required due to their negligence in protecting existing ties, monuments, benchmarks, or any such horizontal and vertical controls. Temporary Benchmarks shall not be used for Vertical control. Benchmarks shall be to the National Geodetic Vertical Datum (NGVD).

36. Heavy construction truck traffic and hauling trips, and any required lane closures shall occur outside peak travel periods. Peak travel periods are considered to be from 7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m.

37. Prior to grading or building permit closeout and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:

    a. Demonstrate that all structural best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications.

    b. Demonstrate that the applicant is prepared to implement and maintain all non-structural BMPs described in the Project WQMP.

    c. Demonstrate that an adequate number of copies of the approved Project WQMP are available on-site.

    d. Submit for review and approval by the City an Operations and Maintenance (O&M) Plan for all structural BMPs.

    e. Submit copies of the latest plans for coordination of design elements for drainage, access and utilities relation to proposed air space layouts and locations.

    f. CC&R's shall be submitted to the Engineering Division for concurrent review and coordination with the design plans for all improvements, including their maintenance, required easements, and processing of

design changes proposed by owners and associations encumbered by the CC&R's.

Water Services Division

38. New water service installations two inches (0'-2") and smaller shall be installed by the City of Garden Grove at the applicant's expense. Installation shall be scheduled upon payment of applicable fees, unless otherwise noted. Fire services and larger water services three inches (0'-3") and larger shall be installed by applicant's contractor(s) per City Standards.

39. Water meters shall be located within the City right-of-way, or within dedicated waterline easement. Fire services and large water services three inches (0'-3") and larger, shall be installed by contractor with a Class A or C-34 license, per City water standards, and inspected by approved Public Works inspection.

40. Public water system within private streets shall be constructed per City Standards by developer and dedicated to the City. Bonding will be required.

41. If a master water meter for a private water system is proposed for the development, and individual fire sprinkler systems for the units are required, then a separate fire service connection shall also be required. The separate fire service and any private fire hydrant laterals shall have above-ground backflow device with a double-check valve assembly. Device shall be tested immediately after installation, and once a year thereafter by a certified backflow device tester, and the results to be submitted to the Public Works Department, Water Services Division. Device shall be on private property and is the responsibility of the applicant. The above-ground assembly shall be screened from public view as required by the Planning Services Division.

42. A Reduced Pressure Principle Device (RPPD) backflow prevention device shall be installed for meter protection, should a large master meter serving multiple units be proposed. The landscape system shall also have RPPD device. Any carbonation dispensing equipment shall have a RPPD device. Installation shall be per City Standards, and shall be tested by a certified backflow device tester immediately after installation. Cross-connection inspector shall be notified for inspection after the installation is completed. Applicant/property owner(s) shall have RPPD device tested once a year thereafter by a certified backflow device tester, and the test results to be submitted to the Public Works Department, Water Services Division. Applicant/property owner(s) shall open a water account upon installation of RPPD device.

43. It shall be the responsibility of applicant to abandon any existing private water well(s) per Orange County Health Department requirements. Abandonment(s) shall be inspected by Orange County Health Department inspector after permits have been obtained.

44. A composite utility site plan shall be part of the included in the grading plan set, which shall be submitted to both the Engineering Division and Water Services Division for review and approval.

45. There shall be a minimum fifteen-foot (15'-0") clearance of building footings from water main. Clearances less than fifteen feet (15'-0") shall be reviewed and approved by Water Engineering.

46. There shall be no structures or utilities built on, or crossing, water or sewer main easements.

47. New utilities shall have a minimum five-foot (5'-0") horizontal and a minimum one-foot (1'-0") vertical clearance from water main and appurtenances.

48. There shall be a minimum clearance from sewer main and water main of ten feet (10'-0") from outside of pipe to outside of pipe.

49. Any existing water services are to be abandoned at the main with repair clamps or couplings.

50. Any new or existing water valve located within new concrete driveway or sidewalk construction shall be reconstructed per City Standard B-753.

51. The City shall determine if existing water services(s) is/are usable and meets current City Standards. Any existing meter and service located within new driveway(s) shall be relocated at applicant's expense.

52. If a fire sprinkler system is required, and individual water meters and services are proposed off the public water main, meters and services shall be installed per City Standard B-719, which specifies a residential fire sprinkler connection (RFSC) on the backside of the meter. The Fire Sprinkler System design shall be a Passive Purge type system.

53. No permanent structures, trees or deep-rooted plants shall be placed over sewer main or water main.

54. The location and number of fire hydrants shall be as required by the Water Services Division and the Orange County Fire Authority (OCFA).

55. The applicant shall abandon any existing unused sewer lateral(s) at the street right-of-way on the applicant's side. The sewer pipe shall be capped with an expansion sewer plug and encased in concrete. Only one sewer connection per lot is allowed.

56. Applicant shall install a new private sewer main with clean out at right-of-way line, and laterals on-site. The sewer main connection in the public right-of-way shall be a minimum six-inch (0'-6") diameter, extra strength VCP with

wedgelock joints, and inspected by the Garden Grove Sanitary District. All on-site sewer and appurtenances to be installed per the California Plumbing Code, and inspected by the Building Service Division.

57. All perpendicular crossings of the sewer, including laterals, shall maintain a vertical separation of minimum one-foot (1'-0") below the water main, outer diameter to outer diameter. All exceptions to the above require a variance from the State Water Resources Control Board.

58. If the water main is exposed during installation of sewer lateral, a twenty-foot (20'-0") section of the water main shall be replaced with twenty feet (20'-0") PVC C-900 DR-14 Class 305 water pipe, size in kind, and centered at the crossing.

Orange County Fire Authority

59. The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements. The applicant shall submit the plans listed below to OCFA for review. Approval shall be obtained on each plan prior to the event specified:

    a. Prior to OCFA approval of the final tract map or precise grading permit:

        i. Fire Master Plan – Service Code PR145

        ii. Gates (if applicable) – Service Code PR180

        iii. Alternate Methods and Materials (AM&M) (if applicable) – Service Code PR910

    b. Prior to the issuance of a building permit:

        i. Architectural – Service Codes PR200-PR465

        ii. Underground piping for private hydrants and fire sprinkler systems – Service Codes PR470-475

        iii. Fire sprinkler system – Service Codes PR400-465

    c. Prior to concealing interior construction:

        i. Fire alarm system (if applicable) – Service Codes PR500 – PR520

Building and Safety Division

60. All work shall comply with the latest edition of the California (CA) Building Standards Code (CBC) at time of permit application.

61. The project shall be subject to building permit plan check review by the Building and Safety Division, and shall illustrate compliance with all locally-adopted codes and ordinances, as well as applicable State statutes and regulations.

62. Terms and Conditions of the Covenants, Conditions, and Restrictions (CC&Rs) shall be incorporated onto the construction plans for reference on how common areas, drainage, site improvements, access and maintenance will affect units.

63. The project shall comply with CBC Chapter 11-A Access Regulations unless publicly funded, then 11B-233 would apply.

64. If being used as an Exit Court along eastern property line, an opening protection or setback clearance to the property line shall be provided, per CBC Section 1029.

65. Townhouses, as defined in the California Residential Code (CRC), do not allow plumbing or mechanical ducts in demising walls per CRC Section 302.2.2.

    a. As an alternate design to avoid townhome demising wall limitations, the CBC may be used to separate dwellings as R-2 occupancies, or as R-3 occupancies for every other unit with firewalls.

66. The trellis breezeways between buildings shall require seismic isolation or be structurally designed for continuity-tie forces.

67. The Title 24 Energy Calculations shall not incorporate reflective roof values that will not comply with the proposed dark roofing tiles.

Planning Services Division

68. The applicant shall submit detailed plans showing the proposed location of utilities and mechanical equipment to the Community Development Department, Planning Services Division for review and approval prior to submitting plans into the Building and Safety Division Plan Check process. The project shall also be subject to the following:

    a. Above-ground utility equipment (e.g. electrical, gas, telephone, cable TV) shall not be located in the street setback, within the common areas, or any parking areas, and such equipment shall be screened by densely planted and maintained landscaped hedges or a fence or wall. Ground-mounted equipment shall not exceed the maximum allowable height for a wall, fence, or hedge.

    b. Roof-mounted mechanical equipment shall be screened by parapet walls, rooftop architectural features such as a tower equal to the height

of the equipment, or low walls surrounding the equipment and shall be painted to match the color of the building materials.

c. No exterior piping, plumbing, or mechanical ductwork shall be permitted on any exterior façade and/or be visible from any public right-of-way or adjoining property. Roof rain gutters are permitted. The rain gutters shall follow the natural architecture lines of the building.

69. All landscaping shall be consistent with the landscape requirements of Title 9 of the Municipal Code. The applicant shall submit a complete landscape and irrigation plan governing the entire development. The landscape and irrigation plans shall include type, size, location and quantity of all plant material. The landscape and irrigation plan shall include irrigation plans and staking and planting specifications. All landscape irrigation shall comply with the City's Landscape Ordinance and associated Water Efficiency Guidelines. The landscape and irrigation plan is also subject to the following:

a. A complete, permanent, automatic remote control irrigation system shall be provided for all landscaping areas shown on the plan. The sprinklers shall be of drip or micro-spray system sprinkler heads for water conservation.

b. Forty percent (40%) of the trees on the site shall consist of minimum size 24-inch box, and the remaining 60 percent (60%) shall be of minimum size 15 gallons. These trees shall be incorporated into the landscaped frontages of all streets. Where clinging vines are considered for covering walls, drought-tolerant species shall be used.

c. All landscape areas, including the areas located within the public rights-of-ways along Kerry Street and Russell Avenue that abut the subject property, are the responsibility of the applicant/property owner(s) and/or Homeowner's Association.

d. Trees planted within ten feet (10'-0") of any public right-of-way shall be planted in a root barrier shield. All landscaping along street frontages adjacent to driveways shall be of the low-height variety to ensure safe sight clearance. All trees planted on the subject property, whether for screening the project from the neighboring lots or for aesthetic or selling/marketing purposes, shall have an irrigation system installed in order maintain the trees.

e. All trees shall be double-staked in accordance with City standards.

f. The landscape treatment along the street frontage, including the area designated as public right-of-way, shall incorporate the landscape area between the sidewalk and the development wall with ground cover, shrubs and bushes, and trees that highlight the project's entrance as

well as enhance the exterior appearance along Kerry Street and Russell Avenue. The plant material for the entrance shall be the type to inhibit graffiti such as vines and dense growing shrubs and bushes, and shall be maintained.

g. Clinging vines shall be installed within the landscape planters along the perimeter block walls to deter graffiti.

h. Fifty percent (50%) of all required shrubs shall be a minimum size of five (5) gallons at time of planting.

i. Live groundcover shall be planted and maintained where shrubbery is not sufficient to cover exposed soil. Mulch may be used in place of groundcover where groundcover will not grow or where groundcover will cause harm to other plants, but not more than 30% of the groundcover area shall have the mulch substitute.

j. Groundcover plants shall be planted at a density and spacing necessary for them to become well established and provide surface coverage within 18 months of planting.

k. The landscape plan shall incorporate and maintain for the life of the project those means and methods to address water run-off also identified as Low Impact Development provisions, which address water run-off. This is to also to be inclusive of any application of Water Quality Management Plans (WQMP), Drainage Area Management Plans (DAMP) and any other water conservation measures applicable to this type of development.

l. The irrigation system shall comply with all applicable provisions of the City's Water Conservation Ordinance, the City's Municipal Code landscape provisions, and all applicable state regulations.

m. All above-ground utilities (e.g. water backflow devices, electrical transformers, irrigation equipment) shall be shown on the landscaping plan in order to ensure proper landscape screening will be provided.

70. All lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.

71. Second and third-story windows, on side and rear building sides shall be located to avoid direct views from those windows, balconies, and decks into any immediately opposite windows and private recreation areas of residential dwelling units on adjacent properties. Where second-story and third-story windows are oriented toward an adjacent property's private recreation area, one or more of the following measures shall be provided:

    a. High-windows with a minimum sill height of six feet (6'-0"), as measured from the finished floor.

    b. View-obscuring treatment such as wing walls.

    c. Obscure, opaque, or frosted fixed (non-slider) windows.

    d. A row of screening/canopy trees evenly spaced shall be placed along the property line(s), which shall be of a minimum height that blocks any direct views. Screening/canopy trees shall be maintained in perpetuity.

72. All new block walls, and/or retaining wall(s), including existing block walls to remain, if any, shall be shown on the grading plans. Block walls shall be developed to City Standards or designed by a Registered Engineer and shall be measured from on-site finished grade. The applicant shall provide the following:

    a. Decorative masonry walls are required along the southern and easterly property lines, and shall be constructed to a minimum height of six feet (6'-0"), up to a maximum of seven feet (7'-0"), as measured from highest point of finished grade. Whether new or existing, the block walls shall be decorative and utilize stucco finish, slump stone, decorative CMU, or split-face block. Street-facing perimeter walls shall include trailing vines, hedges planted along the base of the exterior face, or other landscaping treatments that deter graffiti.

    b. The applicant shall work with the existing property owners along the project perimeter in designing and constructing the required perimeter block walls. This requirement is to avoid having double-walls and minimize any impact that it might cause to the existing landscaping on the neighbor's side as much as possible. The perimeter block wall shall be constructed and situated entirely within the subject property. In the event that the applicant cannot obtain approval from the property owners, the applicant shall construct the new wall with a decorative cap to be placed between the new and existing walls. In the event the location of a new wall adjacent to an existing wall or fence has the potential to affect the landscape planter, then the applicant shall work with City Staff to address this situation. The Community Development Director shall be authorized to approve minor alterations the size and/or

location of the landscape planter to accommodate the placement of such wall.

73. Each unit shall be provided with an air conditioning condensing unit and/or system so that there are no wall-mounted, or window mounted units. Ground-mounted units shall be screened, enclosed, or placed within opaque barriers on all sides such that the equipment is completed concealed from view from the public right-of-way.

74. Mailboxes shall be provided and installed by the applicant. The local postmaster shall approve the design and location.

75. Each unit shall be provided with washer and dryer hook-ups.

76. Prior to issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the name and address of the development, and the developer's name, address, and a 24-hour emergency telephone number.

77. Permitted hours and days of construction and grading shall be as follows, and all work shall be comply with the noise regulations set forth in Chapter 8.47 of the City of Garden Grove Municipal Code:

    a. Monday through Friday – not before 7:00 a.m. and not after 7:00 p.m.

    b. Saturday – not before 9:00 a.m. and not after 6:00 p.m.

    c. Sunday and Federal Holidays – no construction shall occur.

78. Construction activities shall adhere to SCAQMD Rule 403 (Fugitive Dust). Where feasible, application shall implement dust minimization measures, the use of electricity from power poles rather than diesel or gasoline powered generators, and the use methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment. Also, use of solar, low emission water heaters, and low sodium parking lot lights, shall be required to ensure compliance with Title 24.

79. During construction, if paleontological or archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that fossil specimens or cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified paleontologist or archaeologist, as applicable, acceptable to the City to evaluate and determine appropriate treatment for the specimen or resource, and work in the vicinity of the discovery shall halt until appropriate assessment and treatment of the specimen or resource is determined by the

paleontologist or archeologist (work can continue elsewhere on the project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the paleontologist/archaeologist shall be implemented by the applicant at its own cost.

80. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which require the protection of active nests of all bird species, prior to the removal of any on-site landscaping, including the removal of existing trees.

81. The applicant shall prepare Covenants, Conditions, and Restrictions (CC&R's) for review and approval by the City Attorney's office and Community Development Department prior to the issuance of building permits. Unless otherwise approved by the Community Development Director and City Attorney, the approved CC&R's shall be recorded at the same time that the subdivision map is recorded and two copies (a hard copy and an electronic copy) of the recorded CC&R's shall be provided to the Planning Services Division. The CC&R's shall include the following stipulations and/or provisions:

    a. All units shall maintain the ability to park two cars within the garages at all times. Unless otherwise permitted by State Law, garages shall not be converted to any other use.

    b. There shall be no business activities, day care, or garage sales conducted within or from the garages.

    c. Parking spaces in the garages shall be made available to the occupants of the unit at all times.

    d. Residents shall not park or store vehicles anywhere on the site except within the designated parking spaces in the garages for their dwelling unit. However, the unassigned, open guest parking spaces may be utilized by residents or guests for temporary parking. Any issues arising from the use, application, or restriction of such open parking spaces shall be at the resolve of the Homeowner's Association.

    e. All graffiti vandalism shall be abated within the premises. Best management practices shall be implemented to prevent and abate graffiti vandalism within the premises throughout the life of the project, including, but not limited to, timely removal of all graffiti, the use of graffiti resistant coatings and surfaces, the installation of vegetation screening of frequent graffiti sites, and the installation of signage, lighting, and/or security cameras, an necessary. Graffiti shall be removed/eliminated as soon as reasonably possible after it is discovered, but not later than 72 hours after discovery.

f. Each residence shall be utilized as one (1) dwelling unit. No portion of any residence shall be utilized or rented as a separate dwelling unit.

g. The CC&R's shall include provisions providing the owners or tenants a means of contacting persons responsible for site maintenance, repairs, trash pick-up, and other related matters for a development of this type. This shall also include scheduling of maintenance of such items as the recreation area(s), landscape area maintenance, etc. This also includes ensuring tree overhangs do not block or hinder any vehicles such as street sweepers, trash trucks, fire trucks, etc., from maneuvering around the site.

h. Storage of boats, recreational vehicles, or commercial vehicles on the property is prohibited.

i. The CC&R's shall include stipulations that maintenance of the private drive aisles, storm drain, sewer system, common landscape areas, and open space areas within the interior of the development, and the landscape setback areas adjacent to Kerry Street and Russell Avenue are the responsibility of the Homeowner's Association.

j. Each unit shall have and maintain a minimum of 120 cubic feet of storage space, which may be provided in the garage parking areas, and typical closet space within the unit shall not count toward this requirement.

k. Each unit shall maintain a private recreation/open space area with a minimum six-foot (6'-0") width. This area shall be open and unobstructed from the ground to the sky, except for covered entry porches, which shall provide a minimum two-foot (2'-0") depth. No additional patio covers or other accessory structures shall be provided within the private recreation/open space areas.

l. All recreation areas, landscaping along the front and side yards of each unit, the project site entryway, landscaped areas in all common areas, and any landscaping within the public right-of-way shall be maintained for the life of the project and maintenance provisions approved by the City shall be included in the CC&R's.

m. The common recreation areas, as identified on the approved site plan, shall be equipped with a shade structure, food-service counter, outdoor dining tables, flexible lawn space, and raised garden planter beds, subject to review by the Planning Services Division, and Building and Safety Division.

n. There shall be no parking allowed along the private street, except within the designated parking areas. All curbs not designated as parking areas

shall be painted red. The applicant shall post "No Parking" signs along the drive aisle.

o. The maintenance of the private street, storm drains, sewer system, and open space areas is the responsibility of the applicant and property owner(s) and/or Homeowner's Association, including the common recreation areas, and the common landscape areas.

p. The Conditions of Approval for Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, shall be incorporated into the CC&Rs, and provisions corresponding to any applicable Conditions of Approval shall be included in the CC&Rs.

q. The following provisions shall be included within the CC&R's (in substantially the same form as below or as otherwise approved by the City Attorney):

i. Compliance with Stormwater Quality Regulations. The Homeowner's Association shall implement, and fund implementation of, the Operation and Maintenance ("O&M") Plan for the Property, which was approved by the City as part of the Water Quality Management Plan ("WQMP") required for development of the Property, and shall operate and maintain the Best Management Practices ("BMPs") described in the O&M Plan for the Property, which includes:

a. Description of all post-construction BMPs (non-structural and structural),

b. Description of the Property owner's(s') responsibilities and required training of persons performing BMP implementation, operation and maintenance,

c. Implementation frequency and operating schedule,

d. Inspection/maintenance frequency and schedule,

e. Specific maintenance activities,

f. Required permits from resource agencies, if any,

g. Forms to be used in documenting implementation, operation and maintenance activities,

h. Recordkeeping requirements.

A copy of the approved O&M Plan is described in the current WQMP for the Project, as it may be amended from time to time according to its terms, which is on file with the City of Garden Grove Community Development Department, and is incorporated herein by this reference. The Committee shall maintain a copy of the current WQMP at a location on the Property.

The Property shall be, and the Homeowner's Association shall ensure that the Property is used and maintained in full compliance with the provisions of the O&M Plan and Chapter 6.40 (Stormwater Quality) of the Garden Grove Municipal Code, as it may be amended. The City shall have the right to inspect the Property for the purpose of verifying compliance with this provision. The City of Garden Grove shall be an intended third-party beneficiary to this provision. The City shall have the right and authority, but not the obligation, to enforce this provision by any legal or equitable means, or by any method available to the Property owners as provided elsewhere in the Declaration, against the Declarant, Homeowner's Association, Owners, their successors and assigns, or other persons in possession of the Property. This provision shall not be amended or terminated without the written approval of the City of Garden Grove Community Development Department.

ii. Enforcement: The City is hereby made a party to this Declaration solely for purposes of enforcing its provisions and the Standards of Development for PUD-020-2026, and Conditions of Approval for Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447. The City, its agents, departments and employees shall have the unrestricted right and authority, but not the obligation, to enforce the provisions of this Declaration and the Standards of Development for PUD-020-2026, and Conditions of Approval for Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447. In the enforcement of this Declaration, the City shall not be limited to the procedures or processes described in this Declaration and may use any remedy provided under law or equity, including the City's Municipal Code. The City, its agents, departments and employees may further refuse to issue any building, electrical or plumbing permit that may be in violation of these Declarations or General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447 approvals. However, the City shall not be liable for failing or refusing to enforce the provisions of these Declarations or the Standards of Development for PUD-020-2026, and Conditions of Approval for Site Plan No. SP-168-2026, and Vesting Tentative

Tract Map No. TT-19447. The alternative dispute resolution provisions set forth in Section / Article [SECTION] of this Declaration shall not apply to or legally bind the City.

iii. Assessments: The City may levy special assessments against the properties in connection with its actions to enforce the conditions of this Declaration or General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447, or to abate the violation thereof. The City shall have the same power as the Association to levy special assessments pursuant to the provisions of [SECTION] of this Declaration in the event that it incurs expenses in the enforcement of the conditions of these Declarations or General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447 approvals. Notice of intention to make such assessment shall be mailed by the City to the Owner of each affected [LOT/UNIT] affording the Owner thirty (30) days' notice to satisfy or reimburse the City's expenditure. In the event of the failure of any Owner of any affected [LOT/UNIT] to reimburse the City within thirty (30) days, notice of such assessment shall be mailed by the City to said Owner, and said assessment shall thereafter be due as a separate debt to the City within thirty (30) days following the mailing of such notice. Any such delinquent assessment may be and may become a lien upon the interest of the defaulting Owner in the [LOT/UNIT] upon the execution by the City and the recording in the Orange County Recorder's office of a notice of delinquent assessment under the same conditions that the Association could record the same pursuant to the provisions of [SECTION]. The City may foreclose on such notice of delinquent assessment in the same manner and with the same power as the Association could foreclose on such notice pursuant to the provisions of [SECTION]. It is the intent of Declarant, which intent shall be binding upon all of Declarant's successors in interest in the Properties, that the City shall be deemed an interest holder pursuant to the provisions of these Declarations in order to enforce the rights which have been given to the City generally in these Declarations and specifically pursuant to this Section.

iv. Attorney Fees: The City shall be entitled to recover its attorney's fees incurred in connection with its actions to enforce the conditions of this Declaration or General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No.

SP-168-2026, and/or Vesting Tentative Tract Map No. TT-19447 approvals, or to abate the violation thereof.

v. Public Safety Access: The Police, Fire, and other public safety personnel may enter upon any part of the common area for the purpose of enforcing State and Local laws.

vi. Modification/Termination: This Declaration shall not be terminated or substantially amended without the prior written approval of the City of Garden Grove Community Development Director.

82. Should the applicant elect to build the project in more than one phase, then a phasing plan shall be submitted to the Community Development Department prior to releasing units for model purposes. The phasing plan shall include, but not be limited to, a site plan showing the phasing areas, protection of finished units, and protection for related safety issues concerning pedestrians and non-construction vehicles. The perimeter improvements including landscaping, walls, street improvements, and underground utilities, shall be completed in the first phase. The phasing plan shall be approved by the Community Development Department, OCFA, and Public Works Department prior to issuance of building permits. Notwithstanding if the applicant elects to construct the Project in phases, the applicant shall record a single final map, not multiple phased final maps, and the CC&Rs shall apply to the entire property covered by the Vesting Tentative Tract Map at the time of recordation.

83. All mitigation measures that are part of the Mitigated Negative Declaration that was adopted in conjunction with approval of General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447 shall be implemented. In addition, the project is subject to the Mitigation Monitoring and Reporting Program (MMRP) adopted by the City Council as part of the Mitigated Negative Declaration (Exhibit "B"). In order to assist the City to verify that all required project mitigation measures and project design features are complied with in a timely manner, a project-specific mitigation-monitoring program for monitoring all applicable project-related mitigation measures shall be prepared by the applicant and approved by the Planning Services Division prior to issuance of building permits. Said mitigation monitoring program shall be implemented during project construction through completion. The applicant shall provide the City with a report demonstrating adherence to all mitigation measures quarterly or otherwise upon request.

84. Final Vesting Tentative Tract Map No. TT-19447 shall be approved by the City and recorded by the applicant prior to issuance of any grading and/or building permits for the proposed development.

85. The applicant shall submit a signed letter acknowledging receipt of the decision approving Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447, and their agreement with all conditions of the approval.

86. The applicant shall, as a condition of Project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, or proceeding against the City, its officers, agents, employees and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body, or City staff action concerning General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, Planned Unit Development No. PUD-020-2026, Site Plan No. SP-168-2026, and Vesting Tentative Tract Map No. TT-19447. The applicant shall pay the City's defense costs, including attorney fees and all other litigation related expenses, and shall reimburse the City for court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award, which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein.

87. In accordance with Garden Grove Municipal Code Sections 9.32.160 and 9.40.070.A, respectively, unless otherwise provided by State law, the rights granted pursuant to Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447 shall be valid for a period of two (2) years from the effective date of the ordinance approving General Plan Amendment No. GPA-001-2026, Zoning Map Amendment No. A-046-2026, and Planned Unit Development No. PUD-020-2026. Unless a time extension is granted pursuant to Section 9.32.030.D.9 of the Municipal Code, the rights conferred by Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447 shall become null and void if the subject development and construction necessary and incidental thereto is not commenced within two (2) years of the expiration of the appeal period and thereafter diligently advanced until completion of the project. In the event construction of the project is commenced but not diligently advanced until completion, the rights granted pursuant to Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447 shall expire if the building permits for the project expire.

88. The Conditions of Approval set forth herein include certain development impact fees and other exactions. Pursuant to Government Code §66020(d), these Conditions of Approval constitute written notice of the amount of such fees. The applicant is hereby notified that the ninety (90) day protest period, commencing from the effective date of approval of Site Plan No. SP-168-2026 and Vesting Tentative Tract Map No. TT-19447 has begun.

EXHIBIT "B"

MITIGATION MONITORING AND REPORTING PROGRAM

Introduction

The California Environmental Quality Act (CEQA) requires a lead or public agency that approves or carries out a project for which an Initial Study/Mitigated Negative Declaration (IS/MND) has been adopted which identifies one or more significant adverse environmental effects and where findings with respect to changes or alterations in the project have been made, to adopt a "…reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA, Public Resources Code Sections 21081, 21081.6).

A Mitigation Monitoring and Reporting Program (MMRP) is required to ensure that adopted mitigation measures are successfully implemented for the 9822 Russell Avenue Townhome Project (Project). The City of Garden Grove is the Lead Agency for the project and is responsible for implementation of the MMRP. This MMRP for the project identifies the parties that will be responsible for monitoring implementation of the individual mitigation measures in the MMRP.

Mitigation Monitoring and Reporting Program

This MMRP for the Project applies, variably, during all Project phases, including design, construction, and operation, as indicated. The attached table identifies the mitigation program required to be implemented by the City for the 9822 Russell Avenue Townhome Project. The table identifies the mitigation measures required by the City to mitigate or avoid significant adverse impacts associated with the implementation of the Project, the timing of implementation, and the responsible party or parties for monitoring compliance.

The MMRP also includes a column that will be used by the compliance monitor (individual responsible for monitoring compliance) to document when implementation of the measure is completed. As mitigation measures are completed, the compliance monitor will sign and date the MMRP, indicating that the required actions have been completed.

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MITIGATION MONITORING AND REPORTING PROGRAM
9822 RUSSELL AVENUE TOWNHOME PROJECT

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
AESTHETICS			
Lighting. Project plans and specifications shall comply with City standard Conditions of Approval for lighting, which states that all lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building and Occupancy Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	
AIR QUALITY			
SCAQMD Rule 402 – Nuisance. The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The Project shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits and during demolition and grading activities.	City of Garden Grove Building and Safety Division	
SCAQMD Rule 403 – Fugitive Dust. The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403 as implemented by the City's standard Condition of Approval, which includes dust minimization measures, the use of electricity from power poles rather than diesel or gasoline powered generators, and the use of methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment, where feasible.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits and during demolition and grading activities.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
SCAQMD Rule 1113 – Architectural Coatings. The Project plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of Volatile Organic Compound) and/or High Pressure Low Volume (HPLV) applications shall be used.	Requirement to be included in Construction Plans, Specifications, and Permits. Verified prior to issuance of Construction Permits that involve architectural coatings and during architectural coating activities.	City of Garden Grove Building and Safety Division	
BIOLOGICAL RESOURCES			
Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515. The Project construction COA plans and specifications shall identify compliance with the following City standard Condition of Approval. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3515 of the California Fish and Game regulations, which require the protection of active nests of all bird species, prior to the removal of any on-site landscaping, including the removal of existing trees. Prior to commencement of grading activities and issuance of any building permits, the City Community Development Director, or designee, shall verify that all Project grading and construction plans are consistent with the requirements of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3515, as stated above, that pre-construction surveys have been completed (if needed) and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition and Grading Permits involving vegetation removal.	City of Garden Grove Planning Services Division	
CULTURAL RESOURCES			
Archaeological Resources. The Project construction plans and specifications shall identify compliance with the following City standard Condition of Approval. During construction, if archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified archaeologist, acceptable to the City to evaluate and determine appropriate treatment for the specimen or resource, and work in the vicinity of the discovery shall	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
halt until appropriate assessment and treatment of the resource is determined by the archeologist (work can continue elsewhere on the Project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the archaeologist shall be implemented by the applicant at its own cost.			
Human Remains. In the event that human remains are encountered on the Project site, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. Prior to the issuance of grading permits, the City shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits and during ground disturbing activities.	City of Garden Grove Building and Safety Division	
ENERGY			
CalGreen Compliance. The Project plans and specifications shall implement compliance with the CALGreen Building Code as included in the City's GGMC Section 18.04.010 to ensure efficient use of energy. CALGreen specifications are required to be incorporated into building plans as a condition of building permit approval.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division	
California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3). The Project construction plans and specifications shall implement compliance with CCR Title 13, Motor Vehicles, Section 2449(d)(3), which states that no vehicle or engines may idle for more than 5 consecutive minutes. The idling limit does not apply to queuing and necessary operation to accomplish work for which the vehicle/equipment was designed.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division	
GEOLOGY AND SOILS			
California Building Code. The Project plans and specifications shall comply with City standard Conditions of Approval for the California Building Code (CBC) and implement compliance with the CBC as included in GGMC Title 18, Building Codes and Regulations. All work shall comply with the latest edition of the California CBC at time of permit application to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading and Building Permits.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
specifications for the Project are required to be incorporated into grading and building plans and specifications prior to issuance of grading and building permits.			
Mitigation Measure PAL-1: Paleontological Resources. Construction plans and specifications shall state that in the event that potential paleontological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified paleontologist (who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist) has evaluated the find. If a fossil is determined to be significant, the qualified paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school. If any fossil remains are discovered, the qualified paleontologist shall make a recommendation whether monitoring shall be required for the continuance of earth moving activities. Prior to issuance of grading permits, the City shall verify that all Project grading and construction plans specify the requirements herein related to the unanticipated discovery of paleontological resources. After completion of the salvage and curation of any resources, the qualified paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Community Development Director, or designee, and the Natural History Museum of Los Angeles County.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
GREENHOUSE GAS EMISSIONS			
AB 1881 Landscaping. The Project Conditions of Approval would require compliance with AB 1881 landscaping requirements (included in the GGMC in Section 9.12.040.085 and pursuant to the Title 24 regulations in GGMC Section 18.04.010.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division City of Garden Grove Planning Services Division	
HAZARDS AND HAZARDOUS MATERIALS			
Fire Master Plan: The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements, including but not limited to the Fire Master Plan.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Building Permits.	City of Garden Grove Building and Safety Division Orange County Fire Authority (OCFA)	
Asbestos Containing Materials. The Project Plans and specifications shall implement compliance with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 1403. If asbestos is found, the Project applicant shall follow all procedural requirements and regulations of SCAQMD Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition Permit.	City of Garden Grove Building and Safety Division	
Lead Based Paint. The Project Plans and specifications shall implement compliance with the provisions of the Code of Federal Regulations Title 29, Section 1926.62, California Code of Regulations Title 8 Section 1532.1, and Cal/OSHA's Lead in Construction Standard to require a lead-based paint survey be conducted, and if lead-based paint is found, the Project applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. Cal-OSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition Permit.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
HYDROLOGY AND WATER QUALITY			
Stormwater Pollution Prevention Plan. Prior to grading permit issuance, the Project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) in accordance with the County Drainage Area Management Plan (DAMP). The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other DAMP requirements to comply with the National Pollutant Discharge Elimination System (NPDES) regulations to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Garden Grove staff or its designee to confirm compliance.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division, and Public Works Engineering Division	
Water Quality Management Plan. Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all post-construction, site design, source control, and treatment control Best Management Practices (BMPs) that will be incorporated into the development project in order to minimize the adverse effects on receiving waters. The WQMP shall comply with GGMC Section 6.40.050, the Orange County DAMP, and the Santa Ana Region, Regional Water Quality Control Board (RWQCB) requirements in effect at the time permitting.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Grading Permits.	City of Garden Grove Building and Safety Division, and Public Works Engineering Division	
NOISE			
Construction Noise. Project construction plans and specifications shall detail that construction activities shall occur in compliance with GGMC Section 8.47.060(d), which states that it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any construction or repair work on buildings, structures, or projects, including construction-related vehicles arriving, idling, or being loaded/unloaded at or near a construction site, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device outside of the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction or repair work shall be permitted on Sundays or federal holidays.	Requirement to be included in Construction Plans and Specifications. Verified prior to issuance of Demolition, Grading, and Construction Permits and during these activities.	City of Garden Grove Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
Mitigation Measure NOI-1: Construction Vibration. Prior to issuance of demolition or grading permits, the Community Development Director, or designee, shall verify that the construction plans require that the construction contractor restrict the use of heavy construction equipment (i.e., greater than 80,000 pounds), vibratory rollers, large loaded trucks, and large dozers within 10 feet of the southern property line. Instead, smaller, rubber-tired bulldozers (less than 80,000 pounds) shall be used within this area during Project construction to reduce vibration levels.	Requirement to be included in Project Plans and Mechanical Specifications. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division	
PUBLIC SERVICES			
Schools Development Impact Fee: The Project will be required to pay applicable development fees levied by the Garden Grove Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.407) to offset these impacts on school facilities resulting from new development.	Requirement to be included in Project Plans and Conditions of Approval. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division	
Park and Recreation Impact Fee: The Project will be required to pay applicable City development impact fees for park and recreational facilities pursuant to GGMC 9.44.030 In-Lieu Park Fees, which are imposed on each development project to offset the cost of providing increased park and recreation facilities.	In Project Plans and Conditions of Approval. Verified prior to Occupancy Permits.	City of Garden Grove Building and Safety Division Public Works Department	
TRIBAL CULTURAL RESOURCES			
Mitigation Measure TCR-1: Native American Monitoring. A. The Project plans, specifications, and grading permits shall state that the Project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh). The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the City prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed,	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the Project applicant/City upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the Project applicant/City that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project applicant/City that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact any TCRs.			
Mitigation Measure TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects. A. Upon discovery of any TCRs, the Kizh monitor shall notify the City and Project applicant and all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh shall recover and retain all discovered TCRs in the form and/or manner the Kizh deems appropriate.	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	
Mitigation Measure TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects. A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition and Grading Permits and during grading and excavation activities.	City of Garden Grove Planning Services Division and Building and Safety Division	

Regulation / Mitigation Measure	Timing	Responsible for Ensuring Compliance / Verification	Date Completed and Initials
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.			
UTILITIES AND SERVICE SYSTEMS			
Construction Waste. The GGMC Section 18.60.040, Minimum Construction and Demolition Waste Diversion Requirements. Construction plans and specifications shall implement reuse, recycling, and/or diversion of the minimum percentage amount of designated recyclable and reusable materials as set forth by the CALGreen (Part 11 of Title 24, California Code of Regulations).	Requirement to be included in Construction Plans and Specifications. Verified prior to Demolition, Grading, and Construction Permits and during these activities.	City of Garden Grove Building and Safety Division	

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