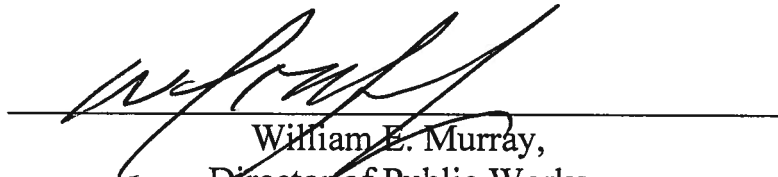


PRELIMINARY
ENGINEERING REPORT
FOR
HARBOR BOULEVARD IMPROVEMENTS

Prepared by
The City of Garden Grove
Department of Public Works

Under the Direct Supervision of


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Director of Public Works

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This Preliminary Engineering Report (PER) has been prepared in conformance with the general requirements of Section M.3 of EDA Form ED-900 Economic Development Administration (EDA). The components of the proposed project described below, which are depicted and described on "Exhibit A-1 thru 6" (attached) and in the preliminary detailed cost spread sheet (attached), are consistent with the EDA investment project description that is provided in Section A.2 of Form ED-900. As noted in Section B.5 of EDA Form ED-900, the project beneficiaries, along with dimensional information, have also been depicted on "Exhibit B" (attached). In addition, rough project quantities have been provided for each project elements (PE) in the Preliminary Cost spread sheet (attached). The columns of the Preliminary Cost spread sheet correspond to "Exhibit A1 thru 6" (attached), which depicts in general form the associated improvements for the aggregated PE's, and shows the general layout and location of the existing site conditions in relation to the proposed improvements, and their relationship to the project beneficiaries.

The Garden Grove EDA Grant Application serves as genesis for creating economic growth for the city of Garden Grove and surrounding cities in the Orange County California region. Our goal for this grant is to be consistent with the EDA goals and will improve the quality of life by expanding the capacity of individuals and firms and allow our community to maximize the use of their talents and skills to support innovation. This Grant will ensure our Economic Development objectives are met. These objectives include working effectively with private sector businesses to advance mutual gain for the public and the private sector by creating new jobs and opportunities through development and implementation of economic development activities which are essential to ensuring our City's regional economic future.

Harbor Boulevard through the city of Garden Grove represents the genesis and major base of employment and international tourism in the County of Orange, and the resilience and sustainability of this economic employment engine meets the intent and goal of the EDA's stated investment priorities and goals, which include:

- The importance of maintaining quick recovery for its economic base and economic resilience to keep the County of Orange a globally competitive asset;
- The infrastructure elements are critical to that economic vitality and resilience;
- The beneficiaries are critical to expanding job creation and business expansion with an emphasis on professional level opportunities and innovative, high-value technologies and services;
- The infrastructure improvements will enhance the viability of the tourism elements as an international destination and serves as a major attraction on a globally economic level;
- Improvement of the target region as a genesis and opportunity zone for private investment to add exponentially to the development of

- businesses and the creation of new jobs, and strengthen the local economy;
- The Harbor Boulevard corridor is expected to create well over a 1,000 new jobs and generate \$750 million in private investment.

This project intends to maximize the potential of available land uses to draw in the funds that will be needed to meet the crucial demands raised as the city works to support the development and growth of the innovation cluster, create and retain jobs and promote initiatives that expand the competitiveness of the region.

This Grant will help the city implement a long-term and sustainable economic strategy through a variety of non-construction and construction projects, for example the Site C resort/hotel/campus Project and entertainment center, which will create over 1,000 new jobs. Adjacent sites also anticipate the creation of nearly 500 new permanent jobs.

- In addition, the Grove district has a track record of "sustained growth" because it has attracted new companies of all sizes, and it has added jobs steadily over several years, rather than in a single massive expansion.
- This project is expected to stimulate over \$500 million in private investment, according to developer's estimates.

On June 2, 2017, pursuant to the requirements of the new "Trash Provisions" called for by the state, the California Regional Water Quality Board (CRWQB) issued an executive order which included new information and instructions under the title ***Water Code Section 13383 Order to Submit Method to Comply with Statewide Trash Provisions; and Requirements for Phase I Municipal Separate Storm Sewer (MS4) Co-Permittees with the jurisdiction of the Santa Ana Regional Water Quality Control Board.*** These new "Trash provisions" now prohibit the discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into transport or conveyance devices (such as storm drains and channels) into surface waters of the State downstream. Addressing this major issue of trash reduction and mitigation as part of this project assures the area will be an attractive destination for international tourism and outreach on a sustainable level. Provisions for improving catch basin inlets and other improvements will be addressed with this project.

As part of their proactive response to the CRWQB order, the City of Garden Grove is taking the initiative and has selected "Track 2" of this California executive order to achieve compliance with the state's goals. The net benefits of this action shall be reflected in the presentation and viability of an attractive Harbor Boulevard corridor and promote economic vitality as an end result. As outlined by the state of California, "Track 2" requirements are: **Installation, operation and maintenance of any combination of "full capture systems," "multi-benefit project," "other treatment**

controls,” and/or “institutional controls” within either the jurisdiction or the Co-permittee or within the jurisdiction of the Co-permittee and contiguous MS4 permittees. The Co-permittee may determine the locations or land uses within its jurisdiction to implement any combination of controls. The Co-permittee shall demonstrate that such combination achieves “full capture system equivalency.” The Co-permittee may determine which controls to implement to achieve compliance with “full capture system equivalency.”

The City of Garden Grove (City) is submitting an application for the Economic Development Administration (EDA) Grant. The stated intent, as summarized above, is to use the EDA Grant to achieve the stated investment priorities of the grant and focus on enhancing public infrastructure along the city boundaries from north to south of Harbor Boulevard. The proposed public infrastructure improvements will attract new development and private investment, create new local and regional jobs, and assure the community long-term economic resiliency. The City has continued an excellent partnership with the EDA, and has been able to build a strong economic ecosystem which supports many layers of entrepreneurship and a genesis for business growth within the City including a proven track record of successful job creation efforts.

The City has also partnered with the County of Orange to support the development and implementation of the Comprehensive Economic Development Strategy (CEDS) process. The CEDS was designed to bring the public and private sectors together to generate an economic development roadmap that would diversify and strengthen the regional economy and provide real incentives for the promotion of new job growth and private investment in business and industry.

The City established a district called the Garden Grove Tourism Improvement District (GGTID). The GGTID area contains ten (10) hotels that agree to contribute annually towards the enhancement and improvement of the GGTID area. The GGTID has collected a self-assessment of annual revenues for transit and/or transit-related projects, and, a portion of the total collected funds will be allocated as matching funds for this grant.

The proposed construction includes, but is not limited to, a variety of public infrastructure improvements such as roads, construction of way-finding and monument signs, construction of new curb and gutter, median enhancement with drought tolerant landscaping, construction and reconstruction of bus stop locations and pedestrian transit points and connectivity along with street furniture. These improvements will revitalize the corridor, improve and minimize safety concerns, enhance pedestrian connectivity, improve public transit access and vehicle safety, and stimulate the economic attraction potential of the entire Harbor Boulevard corridor.

Both interim construction and permanent jobs will be created in connection this planned project and with the hotel development of Site C (Investel), Site B2 (Kam Sang Co), and Home 2 Hotel (BN Hotel Group), along with other adjacent properties. It is the goal of this economic development effort to integrate and connect the southern resort area from Harbor Boulevard and Westminster Avenue to the northern resort area from Harbor Boulevard to Palm Street to create a seamless corridor which will provide a genesis for economic diversification for now and on into the future.

Harbor Boulevard, through the city of Garden Grove, has been designated a "Smart Arterial Highway" that serves as the primary north/south transportation corridor from the Pacific Ocean northerly serving more than 50,000 daily commuters and travelers. The proposed developments along this corridor will impact the Level of Service (LOS) on Harbor Boulevard between Westminster Avenue to Chapman Avenue from LOS A to LOS E. Future improvements to Harbor Blvd. will be needed to address these impacts that would be beyond the genesis for normal development entitlements of the beneficiaries who will develop along this alignment in the near future. The proposed project will be constructed entirely within the existing right-of-way on Harbor Boulevard and extends the full length of the City's proposed International West development area, which is a master plan of 560 acres of new resort, commercial, hospitality and entertainment land uses, including 5,000 new hotel rooms and hundreds of thousands of square feet of new retail, dining, conference, recreational, educational campus and entertainment facilities. It will serve as an international hub for tourism in the region.

Roadway improvements currently exist with conventional asphalt concrete, curb and gutter, sidewalk, minimal landscaping, driveways, utility infrastructure that was installed for the older land uses. Previous improvement phases along Harbor Boulevard have updated and improved a variety of the previous elements listed above. The proposed next phase of the master plan is to improve the remaining elements of this existing infrastructure as it is now approaching its maximum anticipated life span, and will need to be improved to the ultimate sizing per the City's adopted General Plan and the West Development area master plan to meet the demands of future land uses. The proposed project improvements will be designed and constructed to update it to current design standards for basic public health and safety, secure the resilience and sustainability of the corridor and will extend the anticipated life span and service life of the infrastructure.

Currently, the roadway incorporates three travel lanes in each direction with occasional turn pockets at median openings and intersections, and there are traffic signals at major intersections. The ultimate roadway and infrastructure improvements proposed with this project will improve traffic capacity in each direction, and the intersection improvements will improve the level of service, thus reducing congestion and travel time, and will reduce air quality

impacts to the area. The proposed project will also install upgrades to the infrastructure such as pedestrian friendly elements and other EDA consistent improvements within the City's existing right-of-way.

The existing right-of-way averages between 100 feet and 120 feet in width along Harbor Boulevard. The intersecting streets feed traffic to and from adjacent neighborhoods and land uses. The project includes three primary project elements, which are designated as "Project Element 1" or "PE-1" through "Project Element 3" or "PE-3." All three project elements are anticipated to be implemented as one contract bid package. The improvements to be constructed in the designated project elements include, but are not limited to pavement rehabilitation, intersection upgrades for better efficiency and safety, traffic signals with signage, upgrades to medians and storm drain inlet upgrades for base line capacity conveyance.

A preliminary cost spread sheet has been attached to this report with a simplified breakdown of the anticipated improvement components or elements within the appropriate column for each project area, and includes estimated unit costs and quantities with extensions for each project element. The unit costs in the first project element column are designated as the base project and serves as the basis for all the other project elements below. Where the Lump Sum (LS) or percentage unit is used, multipliers have been used to adjust the unit cost as a ratio of the base project. The ratios are approximated for budgeting purposes only. Phasing designations are not intended to imply sequential or staggered construction times. The intended use of the designation "Phase" is for delineation purposes only. It is anticipated that all components of the project will be constructed and installed as part of one construction bid package and as part of a single construction schedule.

Project Element 1 – Pavement Rehabilitation – This segment of the improvements, approximately 553,000 feet in area, will be employing rehabilitation alternatives from slurries to grinding and overlay to give the entire reach of the project a life extending treatment to make the entire corridor to improve the utility, life expectancy and vehicle/pedestrian safety of the roadway. Any existing frontage road and infrastructure utilities along the frontage of the new beneficiaries in the future will be improved by the developer of the site adjacent to Harbor Boulevard so that the roadway improvements for Harbor can be upgraded in their correct and ultimate alignment for each new development based upon their nexus of impact. New and rehabilitated parkway improvements will be constructed to provide the necessary parkway pedestrian improvements that will not be installed by the developer of the adjacent site. These improvements will be constructed within the existing approximately 8-foot wide parkway in the public right-of-way area, including drought tolerant landscaping, pedestrian pathway, street lighting, decorative sidewalk, accessible ADA pathways, related hardscape pathways and parkway improvements that will complement future improvements and match up with the future improvements proposed by the

developers of the adjacent properties, and with the existing improvements that were installed in previous phases of the Harbor Boulevard improvement program project.

Project Area 2 – Various Street/Traffic Improvements – Shown on the exhibit as Project Element 2, this reach of the improvements will address degraded median treatments and pavement areas with the removal of red brick pavers at Harbor Blvd. at the SR-22 median treatment area. This work will likely involve coordination with Caltrans to make sure all work is consistent with state requirements, and within those limits will remove existing median improvements and upgrade them for consistency with adjacent roadway improvements. Street furniture, including bus stops and covered waiting areas, will be improved to promote safer waiting and accessibility for public transportation, and enhance the pedestrian corridor between transportation hubs. The intent is to have the median improvements match and complement the new parkway improvements that will be installed throughout the alignment. The Beneficiaries of this improvement component is the general public, future developments and the properties along both sides of Harbor Boulevard within the limits of the improvements. See the attached project spread sheet for the estimated quantities.

Project Element 3 – Harbor Blvd. @ Garden Grove Blvd. Intersection Improvements – Shown on the exhibit as Project Element 3, this reach of the improvements include intersection widening for better operational capacity and safety, improved curb returns for ADA accessibility, traffic signal modifications, extension of storm drain laterals and the addition of new enhanced inlets, as well as updated striping and signing for more efficient vehicle and pedestrian movements. The Beneficiary for these improvements is the general public and the new and existing land uses along Harbor Blvd. that have increased the attractive factors for commuter traffic. The proposed project improvements will remove all existing parkway improvements, including sidewalk, tree wells, etc, and replace them with new decorative sidewalk, street lighting and adjustments to existing boxes and vaults to grade. A new traffic signal will be to provide safe and efficient access and exiting from the new land uses. The signal will provide access control for properties for each reach along Harbor Blvd. and Garden Grove Avenue. The signal improvements will match the standard improvements required under the adopted City of Garden Grove design standards. New accessible pathways and ramps, cross gutters and spandrels as appropriate to the signal improvements will be constructed. Enhanced drainage inlets will improve capacity and result in safer pedestrian corridors that could be impacted flooding as a result of trash accumulation and inlet blockage.

City Overall Project Costs

The attached cost spread sheet for these improvements uses the descriptors **Project Elements 1 thru 3** at the head of each column of the anticipated

project costs. No new right-of-way will be required for these improvements. The anticipated service life of these new improvements is 30 to 50 years with periodic maintenance and rehabilitation. It will also isolate a genesis and control of components and infrastructure so that the system can be maintained and reliability preserved in a more effective manner.

An environmental assessment will be conducted in compliance with the requirements of the California Environmental Quality Act (CEQA) and it is anticipated that all four of the components of this project will be designated as Categorical Exemptions under CEQA.

With the exception of the improvements that were constructed by an earlier phase of the city's recent redevelopment program, the existing roadway and infrastructure improvements along Harbor Boulevard have been in place for more than 25 years, and currently serve the existing land uses. These improvements include curb, gutter and sidewalk, some street trees and street lighting. Existing bus stops are also in place in the outer travel lanes in each direction. The proposed improvements are not anticipated to interfere with existing utility.

The anticipated permits for these projects will include construction permits that accompany the Storm Water Pollution Prevention Plans approved by the Regional Water Quality Control Board, and no-fee encroachment permits issued by the City of Garden Grove for work within the public right-of-way.

The construction will be completed by private contractors through the public bid process as one project. The city may choose to execute the work for construction as one contract in a single stage, or as staged improvements to accommodate the ongoing use of Harbor Boulevard and the adjacent businesses, thereby minimizing impacts to them. It is anticipated that 11 to 14 months will be required to complete the final design, processing and construction in place for the improvements. Design is anticipated to take 3 to 5 months to complete. Solicitation for bids under the city's current public purchasing requirements will take approximately 2 months to award construction contracts. Construction will take between 6 to 7 months, depending upon the manufacture and delivery time for long lead items such as signal and lighting poles and materials.

The city will provide support staffing to manage all aspects of the project from existing city forces for project and construction management, peer review, permitting, agency processing and field inspection services during the entire duration of the project from design to final construction and acceptance of the improvements by the city. Costs for these project support elements have also been included in the cost breakdowns for the projects.