

GENERAL WATER NOTES

- 1. ALL WATER FACILITIES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF GARDEN GROVE.
- 2. THE CONTRACTOR SHALL NOTIFY THE WATER SERVICES INSPECTOR AT (714) 719-1284 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION FOR WATERLINE INSPECTION.
- 3. ALL WATER MAINS SHALL BE AWWA C-900, D14 CLASS 305 PVC PIPE, UNLESS OTHERWISE INDICATED ON THE PLANS.
- 4. ALL WATER MAINS IN PRIMARY AND SECONDARY STREETS SHALL BE INSTALLED AT 42" COVER BELOW FINISHED SURFACE AND AT 36" COVER IN ALL COLLECTOR AND INTERIOR STREETS.
- 5. ALL WATER MAINS, VALVES, AND FITTINGS SHALL HAVE TYTON OR GRIP-TITE JOINTS EXCEPT AS OTHERWISE NOTED.
- 6. FIRE HYDRANTS SHALL BE INSTALLED AT BCR'S OR LOT LINES UNLESS OTHERWISE INDICATED ON THE PLANS.
- 7. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN SEVEN FEET OF DRIVEWAYS TOP OF "X." AND OTHER REQUIRED CLEARANCES PER THE STANDARD PLANS B-701, B-702, AND B-703.
- 8. NO TAPS TO EXISTING CITY WATER MAINS SHALL BE MADE WITHOUT THE PRESENCE OF AN AUTHORIZED CITY WATER INSPECTOR. IF ANY SUCH TAPS ARE MADE, THEY WILL BE EXCAVATED AND ANY ADJUSTMENTS AS WELL AS ALL COSTS OF EXCAVATION AND RE-SURFACING SHALL BE BORNE BY THE CONTRACTOR. CONTACT WATER SERVICES INSPECTOR AT (714) 719-1284, 48 HOURS PRIOR TO INSTALLATION.
- 9. ALL WATER METERS, METER BOXES, AND RESIDENTIAL FIRE SPRINKLER CONNECTIONS CAN BE PURCHASED FROM THE WATER SERVICES INSPECTOR AT CITY HALL.

- 10. TRENCH BACKFILL SHALL BE COMPACTED TO 95% RELATIVE DENSITY IN THE UPPER 6" AND 90% RELATIVE DENSITY BELOW 30", AS DETERMINED BY THE FIVE-LAYER METHOD (CALIFORNIA 216).
- 11. ALL SANITARY SEWER FACILITIES SHALL MAINTAIN 10 FEET HORIZONTAL SEPARATION FROM POTABLE WATER SUPPLY FACILITIES. ALL PERPENDICULAR CROSSING OF THE SEWER SHALL MAINTAIN A VERTICAL SEPARATION OF THREE FEET BELOW THE WATER MAIN OR SHALL BE CONSTRUCTED OF CAST IRON PIPE WITH PRESSURE TIGHT JOINTS. ALL EXCEPTIONS TO THE ABOVE MUST BE APPROVED BY THE DIRECTOR OF THE PUBLIC WORKS DEPARTMENT.
- 12. TUNNELING OF CURB AND GUTTER, SIDEWALKS, CROSS-GUTTERS AND OTHER STRUCTURES WILL NOT BE PERMITTED WITHOUT REPLACEMENT OF THE STRUCTURE. CONCRETE REPLACEMENT SHALL BE TWO FEET BEYOND THE EDGE OF THE TRENCH, UNLESS THE DISTANCE IS LESS THAN FIVE FEET TO AN EXPANSION JOINT OR CRACK.
- 13. CONSTRUCTION WATER MAY BE TAKEN ONLY AT LOCATIONS APPROVED BY THE WATER SERVICES DIVISION. A CONSTRUCTION METER WITH CHECK VALVE MUST BE INSTALLED AT THESE LOCATIONS BY THE CITY AT CONTRACTOR'S EXPENSE. THE CHECK VALVE TO BE TESTED BY A CERTIFIED BACKFLOW TESTER PRIOR TO CONSTRUCITON METER BEING TURNED ON. VALVE SHALL BE OPERATED WHEN TAKING CONSTRUCTION WATER WITH FIRE HYDRANT REMAINING OPEN DURING THE DAY. DEVELOPERS WILL BE CHARGED FOR CONSTRUCTION WATER ON AS AS-USED BASIS.
- 14. A MINIMUM OF 15 FEET CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY BUILDING PAD, UNLESS OTHERWISE INDICATED HEREON OR APPROVED BY THE DIRECTOR OF PUBLIC WORKS DEPARTMENT.
- 15. ALL ON-SITE UNDERGROUND UTILITY LINES SHALL BE 5' CLEAR OF ALL PARALLEL WATER FACILITIES WITH ADDITIONAL CLEARANCE AT HYDRANT AND BEND LOCATIONS. A MINIMUM OF 6" VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER FACILITIES AND ALL UTILITIES.
- 16. AN INDIVIDUAL SHUT-OFF VALVE SHALL BE PROVIDED AT EACH UNIT.
- 17. CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING VALVE CANS TO GRADE AFTER FINAL PAVEMENT IS PLACED PER CITY STANDARDS B-752 AND B-753.
- 18. ALL WATERLINES SHALL BE REQUIRED TO PASS PRESSURE, LEAKAGE, AND BACTERIOLOGICAL TESTS PER CITY STANDARDS PRIOR TO ACCEPTANCE. A TEMPORARY CONNECTION WILL BE REQUIRED TO FACILITATE THIS TESTIN
- 19. DISINFECTION OF ALL WATERLINES SHALL BE BY LIQUID CHLORINATION ONLY. METHOD FOR PRESSURE/LEAKAGE TESTING AND CHLORINATING NEW WATERLINE SHALL BE PROPOSED BY THE CONTRACTOR AND APPROVED BY THE WATER QUALITY INSPECTOR AND THE WATER SERVICES INSPECTOR.
- 20. ALL WATERLINE TIE-INS SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED CITY WATER INSPECTOR. ALL CONNECTING PARTS SHALL BE SWABBED WITH A 5% NFS APPROVED CHLORINE SOLUTION.

- 21. ALL GATE VALVES SHALL BE AN RESILIENT WEDGE (RW) TYPE, EPOXY LINED AND COATED AS APPROVED BY THE WATER SERVICES INSPECTOR.
- 22. THE LOCATION OF UTILITIES SHOWN HEREON IS APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND TO COORDINATE ALL PHASES OF CONSTRUCTION WITH THE VARIOUS UTILITY COMPANIES INVOLVED.
- 23. EXISTING UTILITIES SHALL BE PROTECTED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL THE REQUIRED VERTICAL BENDS NECESSARY TO MAINTAIN 6" MINIMUM VERTICAL CLEARANCE FROM EXISTING UTILITIES.
- 25. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- 26. EXCAVATED SECTIONS OF A.C. PIPE TO BE DISPOSED OF PROPERLY PER SCAQMD RULE 1403.
- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL WATER LINES IN PLACE, AND SHALL BEAR ANY EXPENSES FOR REPAIRS OR APPROVED RELOCATIONS TO SAID FACILITIES.
- 28. NO MECHANICAL EXCAVATION WITHIN TWO FEET (LATERALLY) OF A WATER MAIN WILL BE ALLOWED.
- 29. WATER SERVICE MUST BE MAINTAINED TO ALL CUSTOMERS WITHIN THE CONSTRUCTION AREA AT ALL TIMES. IF THE PRIMARY SOURCE OF WATER IS INTERRUPTED, A TEMPORARY SECONDARY SOURCE SHALL BE SUPPLIED BY THE CONTRACTOR APPROVED BY THE CITY WATER DEPARTMENT. ANY EXPENDITURES INCIDENTAL THERETO SHALL BE BORNE BY THE CONTRACTOR.
- 30. ANY REQUIRED BACKFLOW DEVICES SHALL BE APPROVED PRIOR TO INSTALLATION. THE DEVELOPER SHALL HAVE A CERTIFIED CROSS CONNECTION SPECIALIST TEST THE DEVICE AND PROVIDE THE CITY WITH WRITTEN TEST AND RESULTS AND CERTIFICATION. CONTACT THE WATER QUALITY DIVISION AT 714-741-5395.
- 31. FIRE HYDRANTS MUST BE OPERATIONAL PRIOR TO FOUNDATION POUR. CALL FIRE DEPARTMENT AT 714-741-5600 TO HAVE FIRE HYDRANTS APPROVED PRIOR TO CALLING FOR FOUNDATION INSPECTION.