GENERAL WATER NOTES

ELEVATION FROM MEAN SEA LEVEL.

- THESE PLANS HAVE BEEN PREPARED FOR THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT (SBMWD). THESE PLANS ARE INTENDED TO SUPPLEMENT THE DEPARTMENT'S TECHNICAL
- SPECIFICATIONS AND DETAILS. ALL UTILITY LOCATIONS SHOWN ARE FROM RECORD INFORMATION ONLY AND ARE NOT A RESULT OF A FIELD SURVEY. CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600 -- 48 HOURS IN
- ALL WATER LINE CONNECTION POINTS AND CRITICAL UTILITY CROSSING POINTS SHALL BE EXPOSED AND ACCURATELY LOCATED AT THE START OF CONSTRUCTION, AND THE SBMWD SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF WORK.
- ALL ELEVATIONS SHOWN ON PLANS SHALL BE BASED ON A U.S.G.S. DATUM, AND SHALL SHOW
- ALL HORIZONTAL OR VERTICAL CHANGES IN PIPE ALIGNMENT DELINEATED ON THE PLANS AS "DEFLECTION BY JOINT" OR SHOWN WITHOUT BENDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TOTAL ANGULAR DISPLACEMENT SHALL BE DISTRIBUTED THROUGH AS MANY JOINTS AS PRACTICABLE
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) -- SBMWD STANDARD SPECIFICATIONS, AND A.W.W.A. STANDARDS AND SPECIFICATIONS.
- APPROVAL OF THIS PLAN BY THE SBMWD DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL ASSUME
- FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT. DURING THE PERIOD OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SUCH WARNINGS, SIGNS, STOP SIGNS, SIGNALS, BARRICADES, AND OTHER SAFETY MEASURES AS DIRECTED BY THE CITY OF SAN BERNARDINO, DEPARTMENT OF PUBLIC WORKS WITH REFERENCE
- TO THE W.A.T.C.H. MANUAL. THE CONTRACTOR SHALL NOT OPEN MORE TRENCH THAN CAN BE PROPERLY PROSECUTED IN A DAYS OPERATION. ANY TRENCH UNAVOIDABLY LEFT OPEN DURING THE HOURS OF DARKNESS OR OVER A WEEKEND SHALL BE FENCED WITH 6-FOOT CHAIN LINK AND PROPERLY LIGHTED, OR BRIDGED BY A WATER DEPARTMENT APPROVED TRAFFIC PLATE WITH REFERENCE TO THE W.A.T.C.H. MANUAL.
- 10. THE CONTRACTOR SHALL REINSTALL PAVEMENT MARKINGS AND STRIPPING DISTURBED BY HIS OPERATIONS.
- 11. A CAL/OSHA PERMIT IS REQUIRED FOR TRENCHES OVER 5'IN DEPTH.
- 12. THE CONTRACTOR SHALL PROVIDE SAFE AND CONTINUOUS PASSAGE FOR LOCAL PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES WITH REFERENCE TO THE W.A.T.C.H. MANUAL
- 13. TRAFFIC SIGNAL FUNCTIONS SHALL BE APPROVED BY THE CITY OF SAN BERNARDINO, DEPARTMENT OF PUBLIC WORKS. HOWEVER, THE CONTRACTOR IS REQUIRED TO GIVE 48 HOUR NOTICE PRIOR TO ANY CONSTRUCTION THAT WILL DAMAGE OR AFFECT ANY BURIED TRAFFIC DETECTORS.
- 14. THE CONTRACTOR SHALL SO CONDUCT HIS OPERATIONS AS TO OFFER THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC, AND HE SHALL HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAN HE CAN PROSECUTE PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC. CONVENIENT ACCESS TO DRIVEWAYS, HOUSES, AND BUILDINGS ALONG THE LINE OF WORK SHALL BE MAINTAINED. TEMPORARY CROSSINGS SHALL BE PROVIDED AND MAINTAINED IN GOOD CONDITION. NOT MORE THAN ONE CROSSING OR INTERSECTING STREET OR ROAD SHALL BE CLOSED AT ANY ONE TIME WITHOUT THE APPROVAL OF THE TRAFFIC / WATER DEPARTMENT ENGINEER. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUCH FENCÉS, BARRIERS DIRECTIONAL SIGNS, LIGHTS, AND FLAGMEN AS ARE NECESSARY TO GIVE ADEQUATE WARNING TO THE PUBLIC AT ALL TIMES OF ANY DANGEROUS CONDITIONS TO BE ENCOUNTERED AS A RESULT OF THE CONSTRUCTION WORK AND TO GIVE DIRECTIONS TO THE PUBLIC.
- 15. STREET CUT PERMITS MUST BE OBTAINED FROM THE CITY OF SAN BERNARDINO PUBLIC WORKS DEPARTMENT.
- 16. ALL REMOVALS IN PAVED AREAS SHALL BE SAW CUT ON A NEAT, STRAIGHT LINE PARALLEL TO THE PIPE LINE. THE EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO PAVING OPERATIONS.
- 17. DUST SHALL BE CONTROLLED AT ALL TIMES BY APPROVED METHODS.
- 18. PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE FROM DIRT AND / OR DEBRIS ON A DAILY BASIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IN STREET CLEANING NECESSITATED BY HIS OPERATION.
- 19. ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY A SOILS ENGINEER PRIOR TO ACCEPTANCE
- 20. 24 HOURS ADVANCE NOTICE IS REQUIRED FOR INSPECTION AND FIELD TIES. ARRANGEMENTS CAN BE MADE BY CALLING (909) 522-3403 BETWEEN 7:30 A.M. AND 5:30 P.M. MONDAY THROUGH THURSDAY AND BETWEEN 7:30 A.M. AND 4:30 P.M. ON FRIDAYS EXCEPT LEGAL HOLIDAYS
- 21. NORMAL INSPECTION HOURS ARE 8:00 A.M. TO 5:00 P.M. MONDAY THROUGH THURSDAY AND 8:00 A.M. TO 4:00 P.M. ON FRIDAYS EXCEPT LEGAL HOLIDAYS. REQUESTS FOR INSPECTION AT OTHER TIMES OR ON OTHER DAYS MUST BE SUBMITTED TO THE SBMWD ENGINEERING SECTION A MINIMUM OF 5 WORKING DAYS BEFORE THE INSPECTION IS REQUIRED. THE CONTRACTOR MUST BEAR THE COST OF SUCH OVERTIME INSPECTIONS AND WILL BE BILLED ACCORDINGLY. NORMAL OVERTIME RATES ARE 1.5 TIMES THE BASE RATE PLUS OVERHEAD. OVERTIME INSPECTIONS WILL BE MADE SOLELY AT THE DISCRETION OF THE SBMWD AND BASED ON STAFF AVAILABILITY.
- 22. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN CITY BUSINESS LICENSES, INSURANCE, AND PROVIDE EVIDENCE OF SAME TO INSPECTION STAFF UPON REQUEST.
- 23. THE CONTRACTOR SHALL NOT PLACE CONCRETE OR ASPHALT ON THE PROJECT PRIOR TO SBMWD/PUBLIC WORKS REVIEW APPROVAL OF CONTRACTOR-SUPPLIED COMPACTION TESTS.
- 24. NO DEVIATIONS SHALL BE MADE FROM THIS PLAN WITHOUT THE REVIEW AND APPROVAL OF THE SBMWD
- 25. THE CONTRACTOR SHALL NOT MAKE ANY CONNECTION TO THE EXISTING SBMWD DISTRIBUTION SYSTEM WITHOUT FIRST GAINING WRITTEN PERMISSION TO DO SO FROM THE SBMWD ENGINEER. IN THE EVENT THAT PERMISSION IS GRANTED, A SBMWD INSPECTOR MUST BE PRESENT ON SITE TO WITNESS SAID CONNECTION(S). TEST PLATES SHALL BE INSTALLED ON THE NEW CONSTRUCTED SIDE OF ALL MAIN CONNECTION POINTS. CONNECTIONS REQUIRING SHUTDOWNS REQUIRE TEN (10) WORKING DAYS MINIMUM ADVANCE NOTIFICATION FROM THE CONTRACTOR.
 - ALL FLUSHING, CHLORINATION, AND TESTING SHALL BE PERFORMED EITHER BY (A) WATER TRUCK, OR (B) HYDRANT-TO HYDRANT CONNECTION THROUGH AN APPROVED BACKFLOW PREVENTION ASSEMBLY. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NPDES PERMIT.
- 26. ALL WATER MAINS AND APPURTENANCES SHALL BE PRESSURE TESTED AND DISINFECTED PRIOR TO ACCEPTANCE BY THE SBMWD.
- 27. TESTING AND DISINFECTION OF WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE A.W.W.A. STANDARDS AND THE CONTRACTOR OBTAINED NPDES PERMIT, EXCEPT AS HEREIN
- MODIFIED (SEE ATTACHED SBMWD STANDARD). 28. ALL TESTING AND DISINFECTION SHALL BE MADE IN THE PRESENCE OF THE SBMWD INSPECTOR AND SHALL COMPLY WITH THE NPDES PERMIT REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE SBMWD ENGINEER NOT LESS THAN TWENTY-FOUR (24) HOURS IN ADVANCE OF THE ACTUAL TIME OF TESTING AND/OR DISINFECTION SO THAT THE SBMWD ÉNGINEER OR DESIGNEE MAY OBSERVE THE PROCEDURE.
- 29. IF THE PRESSURE TEST, CHLORINATION OR BACTERIOLOGICAL TEST FAIL TO MEET THE REQUIREMENT OF THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE NECESSARY REPAIRS, REPLACEMENTS, OR REPETITION OF PROCEDURES AT HIS OWN EXPENSE.
- 30. AT DEAD END LOCATIONS, WATER SERVICE SHALL BE TAPPED TO THE END OF WATER MAIN.
- 31. THE SBMWD HAS POTHOLED AND LOCATED CERTAIN EXISTING UTILITIES IN THE PLANS. THE CONTRACTOR SHALL POTHOLE & LOCATE ALL EXISTING UTILITIES TO VERIFY DEPTH AND LOCATION IN ADVANCE OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS REQUIRED FOR POTHOLING. CONTRACTOR SHALL PROVIDE A SHOP DRAWING (PLAN & PROFILE) SHOWING HOW THE PROPOSED PIPE ALIGNMENT SHOULD BE CHANGED TO AVOID EXISTING UTILITIES.
- 32. ALL SERVICES ARE TO REMAIN ACTIVE DURING NON—WORKING HOURS.
- 33. ANY UNDERCUT SEWERS WILL REQUIRE A 1-SACK SAND SLURRY BACKFILL UP TO THE SPRING LINE OF THE SEWER PIPE.
- 34. PROPERTY RIGHT OF WAY LINES ARE APPROXIMATE AND ARE INTENDED AS GENERAL REFERENCE ONLY FOR THIS PROJECT. NO RECORD OF SURVEY CONDUCTED OR IMPLIED.

DEVIATIONS FROM STANDARDS

THERE ARE NO DEVIATIONS FROM APPLICABLE SBMWD STANDARDS, UNLESS STATED IN THE SPECIFICATIONS.

ADDITIONAL NOTES

CONTRACT DOCUMENTS AND SPECIFICATIONS

THE CONTRACTOR IS HEREBY NOTIFIED THAT ESSENTIAL AND PERTINENT INFORMATION REGARDING THE CONSTRUCTION AND COMPLETION OF WORK FOR THIS PROJECT IS CONTAINED IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO READ AND REVIEW THIS INFORMATION TO THEIR OWN SATISFACTION PRIOR TO PERFORMING ANY WORK. DEFICIENT, INCOMPLETE, OR INCORRECT WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REDONE TO MEET THE REQUIREMENTS AT THE CONTRACTOR'S SOLE EXPENSE.

NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.

SAFETY AND RESPONSIBILITY

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. CONTRACTOR FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

PROPERTY LINES

LOCATION OF PROPERTY BOUNDARIES. RIGHT OF WAY. AND EASEMENTS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BASED ON RECORD DOCUMENTS. IF NO FIELD BOUNDARY OR EASEMENT SURVEY HAS BEEN PERFORMED, CONTRACTOR IS RESPONSIBLE TO VERIFY ANY AND ALL PROPERTY OR EASEMENT DATA DEEMED NECESSARY TO PERFORM THE WORK AS SHOWN.

THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 1-(800) 422-4133 FOR MARKOUT OF EXISTING UTILITIES A MINIMUM OF 48 HOURS PRIÒR TO ANY WORK OR EXCAVATION.

EXPLORATORY EXCAVATIONS

THE LOCATION AND ELEVATION OF BOTH NEW AND EXISTING IMPROVEMENTS TO BE MET BY WORK TO BE DONE, AND ALL OF NEW OR EXISTING BURIED UNDERGROUND UTILITIES AND STRUCTURES SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ANY CITY OF SAN BERNARDINO PUBLIC WORKS PERMITS PRIOR TO ANY EXPLORATORY EXCAVATIONS. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISION OF THE PLANS, SHOULD REVISIONS BE NECESSARY DUE TO THE ACTUAL LOCATION OF FACILITIES.

MONUMENTATION

PRIOR TO CONSTRUCTION, THE CONTRACTOR'S LICENSED SURVEYOR SHALL TIE OUT ALL AFFECTED STREET AND PROPERTY MONUMENTS WHICH MAY BE DISTURBED AS PART OF THE WORK. RE-ESTABLISHMENT AND FILING OF CORNER RECORDS AND/OR A RECORD OF SURVEY FOR ALL DISTURBED/ REMOVED/REPLACED MONUMENTS WILL BE REQUIRED PRIOR TO ACCEPTANCE OF THE WORK. WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE CITY OF SAN BERNARDINO OR OTHER AGENCIES HAVING JURISDICTION AND SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.

DAMAGED IMPROVEMENTS

ALL EXISTING IMPROVEMENTS, BOTH PUBLIC AND PRIVATE, INTENTIONALLY OR UNINTENTIONALLY DISTURBED, DESTROYED, OR REMOVED AS PART OF CONSTRUCTION, SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE

MINIMUM COVER

MAINTAIN 3 FOOT MINIMUM DEPTH OF COVER OVER ALL PIPELINES, UNLESS OTHERWISE NOTED ON THE PLANS.

PERMITS

CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED TO COMPLETE THE WORK INCLUDING, BUT NOT LIMITED TO, COUNTY TRAFFIC CONTROL PERMITS.

TRAFFIC SIGNALS

ALL CONDUITS DISTURBED BY THIS WATER LINE SHALL BE REPLACED. NEW CONDUCTORS SHALL BE REPULLED WITH APPROPRIATE SPARES FROM PULL BOX TO PULL BOX, INTERCONNECT CABLE SHALL BE REPLACED FROM CONTROLLER TO CONTROLLER. ALL LOOPS SHALL BE REPLACED WITHIN 48 HOURS OF BEING DISTURBED. CONTRACTOR SHALL MAINTAIN LIABILITY UNTIL SIGNALS ARE IN APPROVED WORKING ORDER.

DESIGN STANDARD NOTES:

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS INSTALLATION OF THESE OUTLETS IS ACCEPTABLE. HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH SBMWD'S STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

ABANDON VALVES

ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI. THE LATERAL MUST BE COMPLETELY REMOVED FROM THE ABANDONED VALVE AND CAPPED WITH A BLIND FLANGE OR PLUG.

ABANDONMENT OF EXISTING SERVICE LATERALS (2" AND SMALLER)

THE CONTRACTOR SHALL NOTIFY SBMWD TWO (2) FULL BUSINESS DAYS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW SBMWD TO TAKE THE FINAL SERVICE READING. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

DESIGN STANDARD NOTES (CONT.)

EXISTING SERVICE LATERALS TO BE ABANDONED FROM EXISTING WATER MAINS SHALL HAVE THE CORPORATION STOPS TURNED OFF AT THE MAIN, A MINIMUM OF TWELVE (12) INCHES OF THE LATERAL CUT OUT NEAR THE CORPORATION STOPS AND A BRASS CAP OR PLUG INSTALLED ON THE CORPORATION STOP. IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE IN A MANNER APPROVED BY SBMWD. IF IT IS DISCOVERED THE CORPORATION STOP IS NOT WATER TIGHT, THROUGH NO FAULT OF THE CONTRACTOR, THE CONTRACTOR SHALL NOTIFY SBMWD FOR FURTHER DIRECTION. THE EXISTING SERVICE(S) SHALL BE REMOVED AND RECYCLED. THE SBMWD MAY REQUIRE REUSABLE COMPONENTS (METERS) ETC. TO BE DELIVERED TO SBMWD.

ABANDONMENT OF EXISTING SERVICE LATERALS (3" AND LARGER)

THE CONTRACTOR SHALL NOTIFY SBMWD TWO (2) FULL BUSINESS DAYS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW SBMWD TO TAKE THE FINAL SERVICE READING AND TO NOTIFY SBMWD'S INSPECTOR OF THE IMPENDING WORK. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.

IF THE VALVE IS TO BE ABANDONED IN THE CLOSED POSITION, THE LATERAL MUST BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. WHERE A JOINT OR COÙPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A RESTRAINED PLUG MAY BE PERMITTED WITH SBMWD APPROVAL. THE CONTRACTOR SHALL INSTALL A CONCRETE THRUST BLOCK IN ACCORDANCE WITH THE PROVISIONS OF THE SBMWD STANDARD DRAWING NO. W6.4A AT ALL CAP OR PLUG LOCATIONS.

THE EXISTING SERVICE(S) SHALL BE REMOVED AND RECYCLED. THE CONTRACTOR SHALL THEN REMOVE AND / OR BACKFILL THÉ ABANDONED VAULT WITH SELECT MATERIAL AND RESTORE ALL DAMAGED SURFACE FEATURES AS DIRECTED BY SBMWD MAY REQUIRE REUSABLE COMPONENTS (METERS) ETC. TO BE DELIVERED TO SBMWD.

INSTALLATION OF METER AND VAULT

THE METER(S) AND VAULT(S) WITH TRAFFIC/NON-TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS AND SPECIFICATIONS. PRE-CAST VAULTS APPROVED BY SBMWD MAY BE USED IN LIEU OF THE FIBERGLASS VAULTS. THE DESIGNATION OF PRE-CAST OR CAST-IN PLACE MUST BE MADE PRIOR TO PLAN APPROVAL.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), TO ALLOW SBMWD DIRECT ACCESS TO THE VAULT(S) AND INLET PIPING FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

INSTALLATION DOUBLE CHECK DETECTOR CHECK ASSEMBL'

THE DETECTOR CHECK(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

EXISTING PRIVATE WELLS TO REMAIN IN SERVICE

IF THE EXISTING PRIVATE WELL IS TO REMAIN IN SERVICE. SBMWD APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF SBMWD'S WATER METER IN ACCORDANCE WITH STANDARD DRAWING W4.2. THE NEW SERVICE SHALL NOT BE ACTIVATED UNTIL THE BACKFLOW PREVENTION ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY SBMWD.

PRIVATE WELLS TO BE REMOVED FROM SERVICE

IF THE EXISTING PRIVATE WELL IS TO BE ABANDONED, THE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY WILL NOT BE REQUIRED. HOWEVER, SBMWD WATER SERVICE WILL REMAIN IN THE OFF POSITION AND LOCKED OUT UNTIL THE WELL HAS BEEN ABANDONED. AN INSPECTION OF THE ON-SITE SYSTEM WILL BE MADE BY SBMWD'S INSPECTOR TO VERIFY THE WELL HAS BEEN DISCONNECTED FROM THE ON-SITE SYSTEM AND THE WELL IS NO LONGER FUNCTIONAL.

RELOCATION OF FIRE HYDRANTS (EXTENSION OF EXISTING LATERALS)

THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN, EXTEND THE EXISTING LATERAL AS REQUIRED, AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION UNDER THE DIRECTION OF SBMWD TO ENSURE QUALITY. INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING W2.2. LATERALS MADE OF UNAPPROVED MATERIALS SHALL BE REPLACED FROM THE MAIN TO THE FIRE HYDRANT.

FIRE HYDRANT RELOCATION AND LATERAL ABANDONMENT (EXISTING LATERAL TO BE ABANDONED)

WHERE SHOWN ON THE DRAWING(S), THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER BARRELS AND LATERAL OF THE FIRE HYDRANT TO THE FIRE HYDRANT VALVE ADJACENT TO THE MAIN. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION UNDER THE DIRECTION OF SBMWD TO ENSURE QUALITY OF THE FIRE HYDRANT(S). THE EXISTING HYDRANT SHALL BE INSTALLED AT THE NEW LOCATION AS INDICATED ON THE DRAWING, IN ACCORDANCE WITH STANDARD DRAWING NOS. W2.1 AND W2.2. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX, AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR APPROVED AGGREGATE BASE, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO-THOUSAND (2,000) PSI. THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATION. THE INSTALLATION OF A PLUG MAY BE PERMITTED. WITH SBMWD APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CUT AND CAP LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF STANDARD DRAWING.

FIRE HYDRANT AND LATERAL ABANDONMENT

WHERE SHOWN ON THE DRAWING(S), THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS AND LATERAL OF THE FIRE HYDRANT TO THE FIRE HYDRANT VALVE ADJACENT TO THE MAIN. THE EXISTING HYDRANT MAY BE DELIVERED TO SBMWD AT SBMWD'S OWN DISCRETION. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY—FOUR (24) INCHES OF THE VALVE BOX, AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF ÈIGHT (8) INCHES OF SAND OR APPROVED AGGREGATE BASE, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO—THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF ÌHE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE EXISTING CONCRÈTE HYDRANT PAD SHALL BE REMOVED.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) PERMIT REQUIRED

AN APPROVED CALTRANS ACCEPTANCE PERMIT SHALL BE OBTAINED THROUGH SBMWD PRIOR TO ANY CONSTRUCTION WITHIN CALTRANS RIGHT-OF-WAY. PLANS SHOWING WORK IN CALTRANS RIGHT-OF-WAY. MUST SHOWN CALTRANS STATIONING. THE DEVELOPER ASSUMES ALL LIABILITY FOR WORK CONDUCTED UNDER SBMWD OBTAINED PERMIT THROUGH WARRANTY EXPIRATION.

ENCHMARK:

GENERAL STRUCTURAL NOTES

STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR

DESIGN IN ACCORDANCE WITH UBC 1997, ACI 318-99 AND AISC ASD 9th EDITION LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS

TRENCH EXCAVATION SHORING SHALL CONFORM TO OSHA REGULATIONS 29 CFR PART 1926, SUBPART P, APPENDIX C.

STRUCTURAL STEEL

OR APPROVED BY THE ENGINEER.

STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.

ALL STRUCTURAL SHAPES, THREADED ROD, PLATES, AND SHEET SHALL BE OF STEEL MEETING ASTM A-36 SPECIFICATIONS. STEEL PIPE SHALL BE ASTM A500 GRADE B. ALL STRUCTURAL STEEL ASSEMBLIES SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE.

ALL WELDING SHALL BE BY THE SHIELDED ARC METHOD AND SHALL CONFORM TO AWS CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. QUALIFICATIONS OF WELDERS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR STANDARD QUALIFICATION PROCEDURE OF THE AWS.

BOLTS SHALL CONFORM TO ASTM A-325X.

CONCRETE (EXCEPT PRECAST CONCRETE)

UNLESS OTHERWISE NOTED OR SPECIFIED, ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS.

REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM A-615 "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", GRADE 60.

ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE INDICATED, SHALL BE IN ACCORDANCE WITH ACI-315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" LATEST

TOLERANCES IN PLACING REINFORCEMENT SHALL BE:

 \pm 3/8 INCH FOR MEMBERS WITH D < 8 INCHES \pm 1/2 INCH FOR MEMBERS WITH D > 8 INCHES

DOWELS, WATERSTOPS AND OTHER INSTALLED MATERIALS AND ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.

UNLESS OTHERWISE INDICATED, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:

A) IN SLABS #5 RISER BARS AT 36 INCHES OC MAXIMUM TO

B) IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACERS AT 6 FEET OC EACH WAY.

SUPPORT TOP REINFORCING BARS.

METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.

DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE PLACED AFTER CONCRETE HAS BEEN POURED.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, LAPS OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF ACI-318.

REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 1-1/2" OF CLEARANCE SHALL BE PROVIDED AT ALL TIMES.

UNLESS OTHERWISE SHOWN ON THE DRAWINGS CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:

FOR CONCRETE PLACED AGAINST EARTH ______ 3"

FOR SURFACES IN CONTACT WITH WATER OR WEATHER AND FORMED SURFACES IN CONTACT WITH EARTH:

FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH

WATER OR EARTH ______ 1-1/2'

UNLESS OTHERWISE NOTED, WALLS AND SLABS SHOWN WITH A SINGLE LAYER OF REINFORCEMENT SHALL HAVE THAT REINFORCEMENT CENTERED.

UTILITY NOTES

- ALL WORK SHALL BE COORDINATED WITH CITY FORCES.
- 2. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND COORDINATE WORK WITH COMPANY REPRESENTATIVES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY COMPANIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATION, IF NEEDED.
- LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO PREPARATION OF SHOP DRAWINGS CONSTRUCTION OF NEW WORK.
- THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. SOILS INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK

CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT

COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR SHALL NOTIFY ALL CUSTOMERS AFFECTED BY THIS PROJECT PRIOR TO START OF CONSTRUCTION. NOTIFICATION SHALL BE BY CUSTOMER NOTIFICATION DOOR HANGAR AS SHOWN ON SBMWD STANDARD DRAWING W6.35.

BY A QUALIFIED SOILS ENGINEER WHICH CERTIFY THAT TRENCH BACKFILL WAS

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

PROJECT TITLE

HORIZ: N/A VERT: N/A XXXX DWG G2

DRAWING SCALES:

GENERAL NOTES

CALL: TOLL FREE TWO WORKING DAYS BFFORF YOU DIG

UNDERGROUND SERVICE ALERT

ENGINEER'S SEAL

REGISTERED CIVIL ENGINEER No. XXXXX

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX DESIGN ENGINEER SBMWD ENGINEER

APPROVED DATE APPROVED DATE FIFV.= XXXX.XX FT.

SHEET 2 OF XX