SBMWD

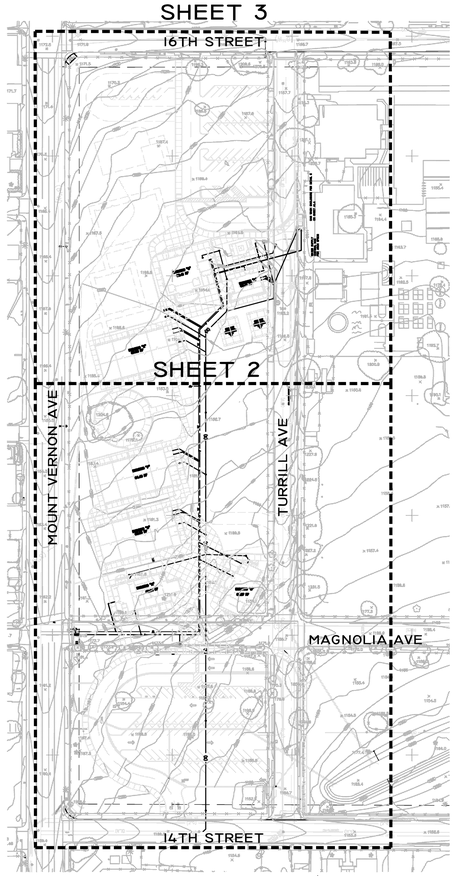
CITY OF SAN BERNARDINO
ROOSEVELT II ELEMENTARY SCHOOL
UTILITY PLANS

GENERAL WATER NOTES:

1. 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.
2. 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 ADVANCE OF CONSTRUCTION.
3. 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.
4. ALL ELEVATIONS SHOWN ON PLANS SHALL BE BASED ON A U.S.G.S. DATUM, AND SHALL SHOW ELEVATION FROM MEAN SEA LEVEL.
5. 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.
6. 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.
7. 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.
8. 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.
9. THE CONTRACTOR SHALL NOT OPEN MORE TRENCHES THAN CAN BE PROPERLY PROSECUTED IN A DAY'S 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 FENCES, 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) 384-5391 BETWEEN 7:00 A.M. AND 4:30 P.M. WEEKDAYS.
21. NORMAL INSPECTION HOURS ARE 7:30 A.M. TO 4:00 P.M. MONDAY THROUGH FRIDAY 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 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 CITY 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 WATER DEPARTMENT/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 WATER DEPARTMENT ENGINEER.
25. THE CONTRACTOR SHALL NOT MAKE ANY CONNECTION TO THE EXISTING SBMWD DISTRIBUTION SYSTEM WITHOUT FIRST GAINING WRITTEN PERMISSION TO DO SO FROM THE WATER DEPARTMENT 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.

    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 ENGINEER NOT LESS THAN TWENTY-FOUR (24) HOURS IN ADVANCE OF THE ACTUAL TIME OF TESTING AND/OR DISINFECTION SO THAT THE ENGINEER 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.

SHEET 3



INDEX MAP
SCALE: 1" = 100'

INDEX

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U-5	STANDARD AND DETAIL SHEET

NOTE:
CONTRACTOR TO VERIFY EXISTING SEWER LATERAL AND FIRE PROTECTION LINE LOCATION AND INVERT ELEVATION PRIOR TO CONSTRUCTION OF PROPOSED SEWER LINES.

SEWER CONSTRUCTION NOTES:

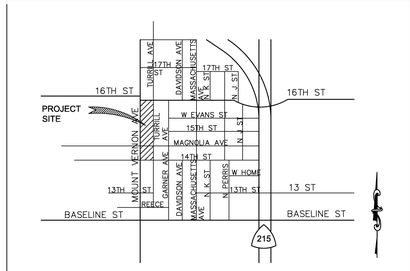
1. INSTALL 6" VCP SEWER LATERAL PER CITY OF SAN BERNARDINO STD. DWG. NO. 305
2. INSTALL 6" SDR 35 SEWER LINE
3. INSTALL SEWER CLEAN OUT PER CITY OF SAN BERNARDINO STD. DWG. NO. 303
4. INSTALL 4" SDR 35 SEWER LINE
5. INSTALL PROCAST GREASE INTECEPTOR MODEL 8044 SEE SHEET 5
6. INSTALL IN-LINE GREASE TRAP W/ C.O , ZURN LIGHT PRODUCT NO. GT 2700 OR APPROVED EQUAL

WATER CONSTRUCTION NOTES:

1. INSTALL 4" WATER SERVICE PER CITY OF SBMWD STD DWG. NO. W1.4 **BY SBMWD**
2. INSTALL 8"x8"x4" TAP PER CITY OF SBMWD STD DWG. NO. W3.4 AND W3.7 **BY SBMWD**
3. INSTALL 4" COMBINATION DOMESTIC/IRRIGATION SERVICE PER SBMWD STD. DWG. NO. W1.13 **BY SBMWD**
4. INSTALL 1" P.V.C.SCHEDULE 80 DOMESTIC WATER LINE
5. INSTALL BACKFLOW PREVENTER PER CITY OF SBMWD STD DWG. NO. W4.1
6. INSTALL 3" PVC SCHEDULE 80 DOMESTIC WATER LINE
7. INSTALL 2" PVC SCHEDULE 80 DOMESTIC WATER LATERAL
8. INSTALL THRUST BLOCK PER CITY OF SBMWD STD DWG. NO. W6.4A
9. NOT USED
10. NOT USED
11. INSTALL 1/2" SHED. 40 PVC LINE FOR HOSE BIB
12. INSTALL 3"x2" REDUCER

FIRE PROTECTION CONST. NOTES:

20. INSTALL 1" PVC SCHEDULE 80 FIRE PROTECTION LATERAL
21. INSTALL 4" PVC SCHDEULE 80 FIRE PROTECTION LATERAL
22. INSTALL 6" FIRE SERVICE PER CITY OF SBMWD STD DWG. NO. W1.14
23. INSTALL 6" FIRE HYDRANT PER CITY OF SBMWD STD DWG. NO. W2.2
24. NOT USED
25. INSTALL 8"x8"x6" HOT TAP & 6" FIRE LAT. PER CITY OF SBMWD STD DWG. NO. W3.4 AND W3.7 **BY SBMWD**
26. INSTALL 6" C-900 CL 200 FIRE PROTECTION LINE
27. INSTALL 6" FIRE HYDRANT PER CITY OF SBMWD STD DWG. NO. W2.2 **BY SBMWD**
28. INSTALL 6"x6"x4" TEE



VICINITY MAP
THOMAS BROS. COORD. - PAGE 576, E-6
NTS

NOTIFICATIONS:

CONTRACTOR SHALL NOTIFY CITY OF SAN BERNARDINO AT (909) 384-5111, AT LEAST 2 WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

AT LEAST 2 WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION CONTRACTOR SHALL NOTIFY:

CITY OF SAN BERNARDINO WATER DEPARTMENT	(909) 384-5296
CITY OF SAN BERNARDINO REFUSE	(909) 384-5054
UNDERGROUND SERVICE ALERT	(800) 227-2600

BASIS OF BEARING:

THE CENTERLINE OF HERRINGTON AVENUE BEING S 00 DEGREES 00' 49" E WAS SHOWN ON RECORD OF SURVEY RECORDED IN BOOK 54 PAGE 36 OF RECORDS OF SURVEYS AS FILED IN THE OFFICE OF THE COUNTY RECORDER, COUNTY OF SAN BERNARDINO, CA

PROJECT ADDRESS:

SOUTHEAST CORNER OF MOUNT VERNON AVE. AND 16TH STREET
SAN BERNARDINO, CA 92376

ASSESSOR'S PARCEL NO.

0139-067-001 THRU 021
0139-062-001 THRU 018

OWNER / APPLICANT:

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
777 NORTH F STREET
SAN BERNARDINO, CA 92410
(909) 381-1100

CIVIL ENGINEER:

FRACO ENTERPRISES, INC.
12139 MOUNT VERNON AVE., SUITE 210
GRAND TERRACE, CA 92313
(909) 824-7230 - OFFICE
(909) 824-7385 - FAX

GEOTECHNICAL ENGINEER:

CONVERSE CONSULTANTS
10391 CORPORATE DRIVE
REDLANDS, CA 92347
(909) 796-0544 - OFFICE
(909) 796-7675 - FAX

WATER DEPARTMENT'S ENGINEER CERTIFICATE

THIS CERTIFIES THAT ON _____ I REVIEWED THE PLAN FOR THE 1720 ZONE WEST TRANSMISSION MAIN, AND FOUND THAT IT MEETS THE MINIMUM REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE.

_____ DATE _____

WILLIAM B. HEMSLEY
PRINCIPAL ENGINEER
CA. R.C.E. 56600
EXPIRATION DATE: 6/30/2009
(909) 384-5386

E0901510

Underground Service Alert
CALL BEFORE YOU DIG
Call: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

MARK	REVISIONS	BY	APPR.	DATE

BENCHMARK = CITY OF SAN BERNARDINO BM# G1-41.
ELEVATION 1158.763 FT.

BRASS DISK CSB G1-41. 41.25 FT. EAST & 30.0 FT SOUTH OF THE CENTERLINE P.I. OF MT. VERNON & 14TH ST. ;9.75 FT. SOUTH OF THE SOUTH CURBLINE OF 14TH ST. 9.25 FT. EAST OF THE EAST CURBLINE OF MT.VERNON AVE. 2.0 FT EAST OF THE NORTH/SOUTH SIDEWALK ABOUT 0.2 FEET LOWER THEN THE PAVEMENT.

Fraco Enterprises Inc
Engineering and Construction Services
12139 MOUNT VERNON AVENUE, SUITE 210
GRAND TERRACE, CA 92313
TEL (909) 824-7230 FAX (909) 824-7385

REGISTERED PROFESSIONAL ENGINEER
MARIA I. FRASER
No. 56005
EXP. DATE 12/31/12
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF:

_____ DATE
MARIA I. FRASER
RCE NO. 56005
EXP. 12/31/2012

DESIGNED BY: JRN, SM
DRAWN BY: JRN, SM
CHECKED BY: MIF

CITY OF SAN BERNARDINO
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

_____ DATE
ROBERT G. EISENBEISZ, P.E.
CITY ENGINEER
RCE NO. 54931, EXP. 6/30/2012

CITY OF SAN BERNARDINO
DEVELOPMENT SERVICES~PUBLIC WORKS/ENGINEERING

UTILITY PLAN-SEWER AND WATER
ROOSEVELT II ELEMENTARY SCHOOL

TITLE SHEET

FOR CITY USE ONLY: FILE NO. W.O. NO. 6-6-11

DRAWING NO. 12343
SHEET U-1 OF 5 SHEETS

RE-BID #F09-02 ROOSEVELT II (HENRY) E.S. NEW CONSTRUCTION BID ISSUANCE SET 12/09/11