SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
Dr. MILDRED HENRY D. ELEMENTARY SCHOOL
WATER IMPROVEMENT PLANS

SERVICE SCHEDULE:

SIZE	TYPE	STD. NO.	BACKFLOW REQ.	QUANTITY
1"	DOMESTIC	W1.1	NO	1
4"	FIRE METER	W1.15	NO	1

MATERIALS LIST AND QUANTITIES:

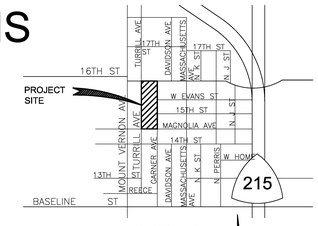
SIZE	DESCRIPTION	CONFIGURATION	QUANTITY
8"	AWWA C151 CML D.I.P. P.C. 350	TJ	1,052 LF
6"	AWWA C151 CML D.I.P. P.C. 350	TJ	155 LF
4"	AWWA C800 CML D.I.P. P.C. 350	TJ	45 LF
6"	AWWA C503-82 F.H. W/BURY	1- 4" & 2-2-1/2"	4 EA
8"	G.V. W/CAN AWWA C509	FL X FL	1 EA
6"	G.V. W/CAN AWWA C509	FL X FL	1 EA
6"	G.V. W/CAN AWWA C509	FL X MJ	5 EA
4"	G.V. W/CAN AWWA C509	FL X MJ	2 EA
8"	ADAPTER	FL X FL	1 EA
STD.	BLUE DOT PVMT. MARKER	SBMWD STD. W6.3	4 EA
2"	CHLORINATION PORT	SBMWD STD. W6.7	4 EA
8"X8"X4"	TEE	MJXMJXFL	1 EA
8"X8"X6"	TEE	MJXMJXFL	5 EA
8"X8"X8"	TEE	FLXFLXFL	1 EA
8"	90° BEND CML D.I.P.	FL X FL	1 EA
4"	90° BEND D.I.P.	MJ X MJ	1 EA
8"	45° BEND CML D.I.P.	MJ X MJ	4 EA
8"x6"	D.I. REDUCER	FL X MJ	1 EA
8"x6"	D.I. REDUCER	MJ X FL	1 EA
8"	BLIND FLANGE	FL	1 EA
4"	BLIND FLANGE	FL	1 EA
STD.	THRUST BLOCK	SBMWD STD. STD. W6.4A	2 EA
6"	MANUAL BLOW OFF ASSY	SBMWD STD. W2.23	1 EA
2"	AIR VACUUM RELEASE VALVE	SBMWD STD. W7.1	1 EA
STD.	AIR VACUUM STEEL COVER	SBMWD STD. W7.6	1 EA
*8"	MJ RESTRAINT JOINT	MEGA-LUG SBMWD STD. W6.4	15 EA
*8"	MJ RESTRAINT FIELD-LOK GASKET	PER MFG SPECS & SBMWD STD. W6.4	38 EA
4"	MJ CAP	MJ	1 EA
6"	MJ CAP	MJ	2 EA

* NUMBER IS APPROXIMATE. ACTUAL NUMBER WILL DEPEND ON PIPE LENGTHS USED IN RESTRAINED AREAS.

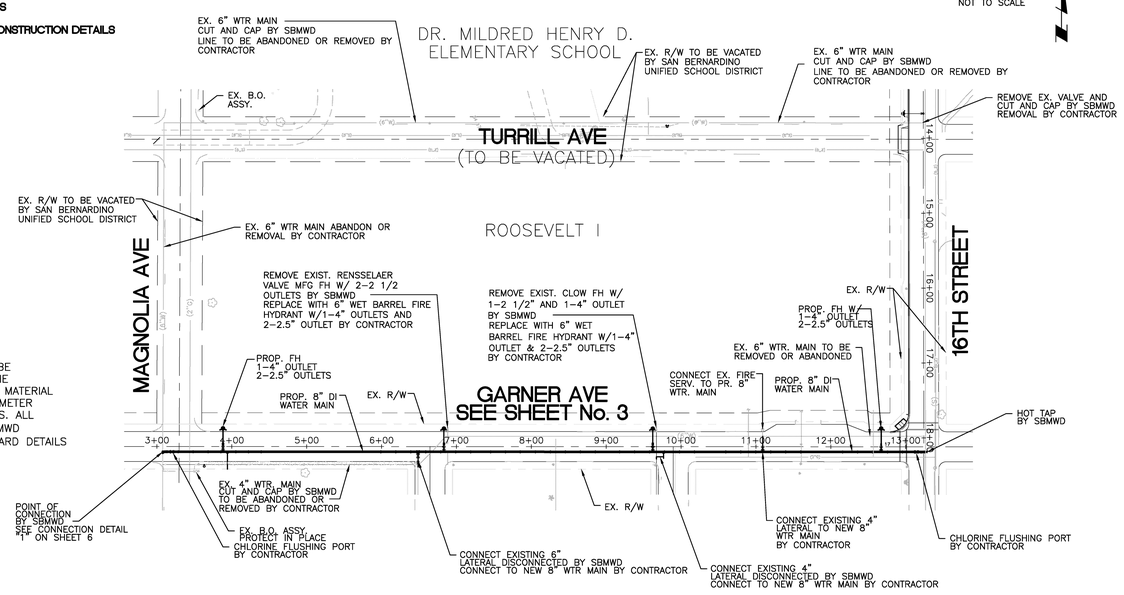
SHEET INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES
3	PLAN/PROFILE STA 3+12.48 TO STA 13+31.91
4	STANDARD DETAILS
5	STANDARD DETAILS
6	STANDARD AND CONSTRUCTION DETAILS

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL EXCLUDING METERS, METER BOXES AND HOT TAPS. ALL REFERENCES TO "SBMWD INSTALLED" IN STANDARD DETAILS DOES NOT APPLY



VICINITY MAP
NOT TO SCALE



CONSTRUCTION NOTES:

1. INSTALL 8" PRESSURE CLASS 350 C.M.L. POLYETHYLENE ENCASED D.I. PIPE PER SBMWD STANDARD SPECIFICATIONS
2. INSTALL 4" PRESSURE CLASS 350 C.M.L. POLYETHYLENE ENCASED D.I. PIPE FIRE SERVICE AND CONNECT TO EXIST. 4" FIRE SERVICE AFTER PROPOSED LINE IS IN SERVICE PER SBMWD STD DWG. NO. W1.14
3. INSTALL 6" FIRE HYDRANT ASSEMBLY PER SBMWD STD. DWG. NO. W2.2 (CONFIG. "B")
4. HOT TAP BY SBMWD FORCES
5. INSTALL 6" MJ CAP
6. 8"MJ X 6"FL DI REDUCER
7. REMOVE INTERFERING PORTIONS OF EXISTING 4" LINE AND MJ DI PLUG
8. INSTALL 8"MJ X 8"MJ X 6"FL DUCTILE IRON TEE
9. INSTALL 4" FL CAP
10. CONSTRUCT THRUST BLOCK PER SBMWD STD DWG. NO. W6.4A
11. PROTECT IN PLACE AS NOTED
12. 8"FL X 6"MJ DI REDUCER
13. TRENCH BACKFILL AND PAVEMENT REPLACEMENT PER SBMWD STD DWG. NO. W5.1
14. INSTALL RESTRAINED FLEXIBLE COUPLING RESTRAINT PER SBMWD STD. DWG. NO. W6.27
15. INSTALL 8" FL X FL GATE VALVE PER SBMWD STD DWG. NOS. W3.1 & W3.3
16. STRUCTURAL SUPPORT AT CROSSING PER SBMWD STD DWG. NO. W5.2
17. INSTALL LINEAR JOINT RESTRAINT PER MANUFACTURERS SPECIFICATIONS AND SBMWD STD. DWG. 6.4 ON ALL JOINTS WITHIN MIN LENGTH SPECIFIED ON PLANS
18. INSTALL BLUE DOT PAVEMENT MARKER PER SBMWD STD. DWG. NO. W6.3
19. INSTALL 8" FL X FL 90° DUCTILE IRON BEND
20. EX. 6" C.I. WATER MAIN TO BE REMOVED OR ABANDONED. IF ABANDONED SLURRY FILL AND CAP PER CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENTS STANDARDS AND SPECIFICATIONS
21. EX. WATER MAIN TO BE REMOVED OR ABANDONED. IF ABANDONED SLURRY FILL AND CAP PER CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENTS STANDARDS AND SPECIFICATIONS
22. REMOVE VALVE AND INSTALL 4" BLIND FLANGE OR CAP AS EXISTING CONDITIONS PERMIT
23. REMOVE 6" LATERAL
24. REMOVE EXISTING FIRE HYDRANT ASSEMBLY
25. REMOVE 6" C.I. LINE
26. INSTALL 2" TEMPORARY CHLORINATION AND FLUSHING PORT ON 8" MJ CAP WITH 2" THREADED OUTLET 10' FROM THE EXISTING SYSTEM TAP LOCATION. REMOVE PLATES AND INSTALL BRASS PLUGS AFTER PERMISSION IS GIVEN BY SBMWD
27. INSTALL 6" PRESSURE CLASS 350 C.M.L. POLYETHYLENE ENCASED D.I. PIPE PER SBMWD STANDARD SPECIFICATIONS
28. INSTALL 6" FL X MJ GATE VALVE PER SBMWD STD DWG. NOS. W3.1 & W3.3
29. INSTALL 8" FL X MJ ADAPTER
30. REMOVE AND REPLACE CURB AND GUTTER IN KIND PER CITY OF SAN BERNARDINO STD. DWG. NO. 200
31. INSTALL 8"MJ X 8"MJ X 4"FL DUCTILE IRON TEE
32. REMOVE EXISTING VALVE
33. INSTALL 4" FL X MJ GATE VALVE PER SBMWD STD DWG. NOS. W3.1 & W3.3
34. INSTALL 6" FL X FL GATE VALVE PER SBMWD STD DWG. NOS. W3.1 & W3.3
35. INSTALL 8"FL X 8"FL X 8"FL DUCTILE IRON TEE
36. INSTALL 8" BLIND FLANGE
37. INSTALL 8" MJ X MJ DUCTILE IRON 45° BEND
38. INSTALL 1" WATER SERVICE PER SBMWD STD. DWG. NO. W1.1
39. INSTALL 4" MJ X MJ 90° DUCTILE IRON BEND

QUANTITY NOTES:

1. QUANTITIES ARE FOR PLAN CHECK AND BONDING PURPOSES ONLY.
2. CONTRACTOR IS RESPONSIBLE FOR CALCULATING OWN QUANTITIES.

WATER METER NOTE:

CONTRACTOR TO LOCATE SERVICE LATERALS AND WATER METERS

NOTE: PRIOR TO ANY WATER DISCHARGE, THE CONTRACTOR SHALL NOTIFY SBMWD WATER QUALITY AT (909) 384-5139 FIVE DAYS IN ADVANCE OF THE INTENDED DISCHARGE. DEVELOPER MAY PROVIDE A COPY OF AN ACCEPTABLE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

JOINT RESTRAINT NOTE:

1. USE MEGA-LUGS FOR JOINT RESTRAINT AT FITTINGS.
2. USE FIELD-LOK GASKETS FOR JOINT RESTRAINT AT PIPE JOINTS.

LEGEND:

FIRE HYDRANT	EXISTING WATER LINE
EXISTING VALVE	CHLORINATION FLUSHING PORT
PROPOSED GATE VALVE	MECHANICAL JOINT (MJ) BEND
RESTRAINED JOINTS	HORIZONTAL DEFLECTION BY JOINT
PROPOSED WATER LINE	PIPE CROSSING OVER EXISTING
PROPOSED TRENCH, BACKFILL AND PAVEMENT REPLACEMENT	PIPE CROSSING UNDER EXISTING
EXISTING R/W	BLOWOFF ASSEMBLY
EXISTING C/L	AIR VACUUM AND/OR AIR RELEASE VALVE
EXISTING P/L	

INDEX MAP
SCALE 1" = 80'

CITY FIRE DEPARTMENT'S CERTIFICATE

THIS CERTIFIES THAT ON _____ I REVIEWED THE PLAN FOR THE DR. MILDRED HENRY D. ELEMENTARY SCHOOL WATER IMPROVEMENT PLANS, AND FOUND THAT IT MEETS THE MINIMUM REQUIREMENTS OF THE CITY OF SAN BERNARDINO FIRE DEPARTMENT'S FIRE CODES AND REGULATIONS.

_____ _____
DOUG DUPREE DATE
FIRE MARSHAL
(909) 384-5388

WATER DEPARTMENT'S ENGINEER CERTIFICATE

THIS CERTIFIES THAT ON _____ I REVIEWED THE PLAN FOR THE DR. MILDRED HENRY D. ELEMENTARY SCHOOL WATER IMPROVEMENT PLANS, AND FOUND THAT IT MEETS THE MINIMUM REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE.

_____ _____
MATTHEW H. LITCHFIELD, P.E. DATE
DIRECTOR, WATER UTILITY
CA. R.C.E. 58079
EXPIRATION DATE: 6/30/2012
(909) 384-5107

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

DECLARATION OF RESPONSIBLE CHARGE: ENGINEER OF WORK:

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

SIGNATURE DATE

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

Frasco Enterprises Inc
Engineering and Construction Services
12139 MOUNT VERNON AVE.
SUITE 210
GRAND TERRACE, CA 92313
PHONE: (909) 824-7230
FAX: (909) 824-7385

APPROVED BY: REGISTERED CIVIL ENGINEER No. 56005 DATE: _____

MARK	REVISIONS	APPROVED	DATE	APPROVED	DATE

DESIGNED BY: MIF DRAWN BY: JRN CHECKED BY: MIF DESIGN ENGINEER SBMWD ENGINEER

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. ; 9.25 FT. SOUTH OF THE EAST CURB LINE OF 14TH ST. ; 9.25 FT. EAST OF THE EAST CURB LINE OF MT.VERNON AVE. ; 2.0 FT EAST OF THE NORTH/SOUTH SIDEWALK ABOUT 0.2 FEET LOWER THEN THE PAVEMENT.
ELEVATION: 1158.763 FEET/ 353.1916 METERS

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT

WATER IMPROVEMENT PLANS
DR. MILDRED HENRY D. ELEMENTARY SCHOOL
TITLE SHEET

DRAWING SCALES:
HORIZ: N/A VERT: N/A
C.O. NO.: 10628
DWG G1
SHEET 1 OF 6

C-DR. MILDRED HENRY D. ELEMENTARY SCHOOL-1-G-G1.DWG

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