



NOTES:

1. SEE CITY STD. DWG. 419 FOR ADDITIONAL REQUIREMENTS WHEN CROSSING UNDER SEWER LINES.
2. CONNECT TO EXISTING WATERLINE WITH FLEX COUPLINGS OR FLANGES WITH SLIP-ON FLANGE WELDED TO EXISTING STEEL PIPE, IF REQUIRED.
3. NEW DUCTILE IRON WATERLINE SHALL BE RESTRAINED MECHANICAL JOINTS ("MEGA-LUG" TYPE OR EQUAL) WITH A DOUBLE WRAP 8-MIL PURPLE POLYETHYLENE WRAP.
4. NUTS, BOLTS, AND WASHERS SHALL BE TYPE 316SS.
5. IF EXISTING WATERLINE IS ASBESTOS CEMENT PIPE (ACP), BACKFILL TRENCH UNDER ACP WITH ONE-SACK SLURRY.
6. PROVIDE ANCHOR BLOCKS OR ADDITIONAL THRUST RESTRAINTS AS REQUIRED. SUBMIT ENGINEERING CALCULATIONS.
7. CONCRETE THRUST BLOCK NOT REQUIRED IF PIPE IS SUFFICIENTLY RESTRAINED OUTSIDE WATER LINE UNDERCROSSING.
8. SUPPORT EXISTING UTILITY EXPOSED IN TRENCH AS NECESSARY TO PROTECT IN PLACE.
9. IF CROSSING UNDER GAS LINE WITH CATHODIC PROTECTION, BOND JOINTS AND CONSTRUCT CP TEST STATION AS DIRECTED BY DWP GENERAL MANAGER OR DESIGNEE.
10. 11-1/4 AND 22-1/2 DEGREE BENDS MAY BE USED WHERE FIELD CONDITIONS WARRANT THEIR USE PENDING APPROVAL BY DWP GENERAL MANAGER OR DESIGNEE.

ITEM MATERIALS

- ① — AIR/VAC VALVE PER CITY STD. DWG 413R.
- ② — DIP MJ 45° BEND. SEE NOTE 10.
- ③ — DIP SPOOL.
- ④ — BLOWOFF HYDRANT AT LOW POINT PER CITY STD. DWG 416R.
- ⑤ — CONCRETE THRUST BLOCK PER CITY STD. DWG. 401. SEE NOTE 7.
- ⑥ — FLEXIBLE PIPE TRANSITION COUPLING, FUSION BONDED EPOXY COATING WITH STAINLESS STEEL HARDWARE.

NOT TO SCALE

RECLAIMED WATER LINE CROSSING UNDER EXISTING UTILITY

REVISION		
NO.	APPROVED	DATE

APPROVED: *Nelson D. Nelson* 11-26-2012
 NELSON D. NELSON, PE, CITY ENGINEER
Tom Koper 11-20-12
 TOM KOPER, PE, DISTRICT ENGINEER, DEPARTMENT OF WATER AND POWER



CITY OF CORONA
 STD 407R
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