

1. PRE-CAST MANHOLE MATERIAL SHALL BE MANUFACUTRED TO ASTM SPECIFICATION C478. 2. GROUT JOINTS WITH 1:3 MORTAR MIX OR USE RAM-NEK JOINT COMPOUND.

SECTION. THE JOINTS SHALL BE PACKED, TOWELLED AND BRUSHED WHILE THE MORTAR IS PLASTIC. 5. MANHOLE SHALL BE SET TO GRADE SUBSEQUENT TO PLACING AC OR RCC. 6. XYPEX CONCENTRATE/CRYSTALLINE COATING ON INTERIOR CONCRETE SURFACES.

7. STEPS NOT REQUIRED IN MANHOLES 3.5 FEET OR LESS IN DEPTH. MANHOLE (PIPES 6" TO 21") NTS

MANHOLE DETAIL 2" PAVEMENT

24"

NTS

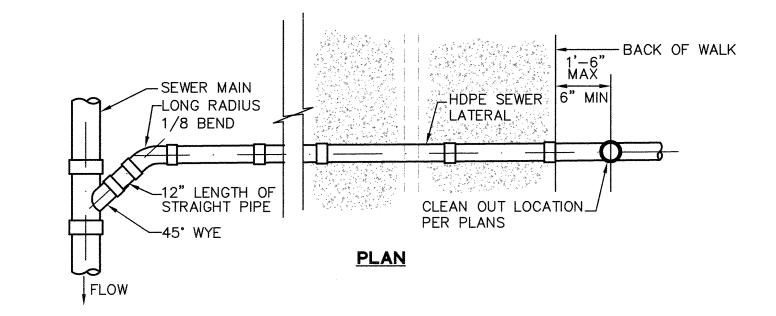
15-7/16" COPOLYMER POLYPROPYLENE PLASTIC COATING -1/2" GRADE 60 STEEL REINFORCEMENT

2. ALL CASTINGS TO BE COMPLETELY CLEANED AND PAINTED WITH ASPHALTIC

VARNISH, AFTER MANUFACTURE. 3. USE PHOENIX P-1090, D&L SUPPLY A-1024, OR EQUAL.

MANHOLE FRAME AND COVER

SECTION A-A STEPS TO BE CAST IN PLACE DURING MANUFACTURE OF PRECAST PIPE RINGS. INSERT STEPS THROUGH FORMWORK PRIOR TO POURING CAST-IN-PLACE STRUCTURES. STEPS ARE AS MANUFACTURED BY M.A. INDUSTRIES, INC. OR EQUAL. MANHOLE STEP FOR PRECAST MANHOLE

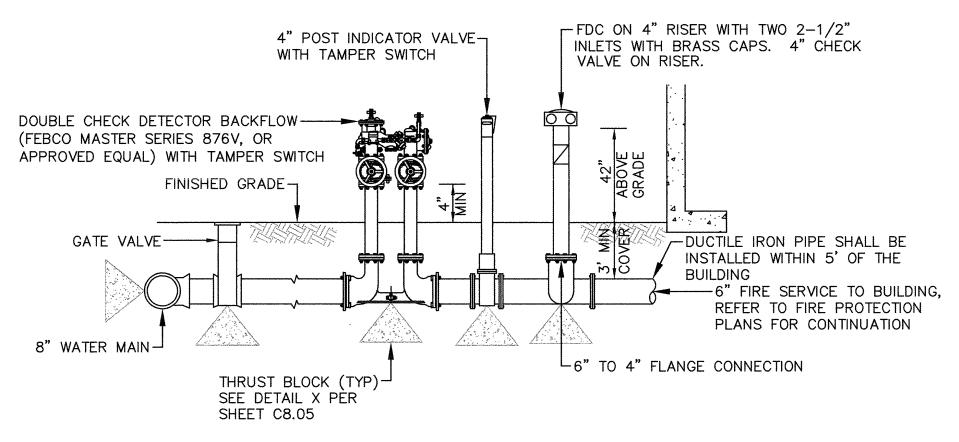


NOTES:

1. PROVIDE STEEL TRAFFIC COVER FOR BOX WHEN INSTALLED IN LOCATION SUBJECT

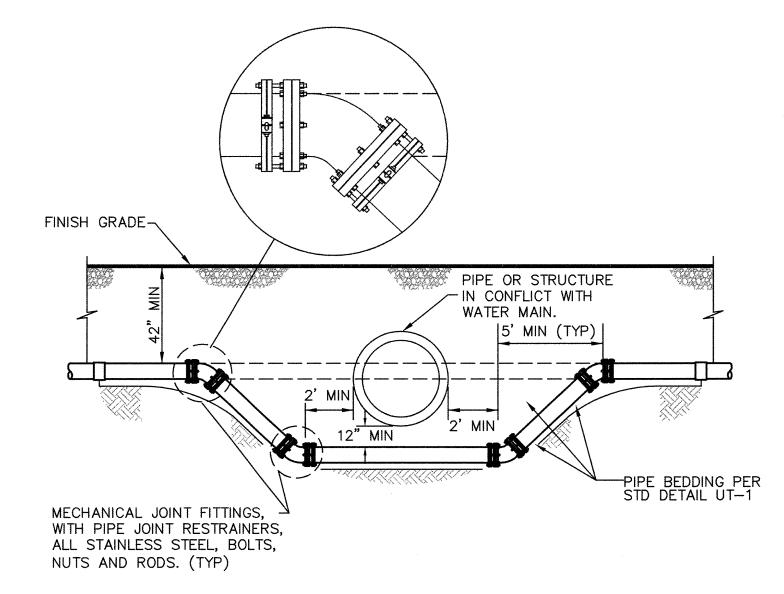
- TO VEHICULAR LOADING. 2. CHRISTY CONCRETE TYPE F8 METER BOX WITH F8D LID, MARKED "SEWER" 3. TAPE TRACER WIRE AT 3' INTERVAL
- WITH FILAMENT TAPE. 4. LATERAL AND RISER SHALL BE AWWA C-906, DR 11 HDPE. 5. TO CONNECT NEW WYE TO EXISTING CLAY LATERAL, USE RUBBER COUPLING WITH
- CONTINUOUS STAINLESS STEEL BAND. 6. STAMP "S" ON CURB FOR ALL NEW LATERALS.





- 1. DETECTOR CHECK VALVE, PIV AND FDC SHALL BE FACTORY MUTUAL AND UL APPROVED. ALL RISERS USED SHALL BE DUCTILE IRON.
- 2. PIV AND FDC SHALL HAVE ADDRESS PLATE. 3. ALL FERROUS MATERIALS SHALL BE CATHODICALLY PROTECTED.
- SEE PROJECT SPECIFICATIONS FOR CATHODIC PROTECTION REQUIREMENTS. 4. ALL UNDERGROUND FIRE SERVICE PIPE AND FITTINGS SHALL BE EXPOXY
- COATED PER PROJECT SPECIFICATIONS.

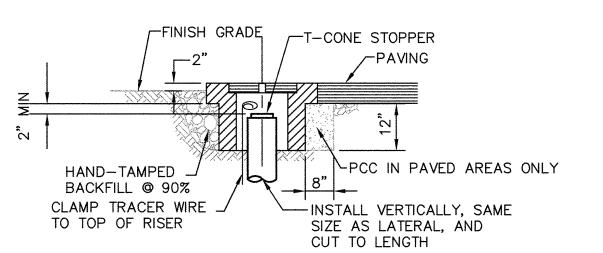
6" FIRE SERVICE - TYPICAL SECTION NTS



NOTES:

- 1. ALL BENDS SHALL BE 45 OR 22-1/2 FITTINGS, AS REQUIRED FOR PROPER HORIZONTAL SEPARATION.
- 2. PIPE JOINT RESTRAINERS SHALL BE EBA-IRON SERIES 6500, SMITH BLAIR SERIES 981, OR EQUAL.





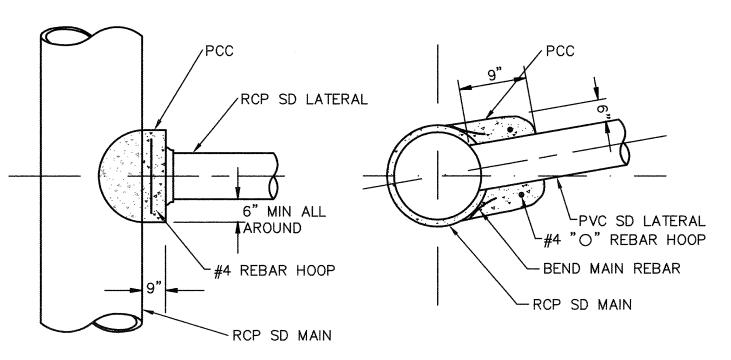
SECTION

- NOTES:

 1. PROVIDE STEEL TRAFFIC COVER FOR BOX WHEN INSTALLED IN LOCATION SUBJECT TO VEHICULAR LOADING.
- 2. CHRISTY CONCRETE TYPE F8 METER BOX WITH F8D LID, MARKED "SEWER" OR "STORM". 3. TAPE TRACER WIRE AT 3' INTERVAL WITH FILAMENT TAPE. 4. LATERAL AND RISER SHALL BE AWWA C-906, DR 11 HDPE. 5. TO CONNECT NEW WYE TO EXISTING CLAY LATERAL, USE

RUBBER COUPLING WITH CONTINUOUS STAINLESS STEEL BAND.

CLEANOUT BOX NTS

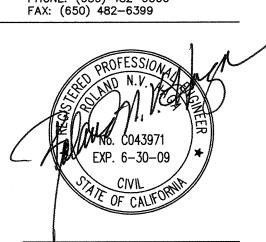


NOTE: 1. RCP SD LATERAL SHALL BE CUT TO MATCH INSIDE FACE OF RCP SD MAIN AND INSTALLED FLUSH. OPENING FOR RCP SD LATERAL SHALL BE CORED HOLE, WITH DIM LARGER THAN SD LATERAL 1". PIPE SHALL BE CORED AND ADAPTOR INSTALLED PRIOR TO PLACEMENT IN THE TRENCH. PVC TO RCP CONNECTION

NTS

McCarthy Building Companies, Inc 343 Sansome Street, 14th Floor San Francisco, California 94104 P 415 | 364-1339 F 415 397-5999

255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 PHONE: (650) 482-6300



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICE APPL. #: 01-110097 AC OF FLS DOM SS D. M

FILE NUMBER:

This and all other project documents and all ideas, aesthetics and designs incorporated therein are instruments of service. All project documents are the registered property of LPA, INC. project documents are the registered property of LPA, INC.

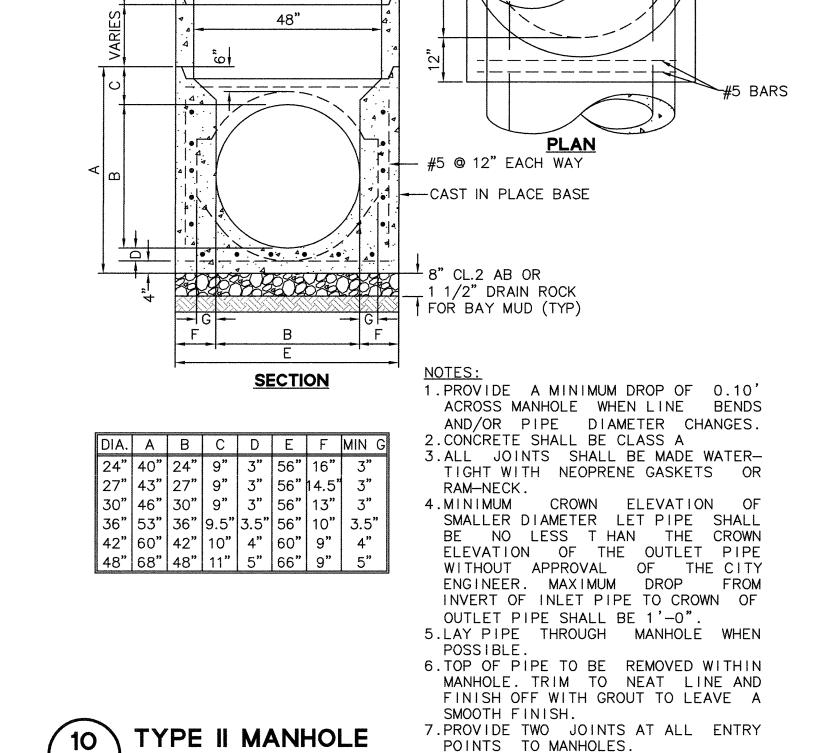
(LPA) and cannot be lawfully used in whole or in part for any
project or purpose except as described in the contractual
agreement between McCarthy and the District. LPA hereby
gives formal notice that any such project document use,
reproduction or modification (misuse) is not only unlawful but
automatically binds all parties involved with misuse to fully
indemnify and defend LPA and LPA's Consultants to the
maximum legal extent against all losses, demands, claims or
liabilities arising directly or indirectly from project document
misuse. Project documents describe design intent of work and
are not a representation of as-built or evidence conditions. misuse. Project accuments osecrob esign intent or work and are not a representation of as-built or existing conditions. LPA and LPA's Consultants make no representations concerning the accuracy of documents and are not responsible for any discrepancies between project documents and the existing conditions.

C Copyright 2008

09 APRIL 2009 AS SHOWN

> CONSTRUCTION **DETAILS**

C8.04



CONCRETE

COLLAR

8.REINFORCE CONCRETE MANHOLE

SHALL CONFORM TO ASTM C-478.

SECTIONS SHALL BE PRECAST, AND