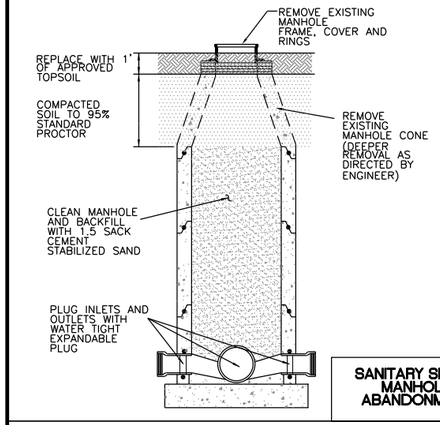
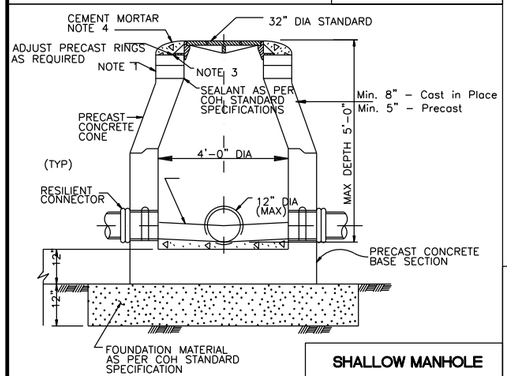
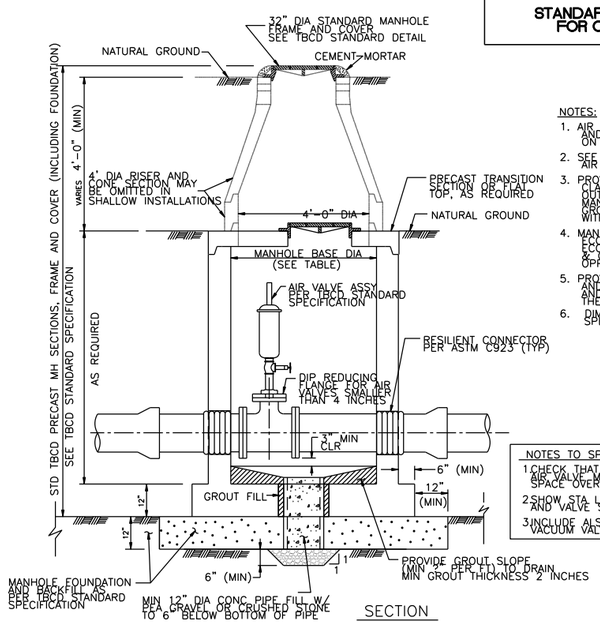


SANITARY SEWER MANHOLE ABANDONMENT



SHALLOW MANHOLE

SANITARY SEWER AIR RELEASE OR AIR/VACUUM RELEASE VALVE MANHOLE



SECTION

NOTES:

1. AIR VALVE MAY BE AIR RELEASE OR AIR AND VACUUM RELEASE VALVE AS NOTED ON PLAN AND PROFILE SHEET.
2. SEE TBCD STANDARD SPECIFICATION FOR AIR VALVE ASSEMBLY REQUIREMENTS.
3. PROVIDE LINED DUCTILE IRON PIPE, THICK CLASS 53 FOR FORCE MAIN WITHIN 12' OF OUTSIDE FACE OF MANHOLE. JOINTS WITHIN MANHOLE MAY BE FLANGED (AS SHOWN) OR GROOVED (PER AWWA C606) WITHIN MANHOLE, WITH 316 STAINLESS STEEL BOLTS.
4. MANHOLE TOP MAY BE CONCENTRIC CONE, ECCENTRIC CONE, OR FLAT TOP WITH ECCENTRIC OPENING. PROVIDE 32" FRAME & COVER. ORIENT ECCENTRIC OPENING OPPOSITE SIDE FROM AIR VALVE.
5. PROVIDE VENTED MANHOLE FOR AIR AND VACUUM VALVE INSTALLATIONS AND DUPLICATIONS INDICATED ON THE DRAWINGS.
6. DIMENSIONS NOTED WITH "2" ARE TO BE SPECIFIED BY PROJECT ENGINEER.

TABLE

MANHOLE BASE DIAMETER (FT)	MAX FORCE MAIN DIAMETER
5	8
6	16
8	36

NOTES TO SPECIFIER:

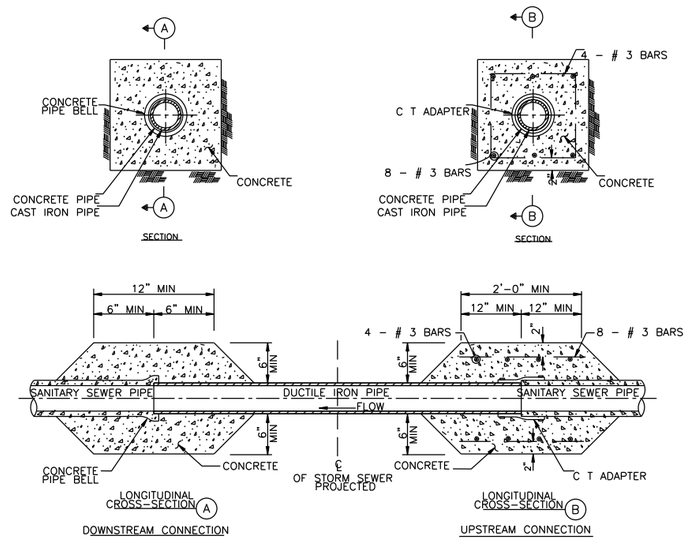
1 CHECK THAT FORCE MAIN BURIAL DEPTH AT AIR VALVE MANHOLE WILL PROVIDE -0" CLEAR SPACE OVER VALVE INSIDE MANHOLE.

2 SHOW STA LOCATION OR MANHOLE, TOP ELEV, AND VALVE SIZE ON PLAN & PROFILE SHEET.

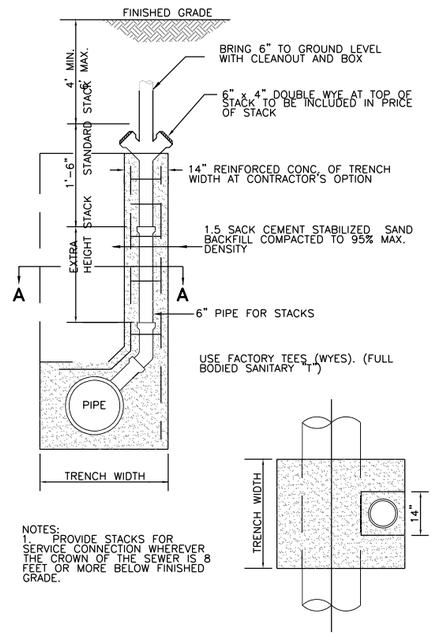
3 INCLUDE ALSO VENTED MH DETAIL FOR AIR & VACUUM VALVE INSTALLATIONS.

NOTE:

1. THE CONTRACTOR SHALL CENTER A MINIMUM OF 18 FOOT JOINT OF DUCTILE IRON PIPE OR C900 PVC PIPE ACROSS THE CENTER OF THE PROPOSED STORM SEWER.



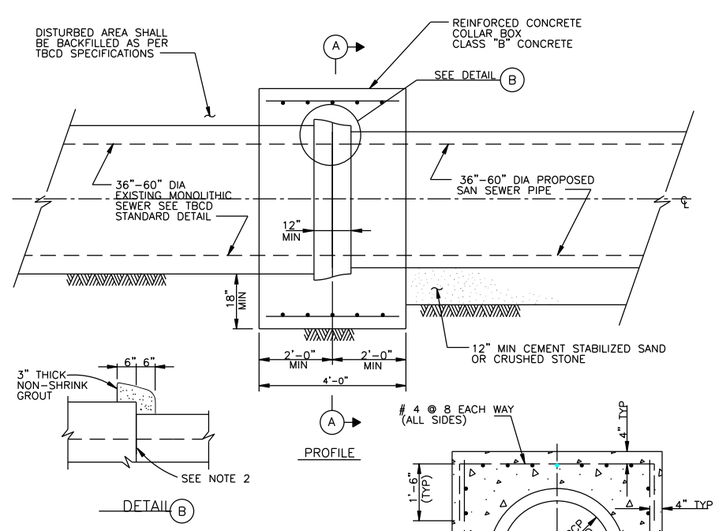
DUCTILE IRON PIPE STORM SEWER CROSSING



NOTES:
1. PROVIDE STACKS FOR SERVICE CONNECTION WHEREVER THE CROWN OF THE SEWER IS 8 FEET OR MORE BELOW FINISHED GRADE.

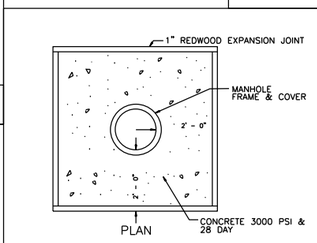
SANITARY SEWER STACK

SECTION "A–A"



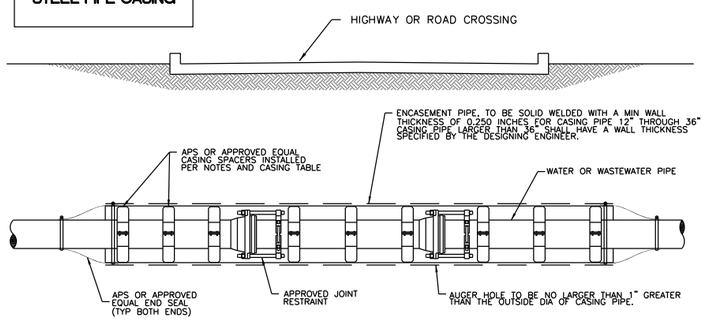
NOTES:
1. EXISTING MRC OR RCP SHALL BE SAW CUT AT LOCATION APPROVED BY THE AGENCY ENGINEER (SMOOTH END).
2. PIPE EDGES SHALL TOUCH EACH OTHER. ALL GAPS IN JOINT SHALL BE FILLED WITH QUICK SETTING NON SHRINK GROUT SEE SPECIFICATION.

CONCRETE COLLAR DETAIL FOR CONNECTING EXISTING MONOLITHIC SEWERS TO PIPE SEWERS



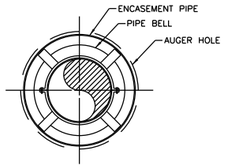
STANDARD MANHOLE BLOCKOUT FOR CONCRETE PAVEMENT

STEEL PIPE CASING



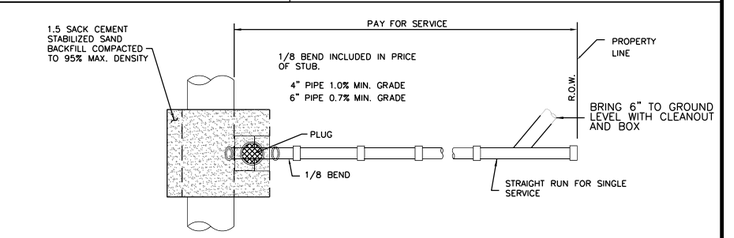
LONGITUDINAL SECTION

CASING TABLE		
NOMINAL PIPE SIZE DIA IN INCHES	MIN CASING SIZE INSIDE DIA IN INCHES	MAX SKID SUPPORT SPACING IN FEET
4	12	4.7
6	12	6.3
8	16	7.4
10	18	8.5
12	20	9.6
15	22	11.0
18	26	12.0
21	30	12.0
24	33	12.0
27	36	12.0



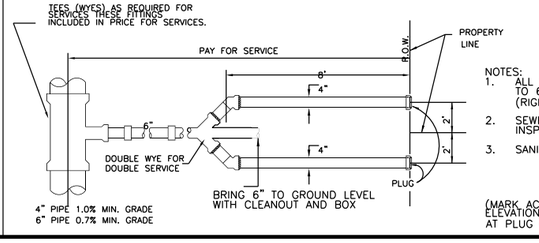
CROSS SECTION

NOTES:
1. SPACERS FOR CARRIER PIPE SHALL BE STAINLESS STEEL, NEOPRENE OR APPROVED EQUAL AND SHALL BE INSTALLED TO CENTER CARRIER PIPE WITHIN CASING WITH A MAX TOLERANCE OF ½" BETWEEN RUNNER AND CASING INSIDE AS WELL AS PREVENT THE CARRIER PIPE FROM RESTING ON THE BELLS WITHIN THE CASING. SEE CASING TABLE FOR SPACER DISTANCE AND NUMBER OF SPACERS.
2. CONTRACTOR TO TAKE INTO CONSIDERATION THE SIZE AND LIMITS OF PIPE RESTRAINTS WHEN ORDER AND INSTALLING CASING PIPE TO ALLOW FOR ADEQUATE CLEARANCE.
3. SPACERS TO BE PLACED A MIN OF 1' BACK FROM EACH JOINT THAT FALLS WITHIN CASING. A GREATER SET BACK MAY BE REQUIRED FOR LARGER PIPE. SEE CASING TABLE FOR ADDITIONAL INFO ON SPACING OF SUPPORTS.
4. WHEN INSTALLING GRAVITY PIPE WITH CASING CONTRACTOR SHALL TAKE INTO CONSIDERATION PIPE GRADE SO THAT THE SEWER PIPE MAINTAINS THE PROPER FALL.
5. JOINT RESTRAINTS ARE REQUIRED ON ALL JOINTS THAT FALL UNDER OR WITHIN 10' OF HIGHWAY CROSSINGS REGARDLESS OF PIPE MATERIAL, CASED OR NOT.



NOTES:
1. ALL SINGLE SEWER SERVICES AND DOUBLE SEWER SERVICES, AS SHOWN, ARE INTERCHANGEABLE, AS REQUIRED, TO CONNECT WITH STACKS, DOUBLE WYES AND WYES, AS REQUIRED, TAPS FOR PVC PIPE TO BE PVC "T" OR "Y".
2. PROVIDE LOCATOR WIRE LOOPS FROM EACH SERVICE CONNECTION TO NEAREST MANHOLE.
3. SANITARY SEWER LATERALS SHALL NOT BE CONNECTED TO MANHOLE.

SINGLE SEWER SERVICE



DOUBLE SEWER SERVICE

NOTES:
1. ALL SANITARY SEWER SERVICES WILL BE BROUGHT TO WITHIN 4 TO 6 FEET OF FINISHED LOT GRADE ELEVATION AT PROPERTY LINE (RIGHT OF WAY).
2. SEWER SERVICE LEADS SHALL NOT BE BACKFILLED UNTIL VISUALLY INSPECTED BY CITY INSPECTOR.
3. SANITARY SEWER LATERALS SHALL NOT BE CONNECTED TO MANHOLE.

(MARK ACTUAL STATION AND FLOW LINE ELEVATION OF EACH SERVICE CONNECTION AT PLUG ON AS-BUILT DRAWINGS.)

PLACE ENGINEERING SEAL HERE

Mont Belvieu
TEXAS

Sanitary Sewer Standard Details

Scale: NTS

DWG No: 200 – 03

SHEET 3 OF 3