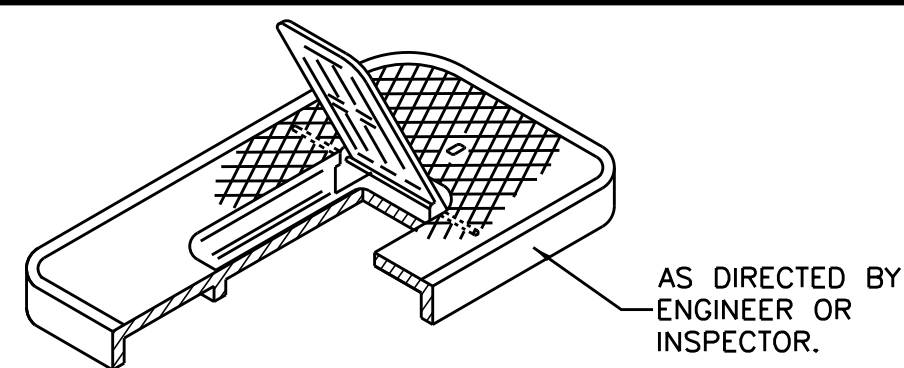
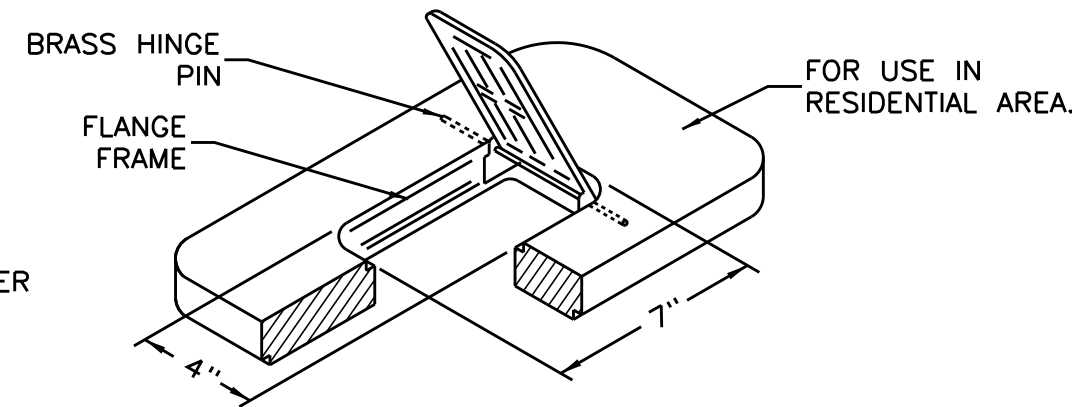


5/14/99

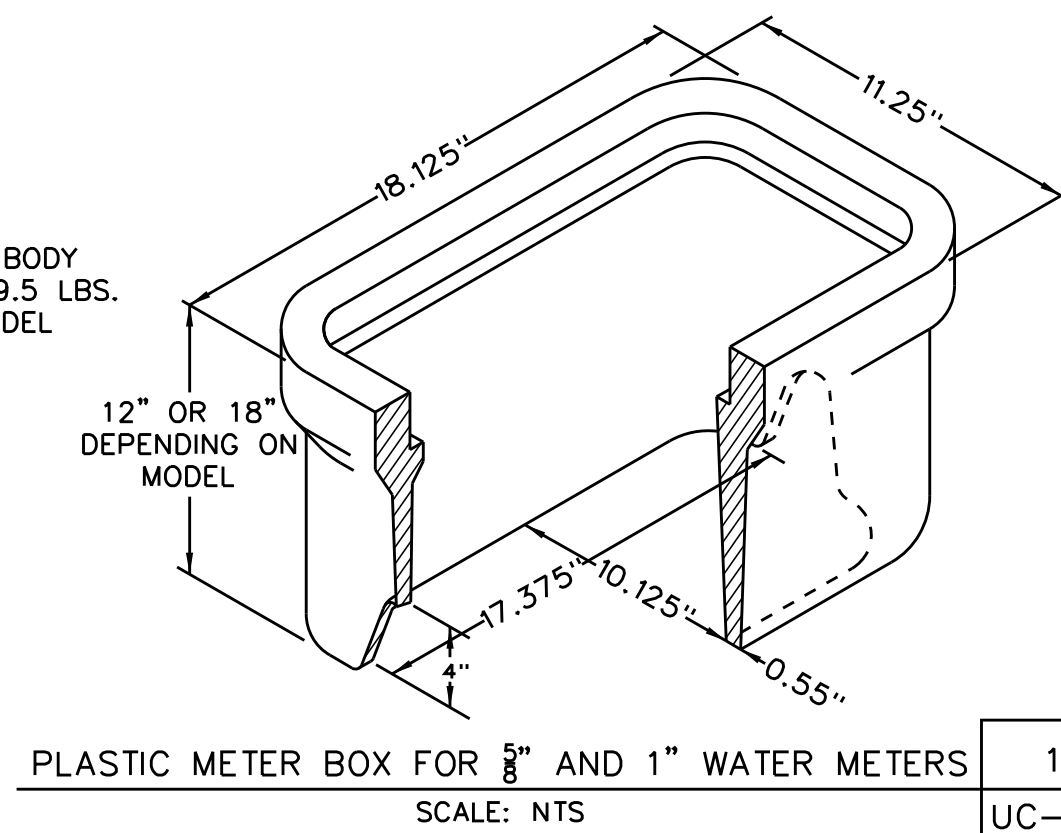
NO. 33. T - DUCTILE IRON COVER WITH DUCTILE IRON HINGE LID WEIGHT 18 LBS.



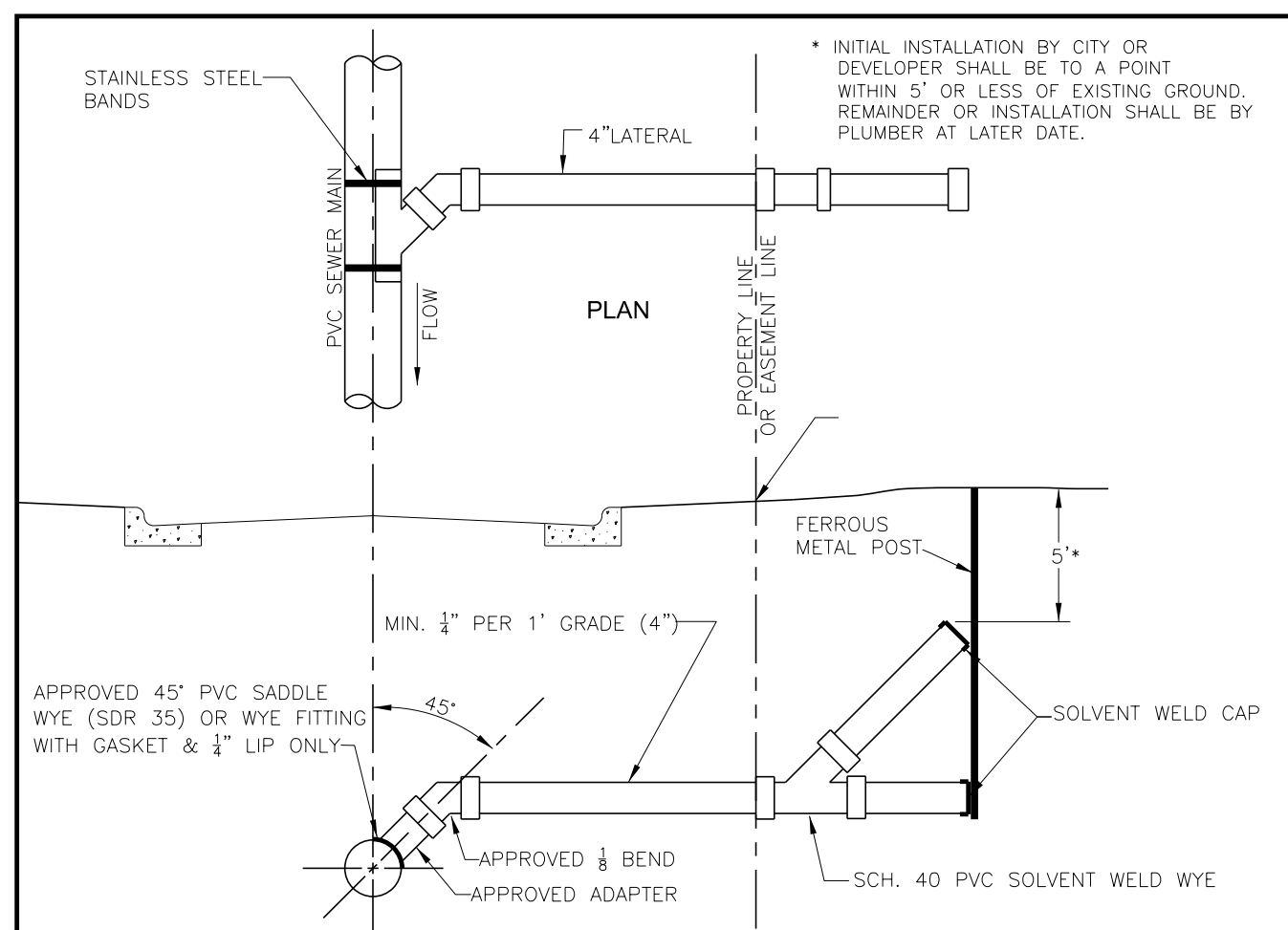
NO. 33. H - PLASTIC COVER WITH PLASTIC HINGE LID WEIGHT 8 LBS.



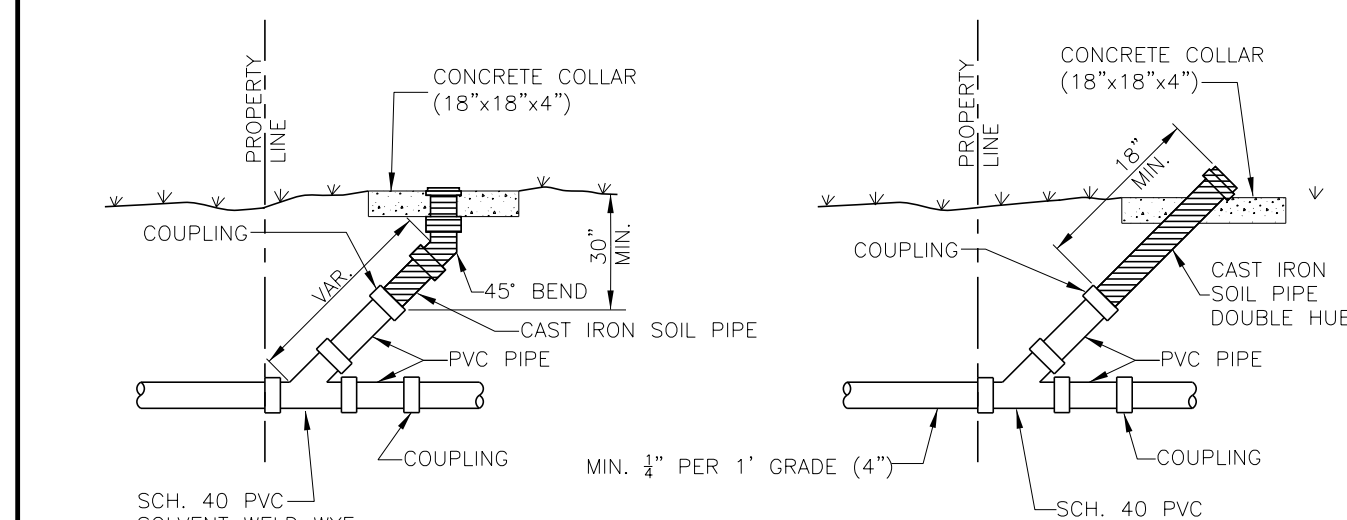
NO. 33. - PLASTIC BODY WEIGHT 15 LBS. OR 19.5 LBS. DEPENDING ON MODEL



1 UC-3C



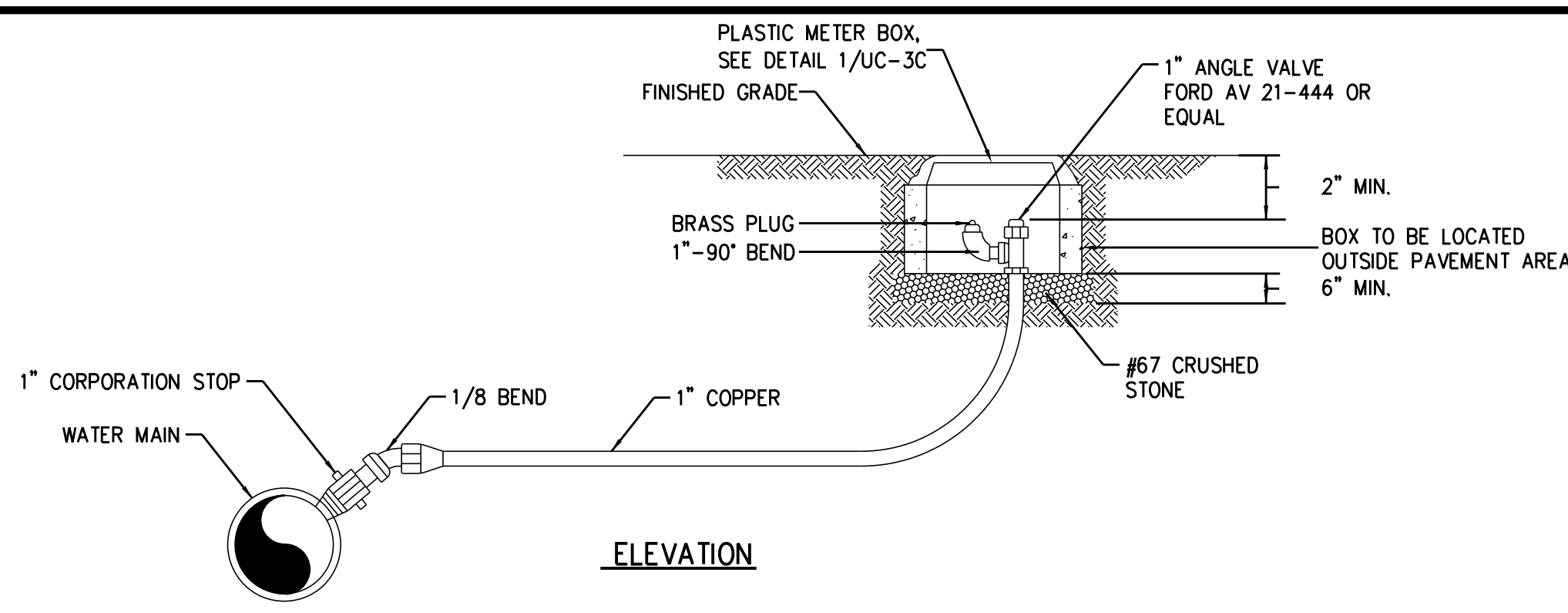
STANDARD SEWER MAIN LATERAL STUB-OUT



CLEAN OUT DETAILS

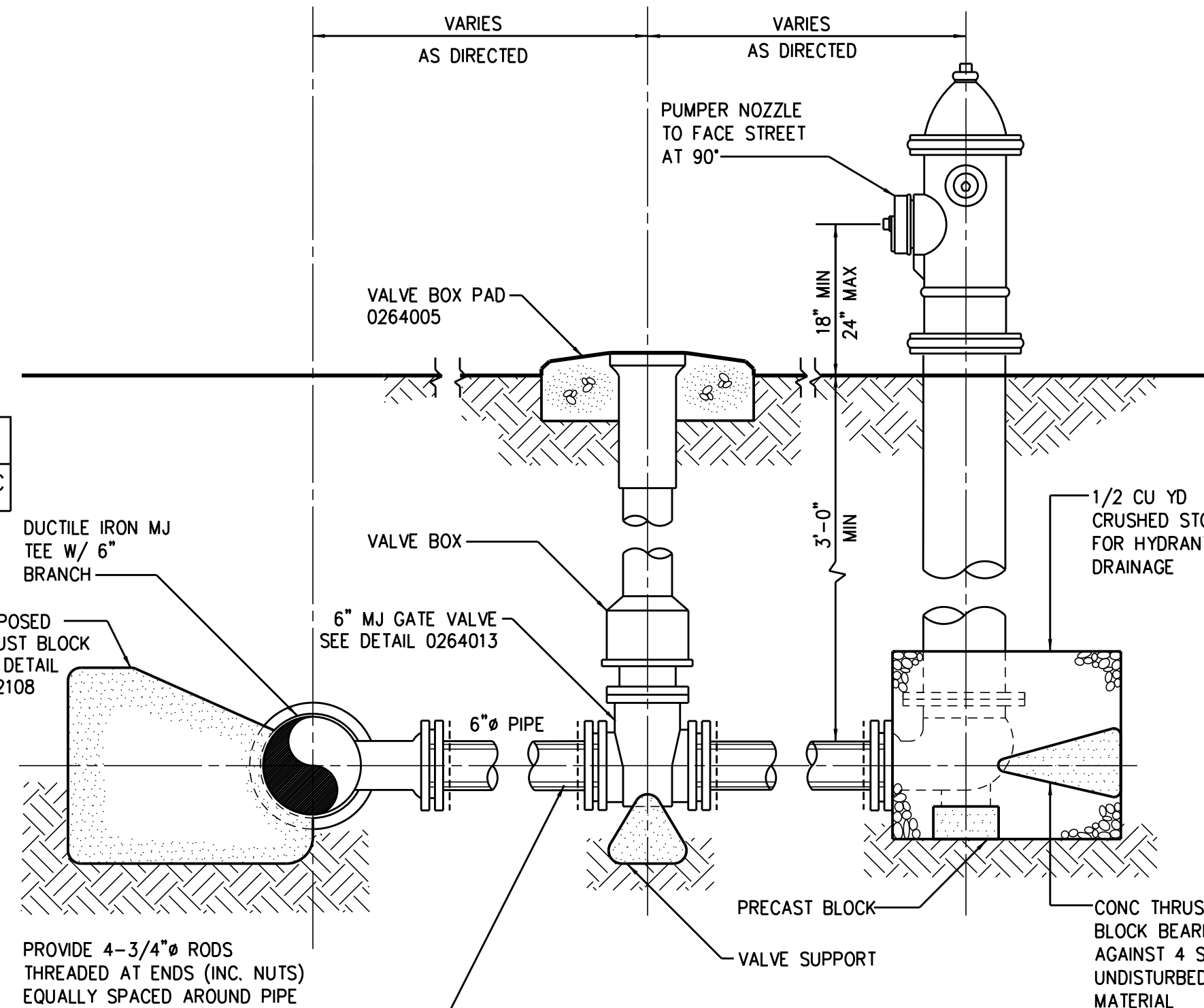
DURHAM CITY OF RESPONSE	SANITARY SEWER LATERAL		SCALE: NTS
	4" SEWER LATERAL		DETAIL NO. SS-1.0
	REVISION DATE: 05/21/2008	CITY OF DURHAM, NORTH CAROLINA DEPARTMENT OF PUBLIC WORKS	

NOTE: CONTRACTOR SHALL FIELD LOCATE EXISTING SANITARY SEWER SERVICES PRIOR TO INSTALLATION OF PROPOSED MAIN LINE SANITARY SEWER.



ELEVATION

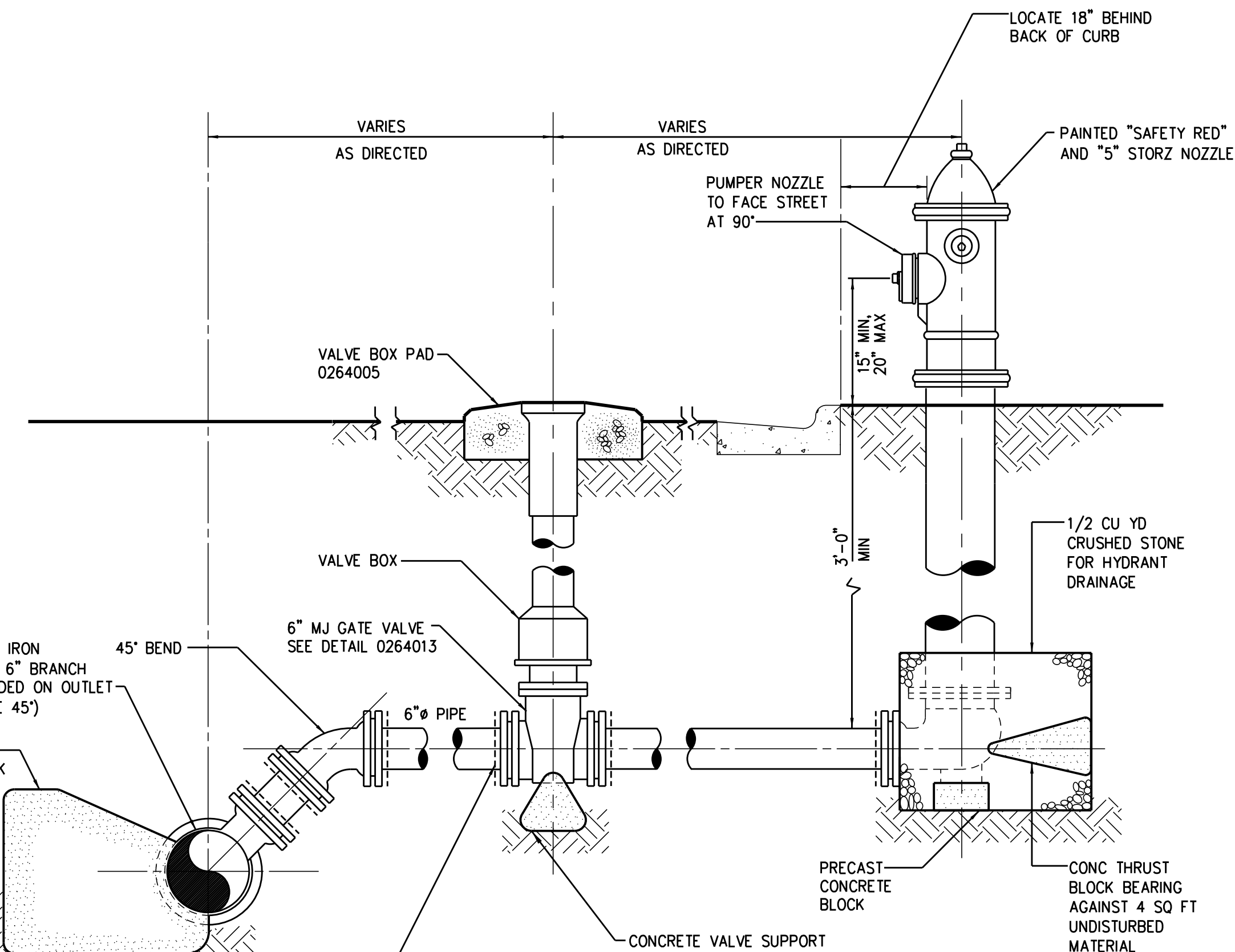
DISINFECTION AND SAMPLING POINT 0271303R



FIRE HYDRANT 1553000

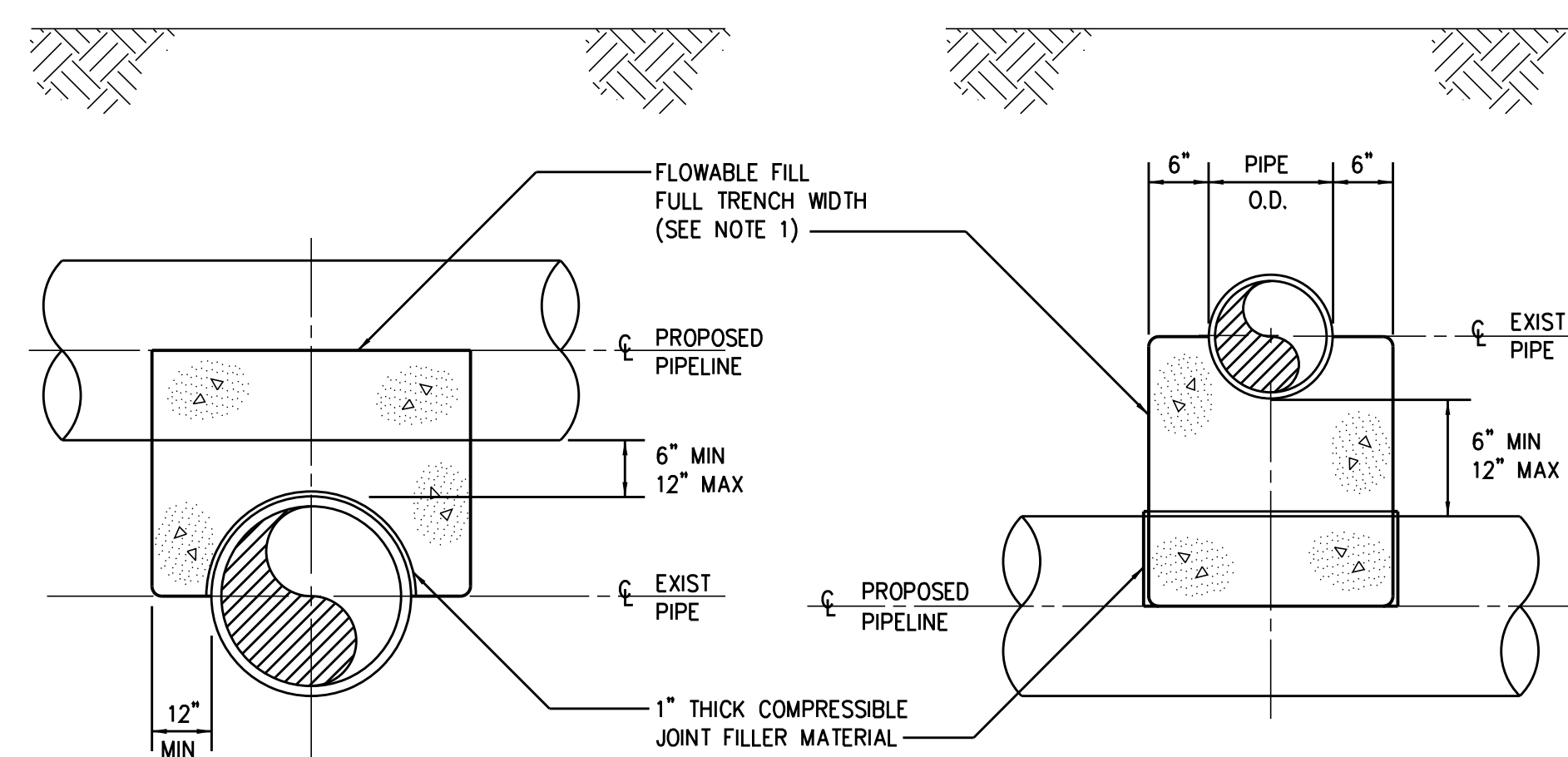
PROVIDE 4-3/4" RODS THREADED AT ENDS (INC. NUTS) EQUALLY SPACED AROUND PIPE BETWEEN ALL MECHANICAL JOINT FITTINGS (TEE, VALVE, BEND)

DETAIL NOTES:
1. LOCATE HYDRANT 18" FROM BACK OF CURB OR 12" INSIDE R/W.
2. ALL PIPE AND FITTINGS SHALL BE RESTRAINED WITH MECHANICAL JOINT RETAINER GLANDS



AIR RELEASE ASSEMBLY (USED IN-LIEU OF ARV) 1553000R

PROVIDE MEGA-LUGS TO RESTRAIN ALL MECHANICAL JOINT FITTINGS (TEE, VALVE, BEND)

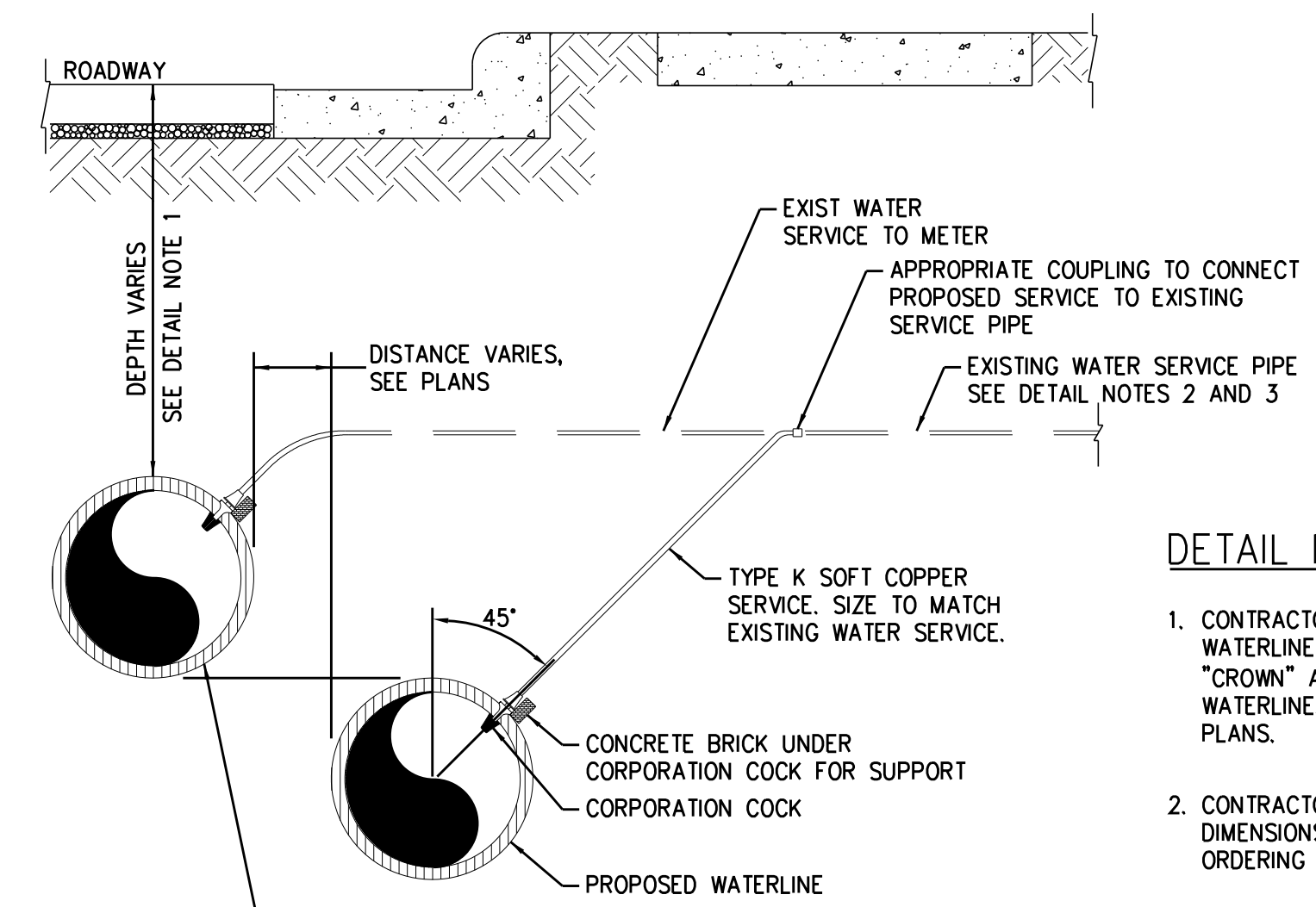


PROPOSED PIPELINE OVER EXIST PIPE

PROPOSED PIPELINE UNDER EXIST PIPE

0222118

NOTE: NO ENCASEMENT REQUIRED FOR SPACE GREATER THAN 12"



TYPICAL SERVICE CONNECTION

0260121

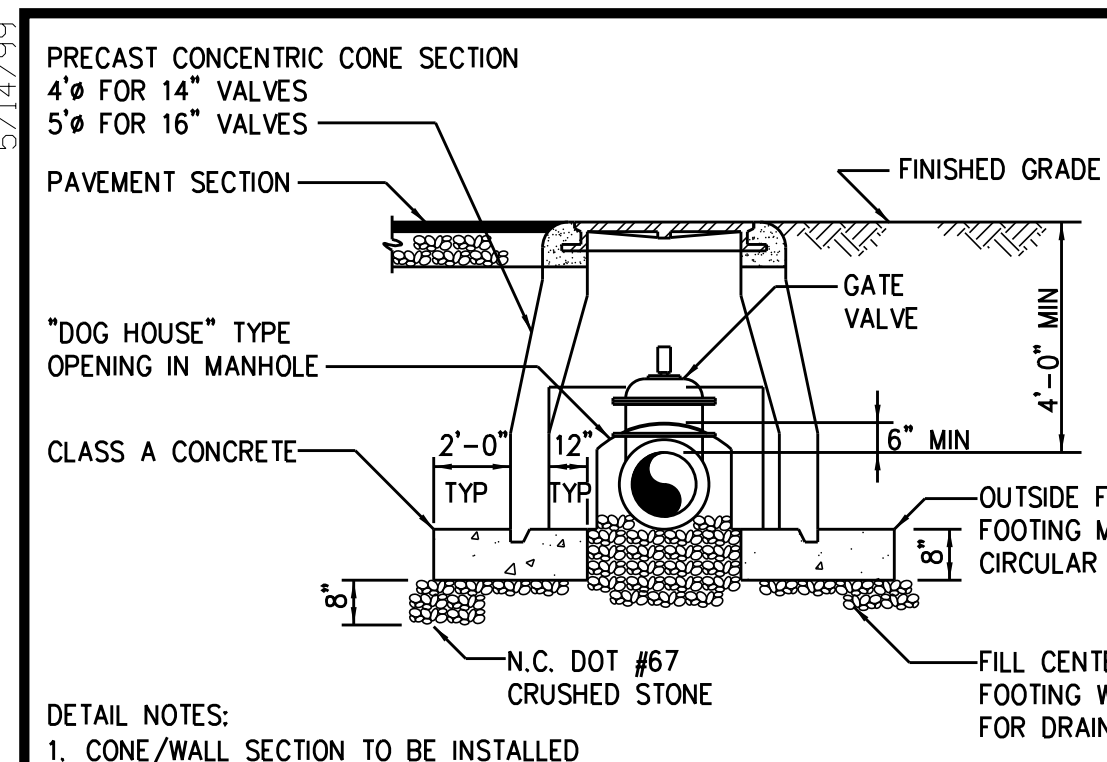
DETAIL NOTES:

- CONTRACTOR SHALL VERIFY DEPTH OF EXISTING WATERLINE AND LOCATE PROPOSED WATERLINE "CROWN" AT THE "INVERT" OF THE EXISTING WATERLINE, UNLESS OTHERWISE SHOWN ON THE PLANS.
- CONTRACTOR SHALL VERIFY EXACT MATERIALS AND DIMENSIONS OF EXISTING WATER SERVICES PRIOR TO ORDERING MATERIALS.
- CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IF THERE ARE COMPLICATIONS WITH CONNECTING TO THE EXISTING WATERLINE.

PROJECT REFERENCE NO. U-3308	SHEET NO. UC-3C
DESIGNED BY: KFC	
DRAWN BY: JGB	
CHECKED BY: DGB	
APPROVED BY: JJW	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
PREPARED IN THE OFFICE OF: Kimley»Horn P.O. BOX 33068 RALEIGH, NORTH CAROLINA 27636-3068 PHONE: (919) 677-2000 FAX: (919) 677-2050 PE NO. F-0102	
UTILITY CONSTRUCTION PLANS ONLY	

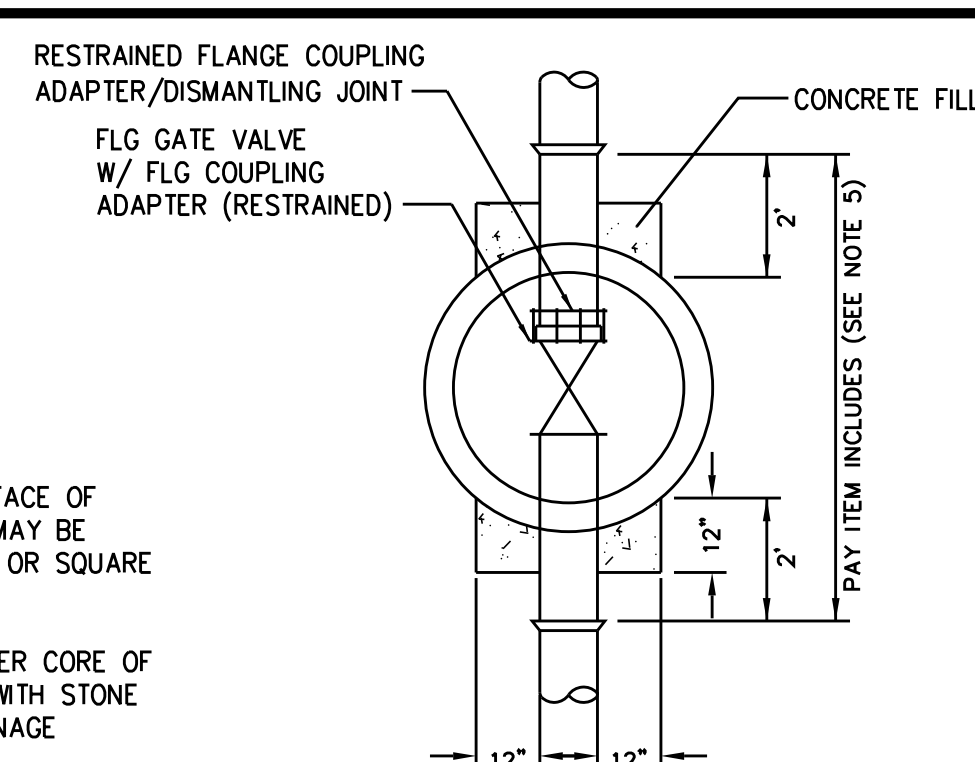
UTILITY CONSTRUCTION

5/14/19



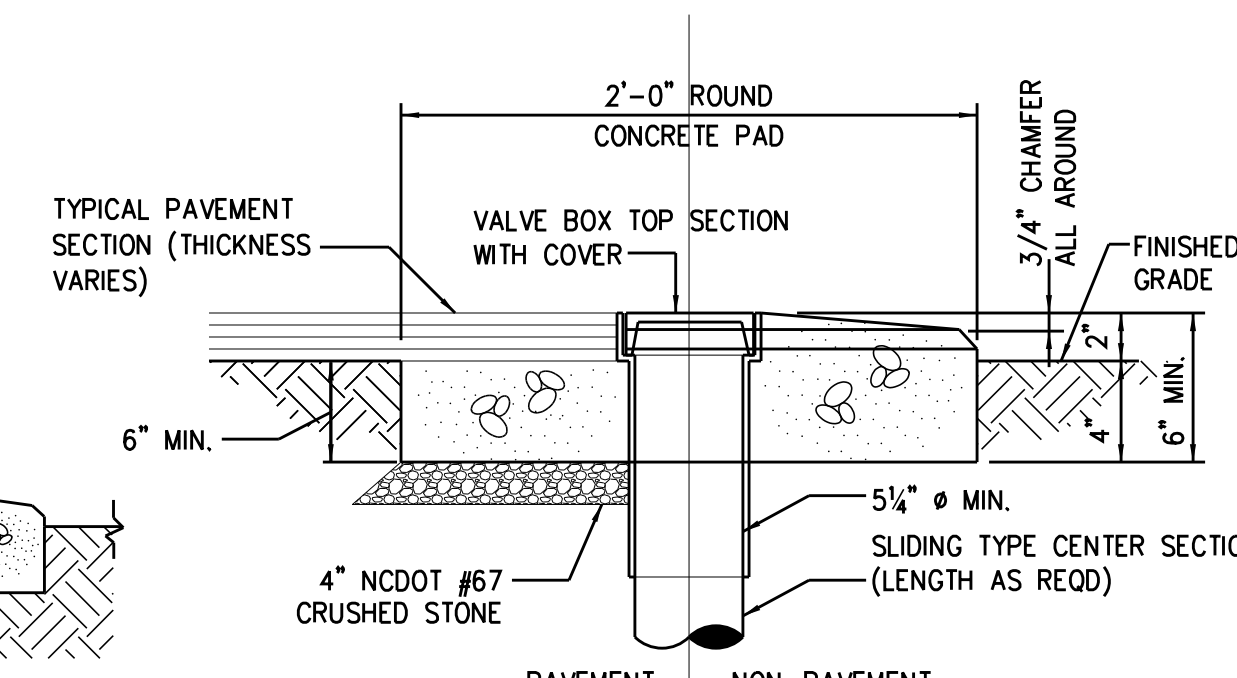
- DETAIL NOTES:**
1. CONE/WALL SECTION TO BE INSTALLED IN FRESHLY PLACED FOOTING TO INSURE UNIFORM BEARING.
 2. ADD BARREL SECTIONS TO MANHOLE AS NECESSARY.
 3. ELIMINATE FOOTING AT OPENING.
 4. 2'-0" MAXIMUM DISTANCE FROM OUTSIDE OF MANHOLE TO FIRST PIPE JOINT. (EACH SIDE OF MANHOLE)
 5. PAY ITEM DOES NOT INCLUDE PIPING.

SECTION

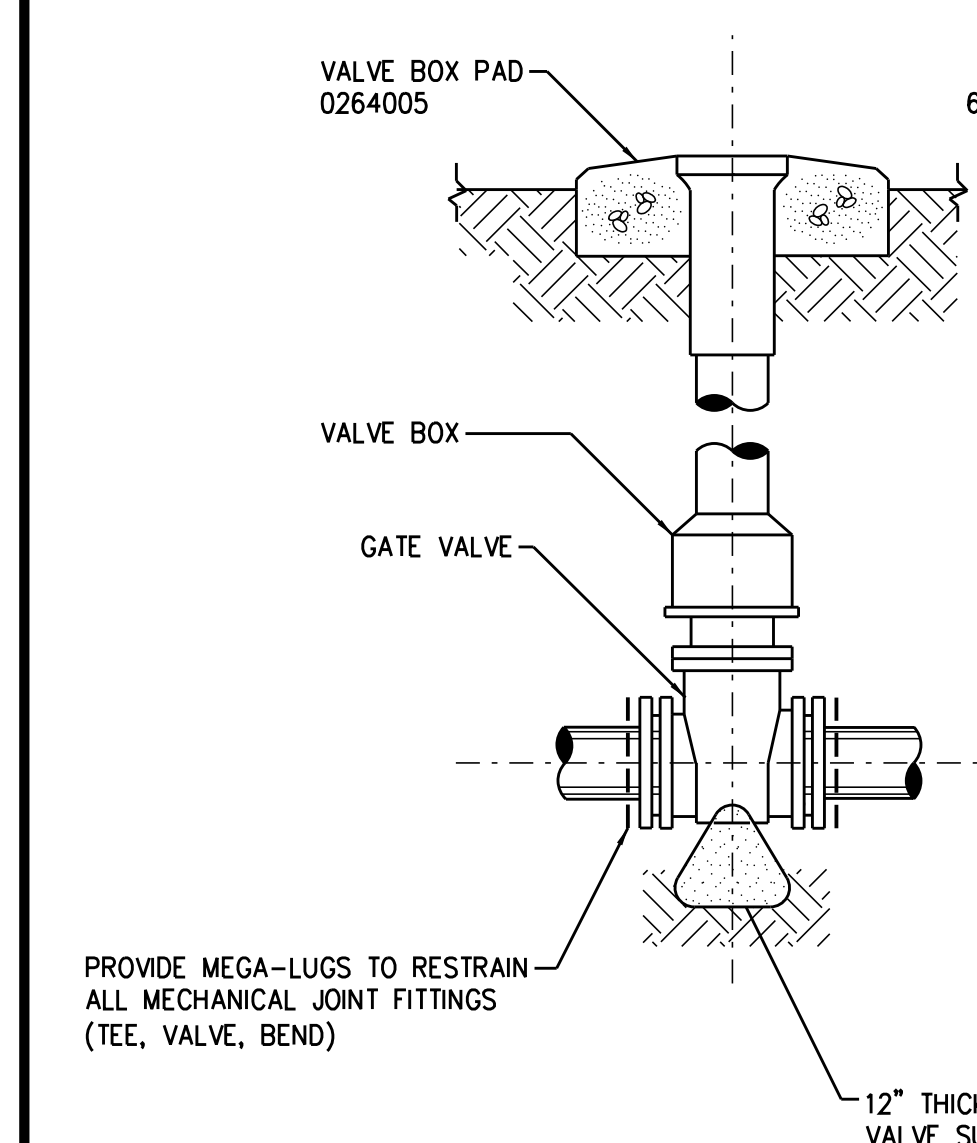


PLAN

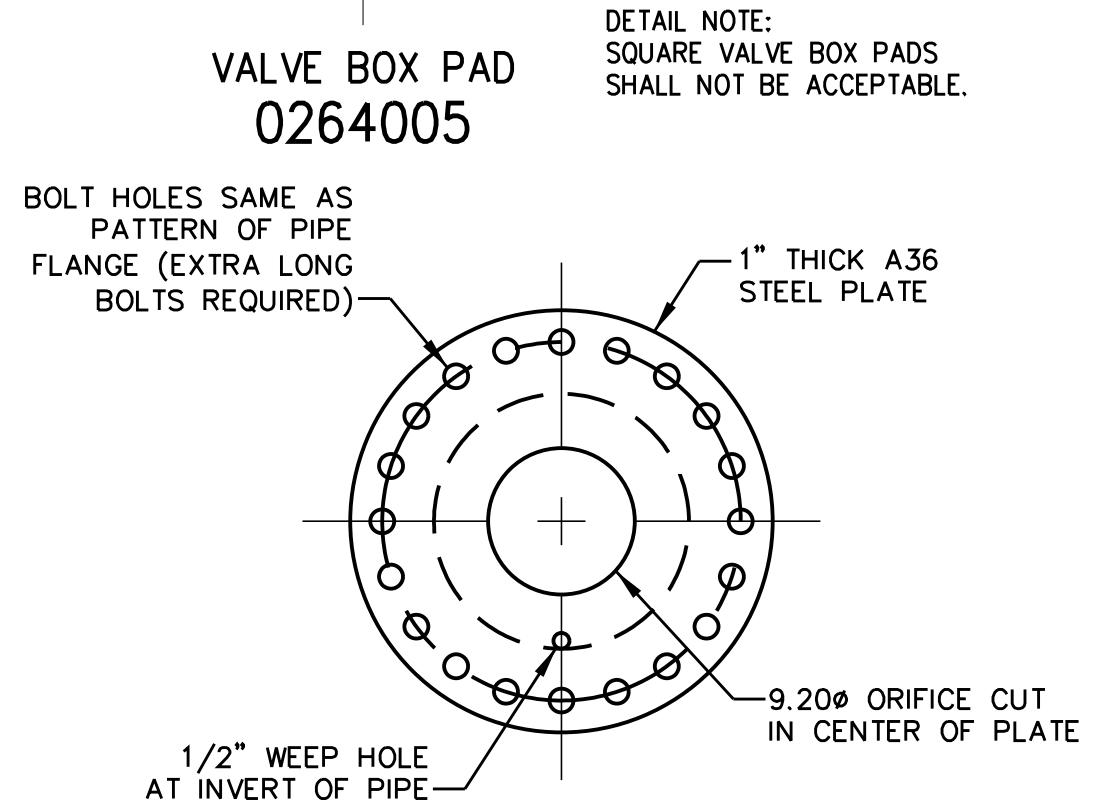
GATE VALVE ASSEMBLY (FOR 14" AND 16" VALVES) 0264001R



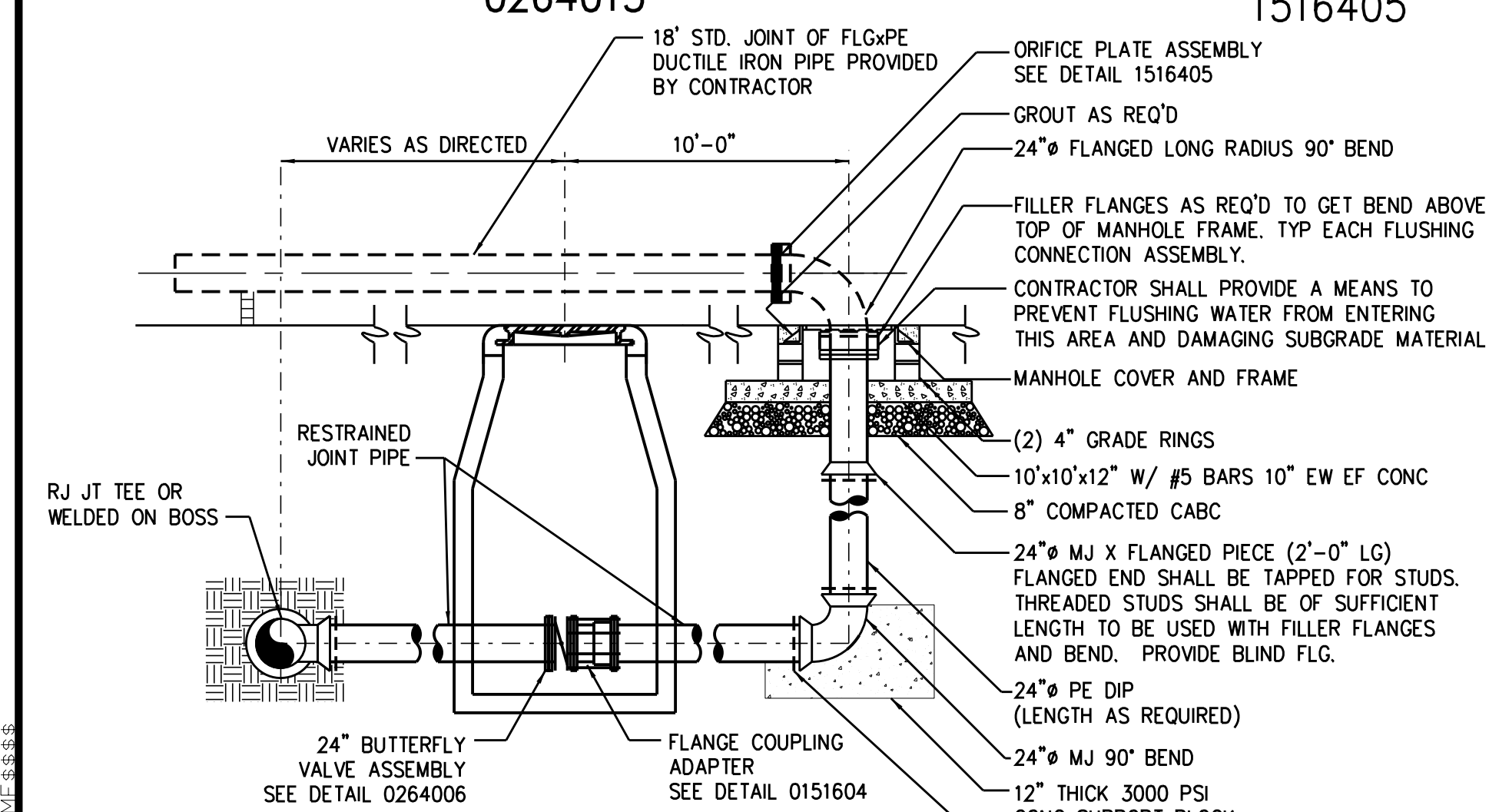
VALVE BOX PAD 0264005



GATE VALVE ASSEMBLY (FOR 4" THRU 12" VALVES) 0264013

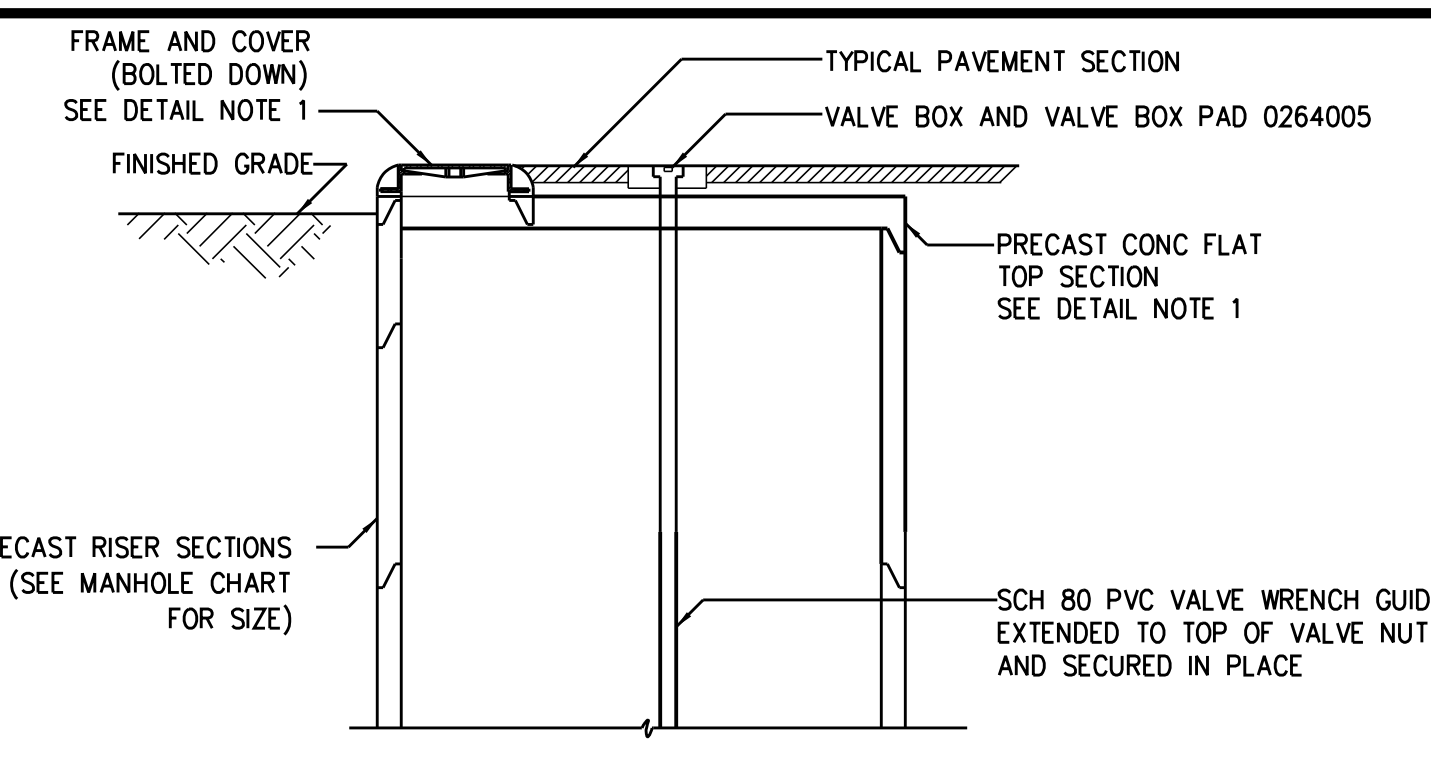


ORIFICE PLATE ASSEMBLY 1516405



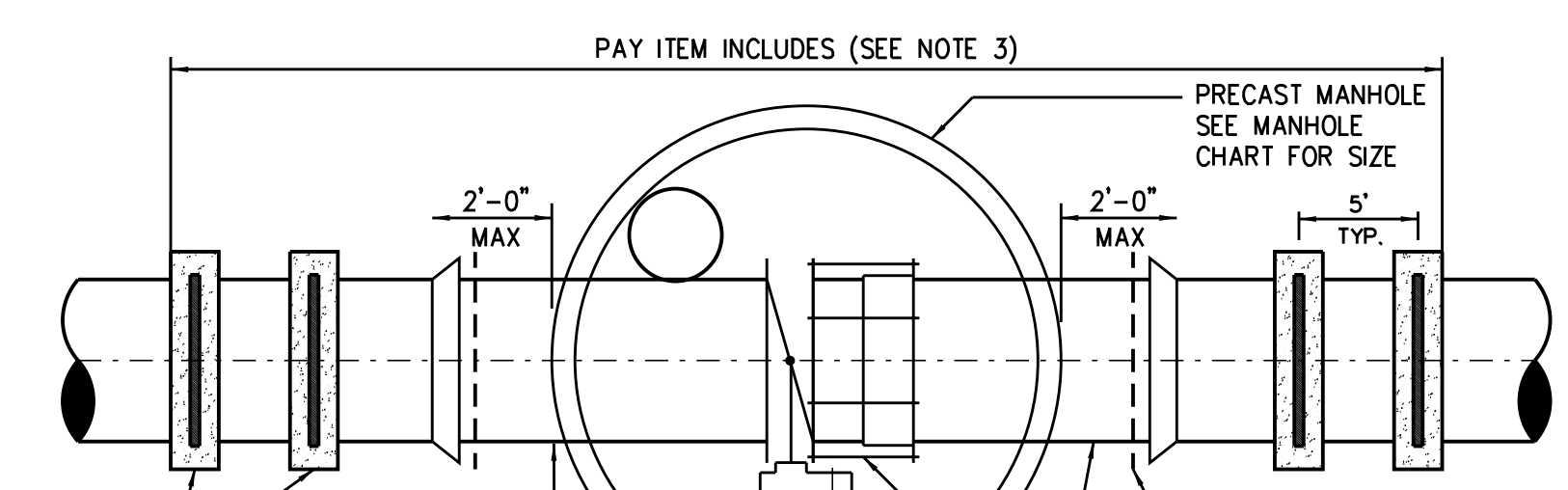
FLUSHING CONNECTION ASSEMBLY 0260118

NOTE: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER/CITY OF DURHAM FOR CONTROL OF FLUSHING WATER

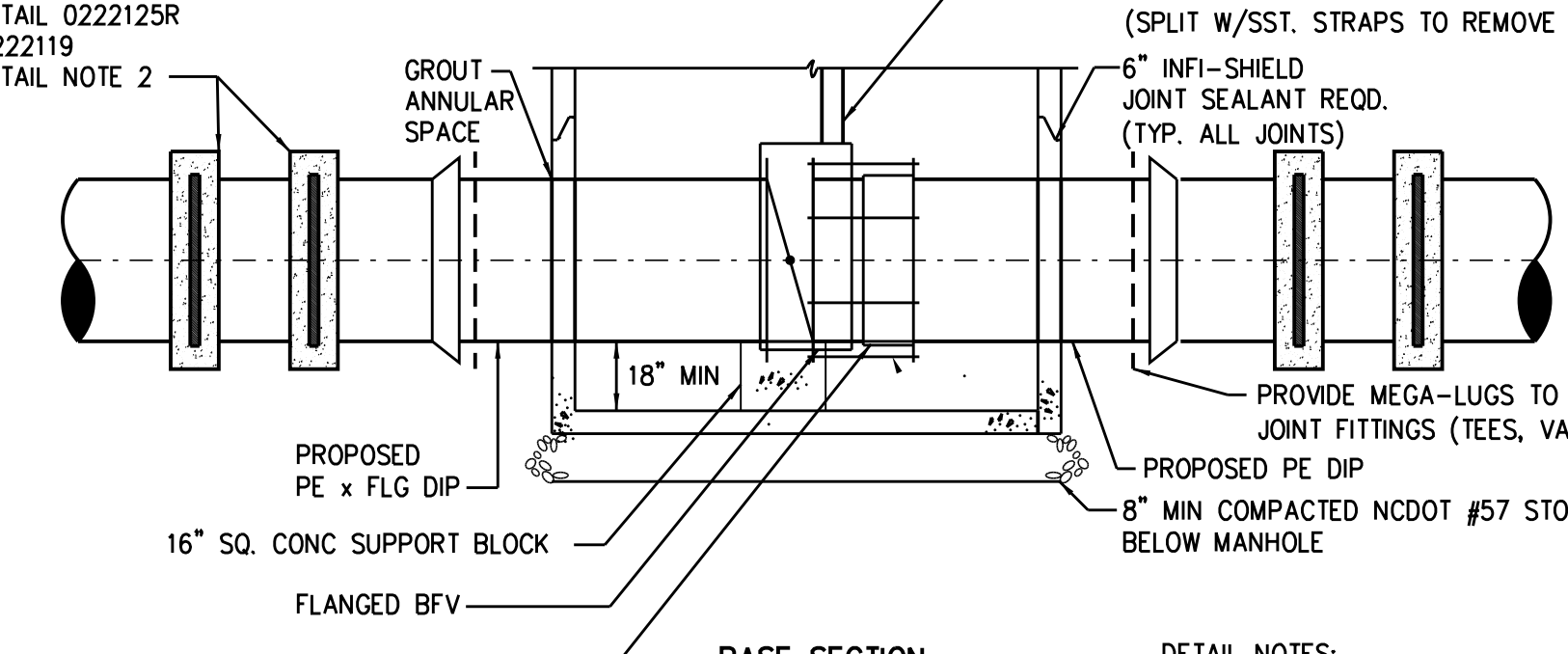


FLAT TOP SECTION

MANHOLE CHART	
VALVE SIZE	MANHOLE SIZE
18"	6'-0" DIA
20"	6'-0" DIA
24"	7'-0" DIA
30"	7'-0" DIA
36"	8'-0" DIA
42"	10'-0" DIA



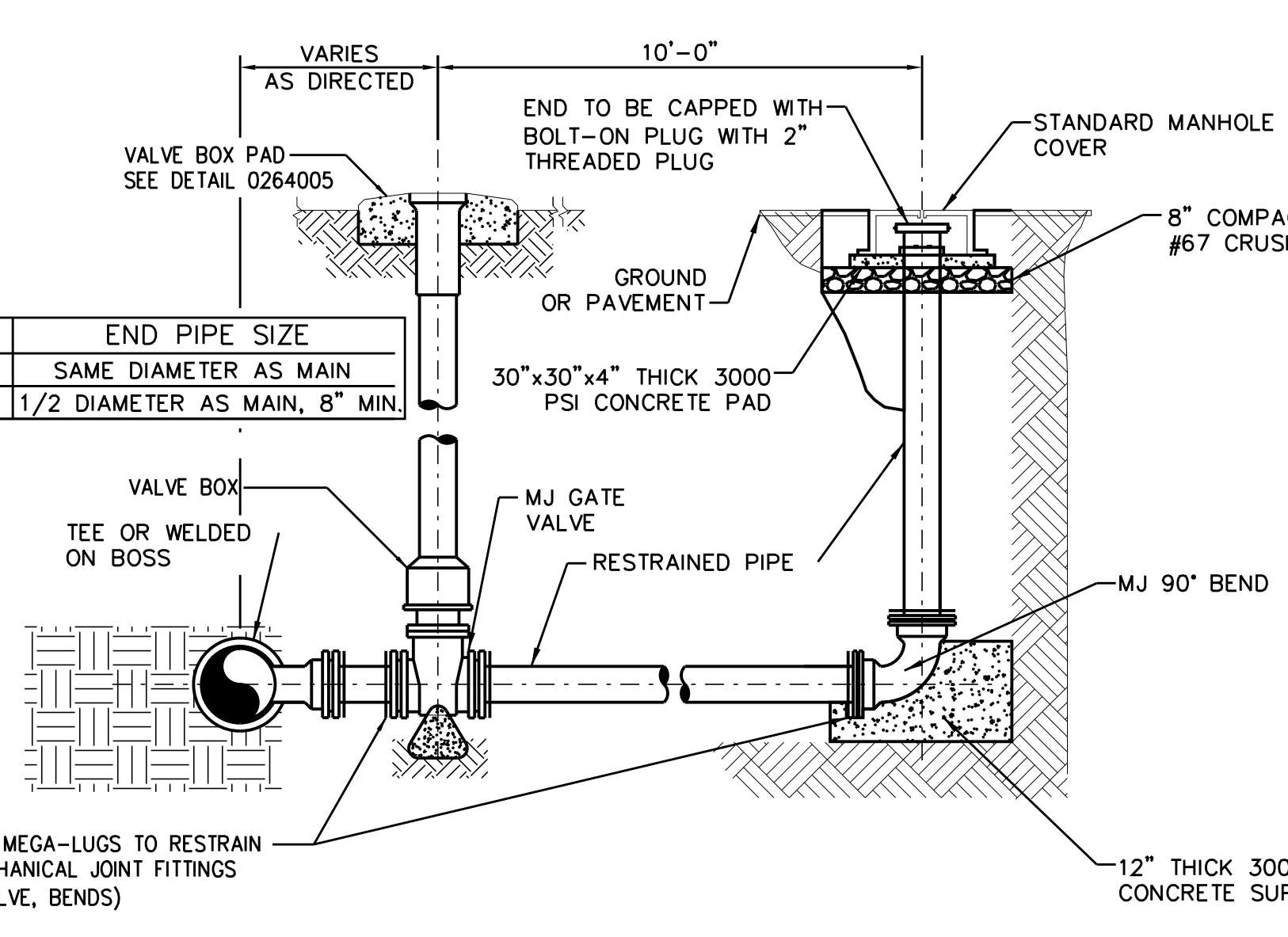
PLAN



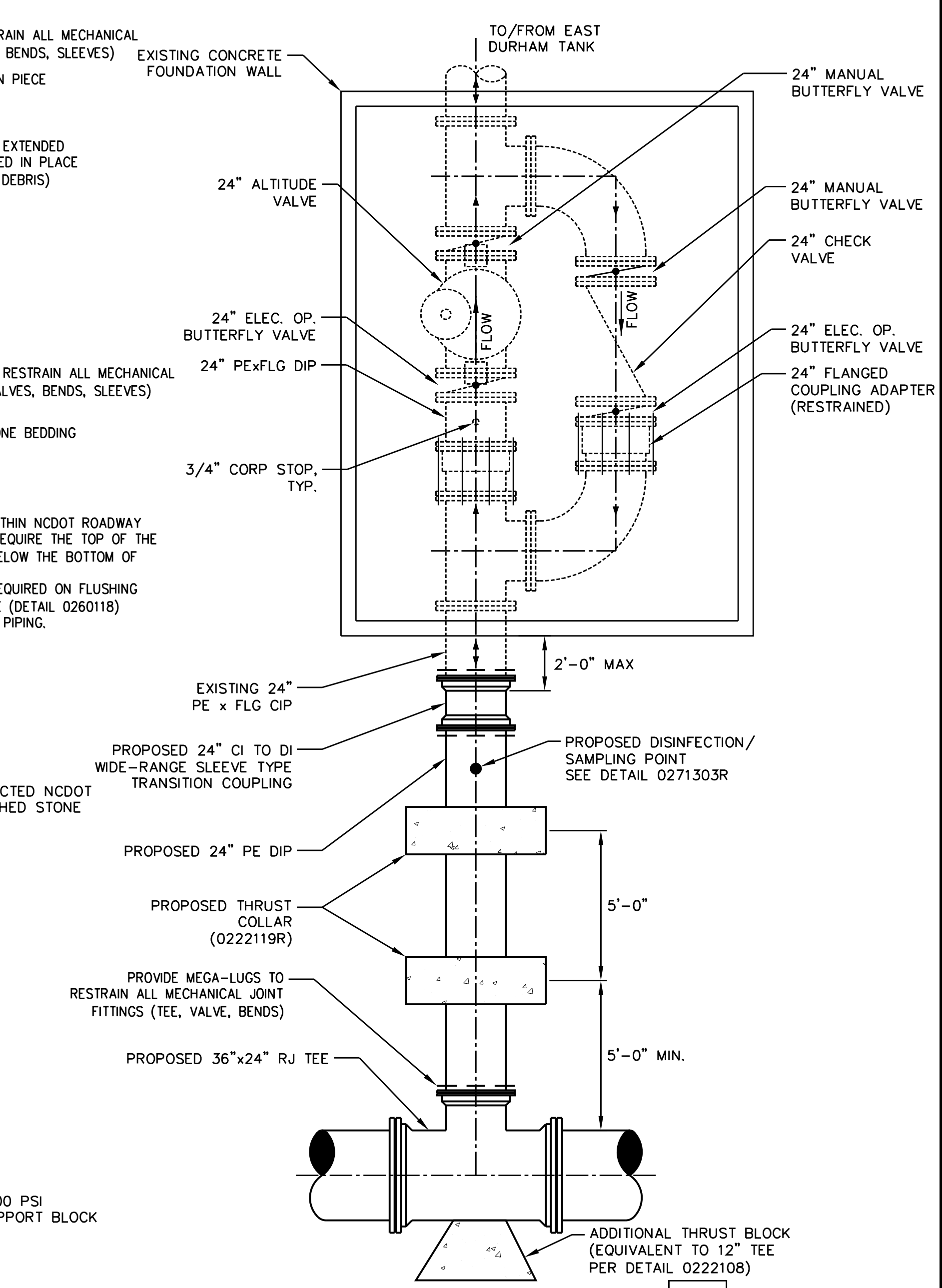
BASE SECTION

TYPICAL BUTTERFLY VALVE ASSEMBLY (FOR 18-INCH THRU 36-INCH VALVES) 0264006

MAIN SIZE	END PIPE SIZE
6" - 12"	SAME DIAMETER AS MAIN
16" - 36"	1/2 DIAMETER AS MAIN, 8" MIN.



TEMPORARY WATERLINE BLOW OFF ASSEMBLY 0271304



PROJECT REFERENCE NO. U-3308 SHEET NO. UC-3B

DESIGNED BY: JAR
DRAWN BY: JGB
CHECKED BY: JJW
APPROVED BY: JJW

PREPARED IN THE OFFICE OF:
Kimley»Horn
P.O. BOX 33068
RALEIGH, NORTH CAROLINA 27636-3068
PHONE: (919) 677-2000
FAX: (919) 677-2050
PE NO. F-0102

5/27/2015

UTILITY ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

