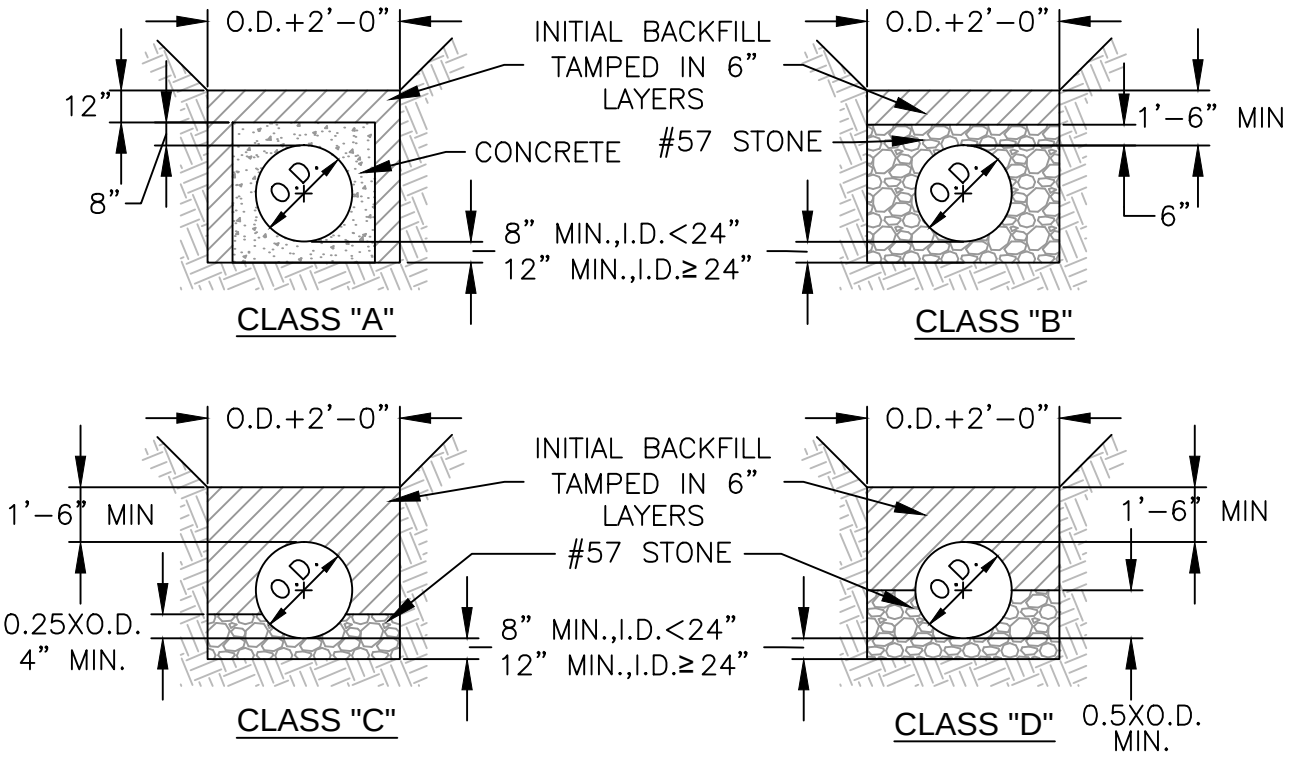


NOTES:

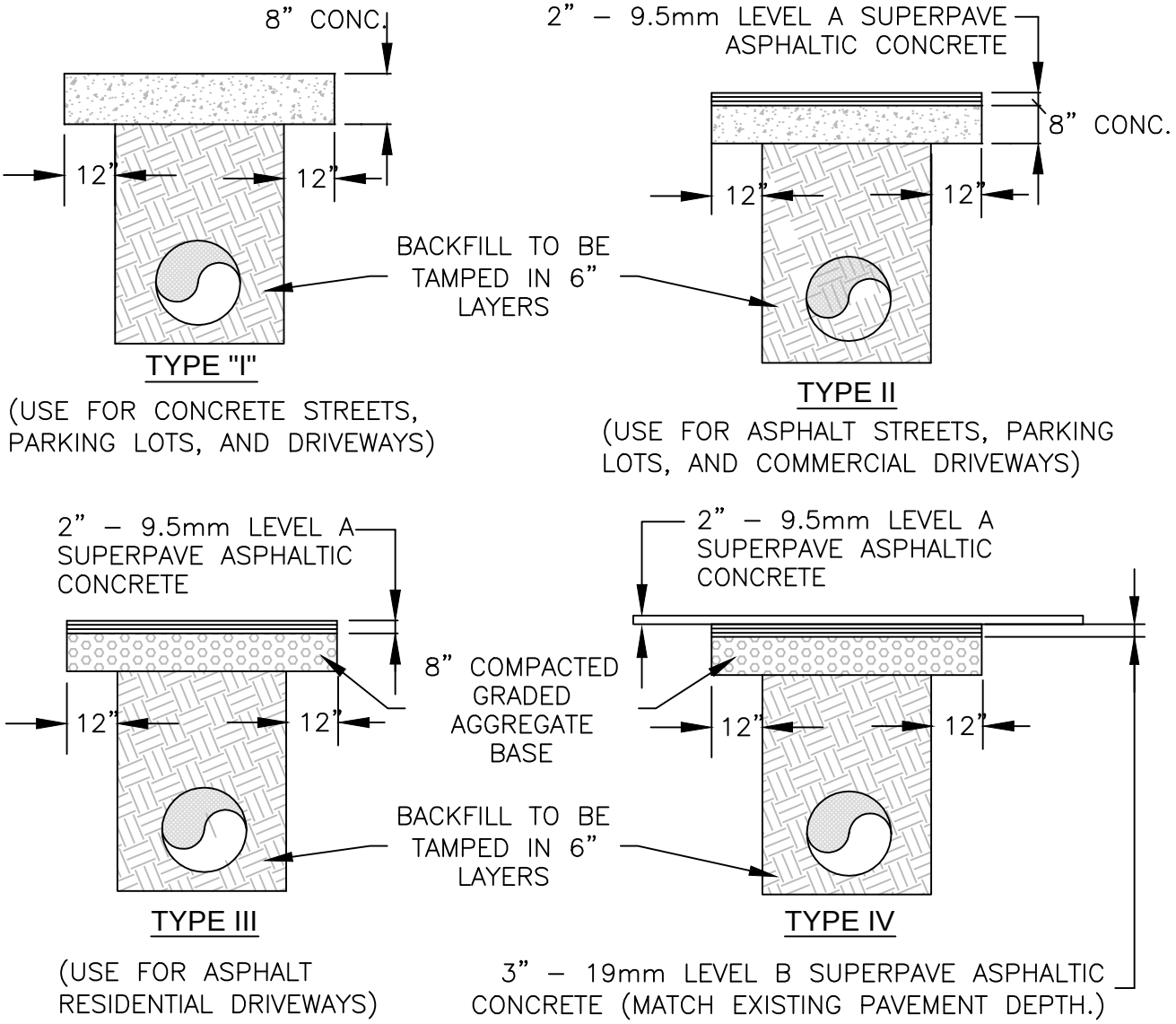
1. INITIAL BACKFILL SHALL BE FREE AND CLEAR OF ROCKS 2" IN DIAMETER OR LARGER.
2. ALL PVC SEWERS SHALL USE CLASS "B" BEDDING.
3. ALL DIP SEWERS WITH LESS THAN 24 FEET IN INVERT DEPTH SHALL USE CLASS "C" BEDDING.
4. ALL DIP SEWERS WITH GREATER THAN 24 FEET IN INVERT DEPTH SHALL USE CLASS "D" BEDDING.

PIPE BEDDING AND HAUNCHING DETAILS

SD G1

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PIPE BEDDING AND HAUNCHING DETAILS	
DATE: JAN 2013	SD-G1



NOTES:

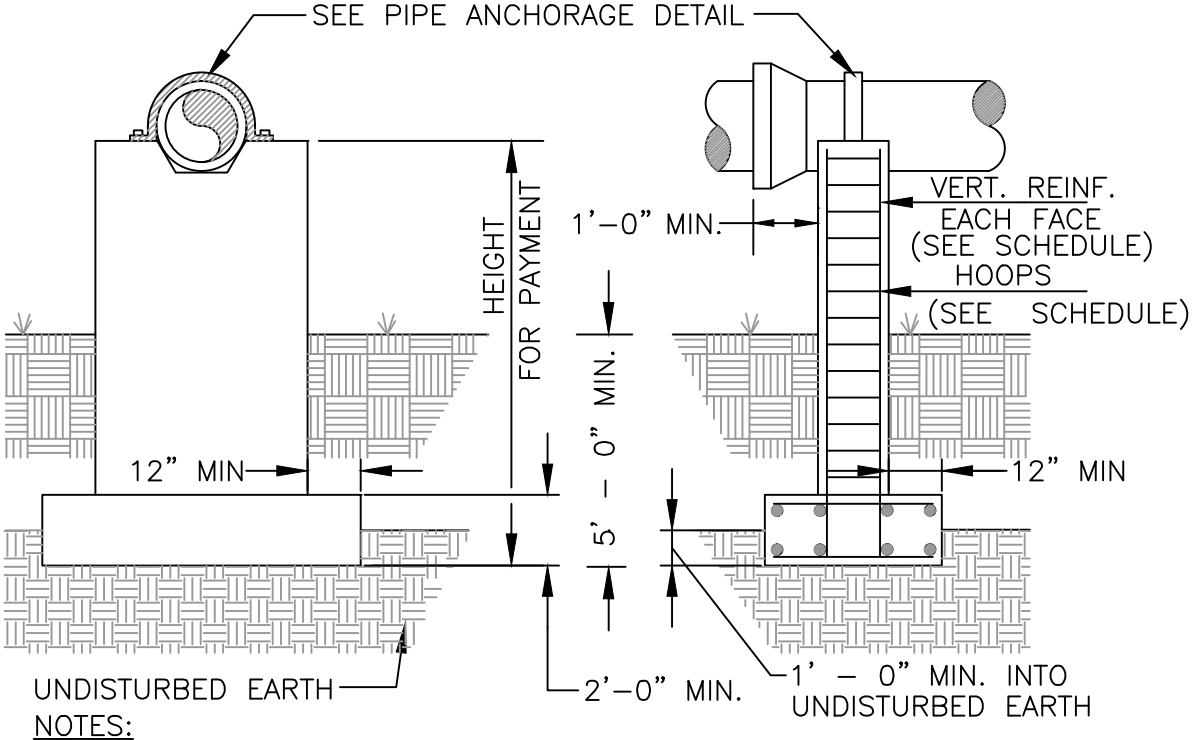
1. USE 8" COMPACTED GRADED AGGREGATE BASE FOR REPLACEMENT AT GRAVEL DRIVES.
2. FOR TYPE IV PAVEMENT REPLACEMENT, 2" LEVEL "A" SUPERPAVE SHALL EXTEND TO LIMITS AS DIRECTED BY THE CITY.
3. FOR ASPHALT COUNTY ROADS, ALL TYPE I PATCHES SHALL BE DYED BLACK TO MATCH EXISTING SURFACE, UNLESS OTHERWISE DIRECTED BY THE CITY.
4. FOR ALL ASPHALT ROADS, BITUMINOUS TACK SHALL BE PLACED BETWEEN ALL NEW AND EXISTING ASPHALT LAYERS, AND BITUMINOUS PRIMER SHALL BE PLACED BETWEEN ALL GAB AND NEW ASPHALT.
5. USE BITUMINOUS PRIMER ON ALL EXISTING ASPHALT EDGES.

PAVEMENT REPLACEMENT DETAILS

SD G2

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PAVEMENT REPLACEMENT DETAILS	
DATE: JAN 2013	SD-G2



NOTES:

1. FOOTING REINF. SAME AS VERT. REINF. EA. WAY TOP & BOTTOM

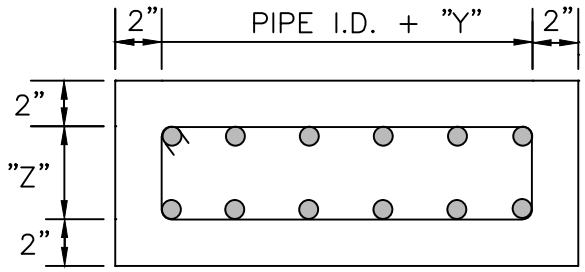
FOUNDATION IN EARTH

CONCRETE PIER DETAIL

SD G3A

SCALE: NTS

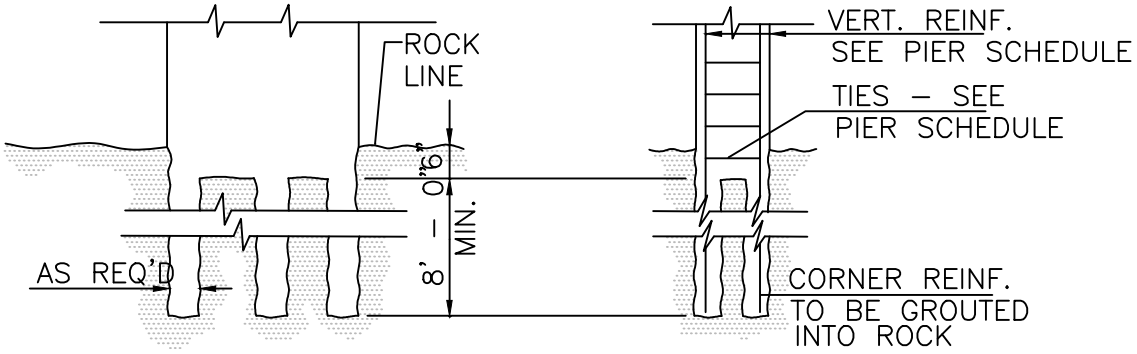
CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
CONCRETE PIER DETAILS	
DATE: JAN 2013	SD-G3A



PIER SECTION

PIPE ID	"Y"	"Z"	VERT. REINF. @12"O.C.	HOOPS @12"O.C.
8"–24"	24"	12"	#5	#3

PIER SCHEDULE



FOUNDATION IN ROCK

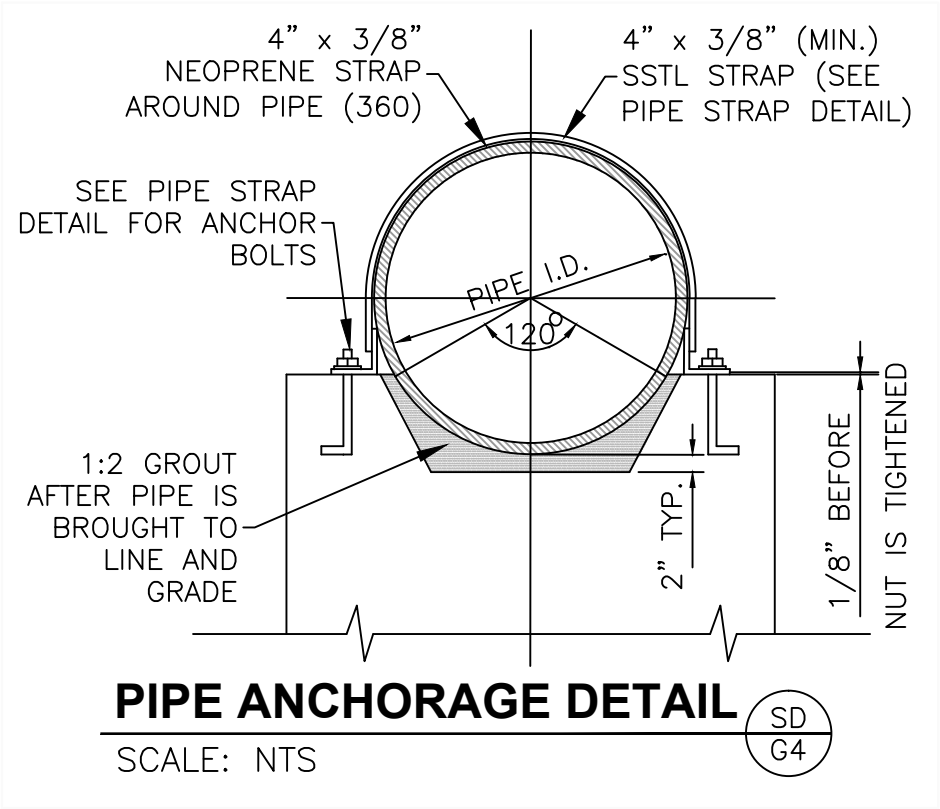
NOTES:
1. FOOTING REINF. SAME AS VERT. REINF. EA. WAY TOP & BOTTOM
2. WHEN BASE IS IN ROCK, OMIT FOOTING & GROUT VERT. CORNER BARS 8' INTO ROCK
3. THE ROCK ANCHOR SHALL BE EMBEDDED INTO ROCK DEVELOP THE FULL CAPACITY OF THE REBAR.

CONCRETE PIER DETAIL

SD G3B

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
CONCRETE PIER DETAILS	
DATE: JAN 2013	SD-G3B

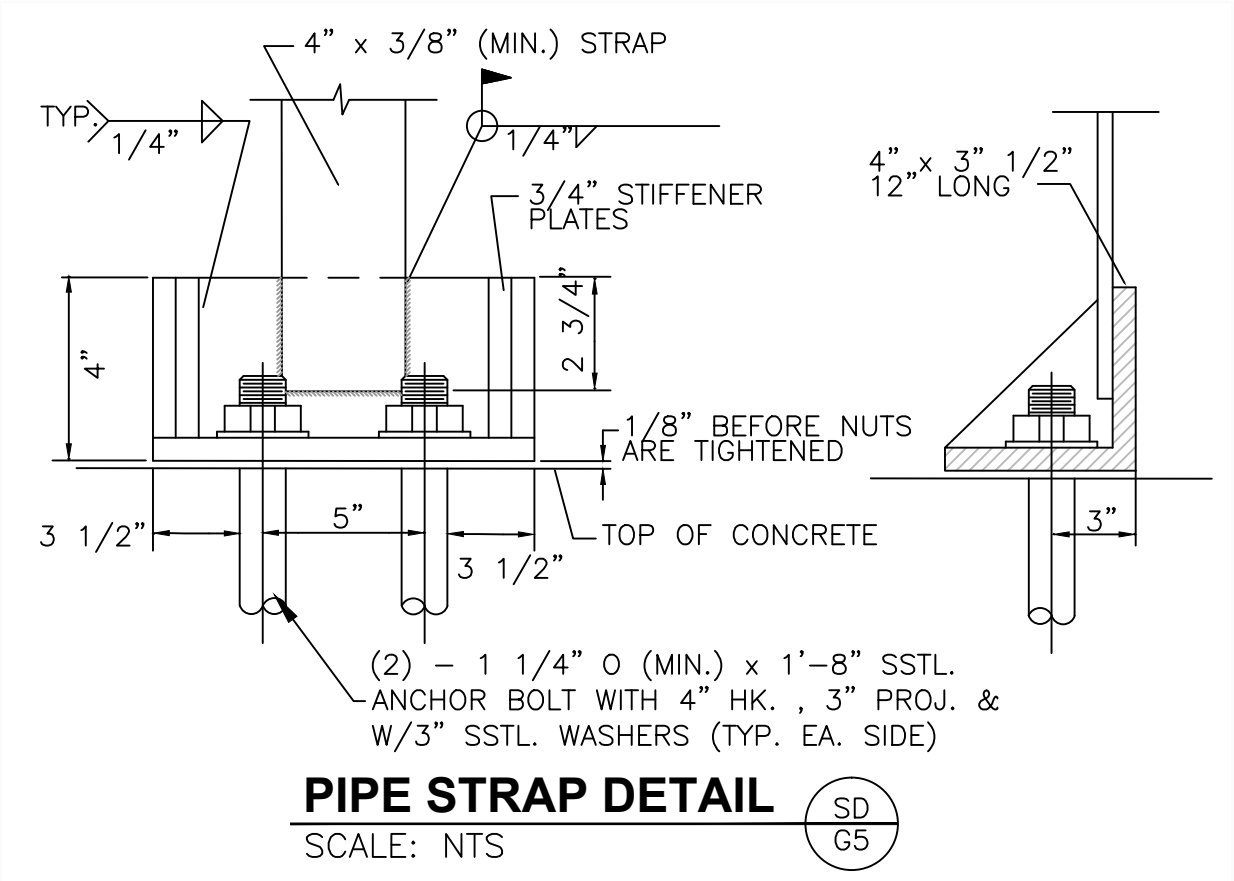


PIPE ANCHORAGE DETAIL

SD
G4

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PIPE ANCHORAGE DETAIL	
DATE: JAN 2013	SD-G4

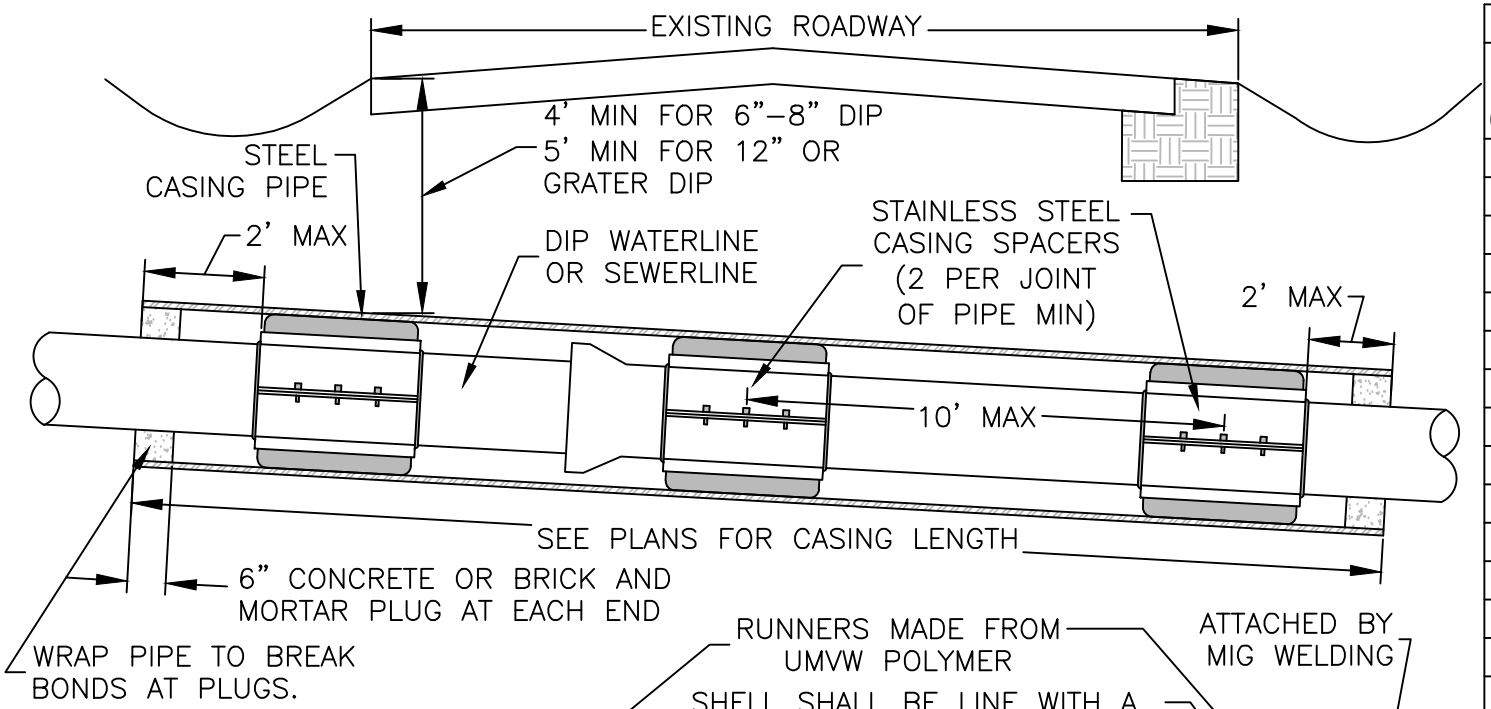


PIPE STRAP DETAIL

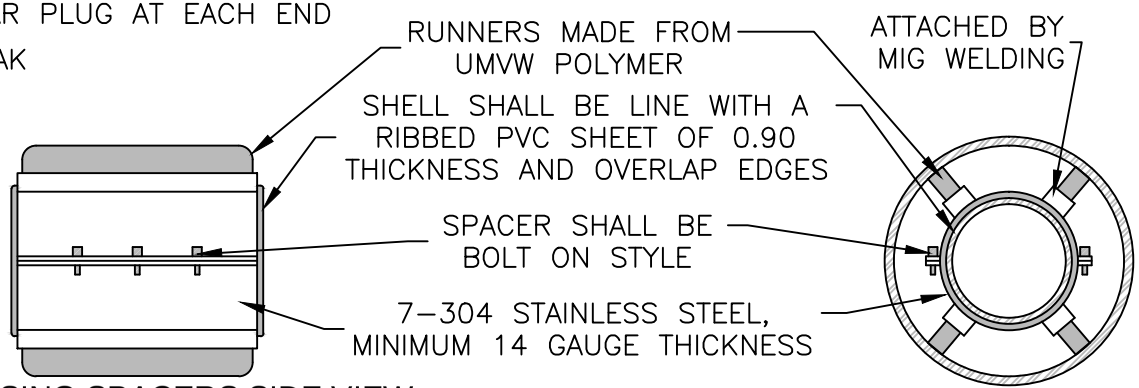
SCALE: NTS

SD G5

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PIPE STRAP DETAIL	
DATE: JAN 2013	SD-G5



UNDER ROADS/HIGHWAYS		
PIPE SIZE (INCHES)	CASING SIZE (INCHES)	WALL THICKNESS (INCHES)
6	12	0.250
8	16	0.250
12	18	0.250
16	24	0.250
18	30	0.312
20	30	0.312
24	36	0.375
30	42	0.375
36	42	0.500
UNDER RAILROADS		
6	14	0.250
8	18	0.250
12	22	0.312
16	30	0.406
18	30	0.406
20	32	0.469
24	36	0.625
30	42	0.625
36	42	0.625



CASING SPACERS SIDE VIEW

CASING SPACERS END VIEW

NOTES:

1. STEEL CASING PIPE SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM A 139, GRADE B AND BE NEW AND UN USED
2. PUSH OR PULL THE WATERLINE THROUGH THE CASING SO THAT THE WATERLINE JOINTS ARE ALWAYS COMPRESSED.
3. CASING SPACERS SHALL BE MODEL CCS BY CASCADE WATERWORKS MANUFACTURING COMPANY OR APPROVED EQUIVALENT
4. JOINTS IN THE STEEL CASING SHALL BE FULLY WELDED.
5. SEE CITY OF GAINESVILLE STANDARD SPECIFICATIONS FOR FURTHER DETAIL

JACK AND BORE DETAIL

SCALE: NTS

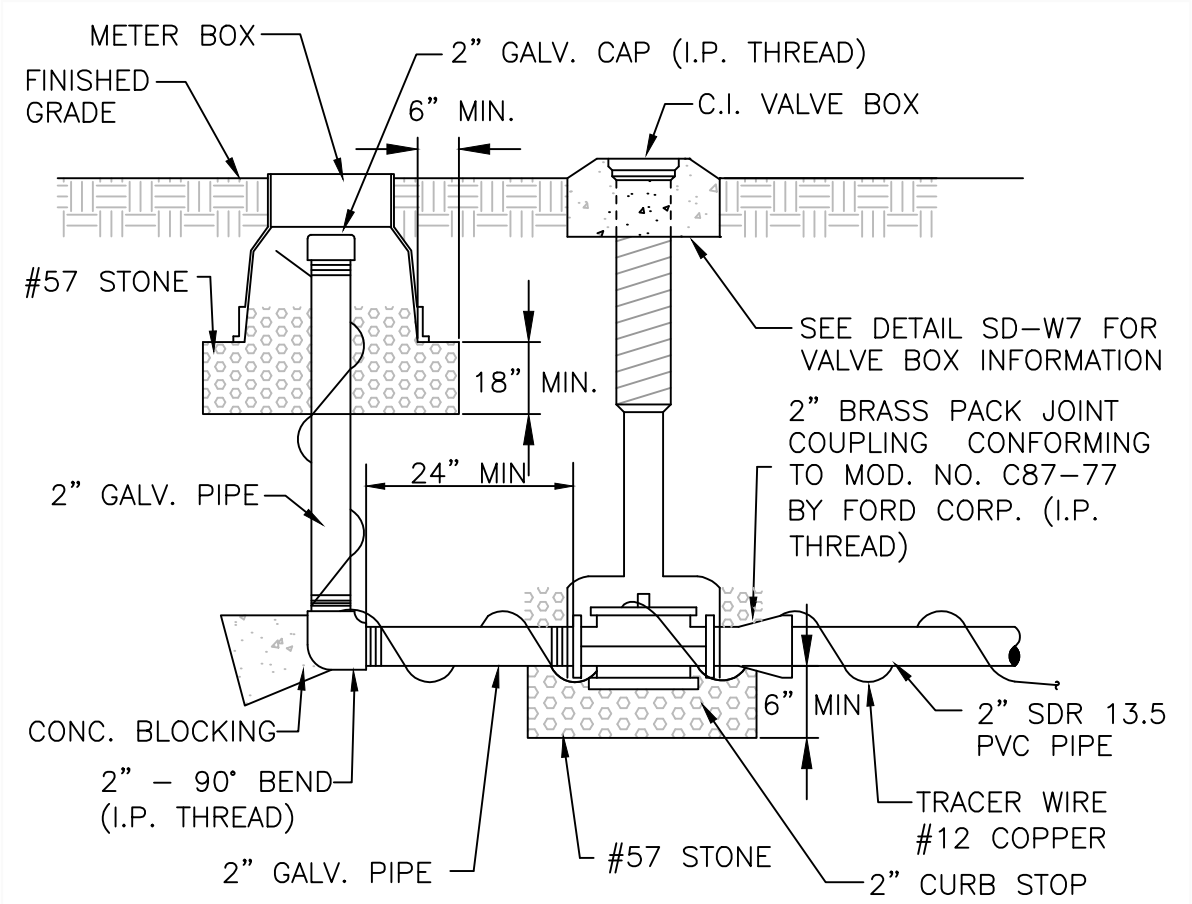
SD / G6

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES

JACK AND BORE DETAIL

DATE: JAN 2013

SD - G6



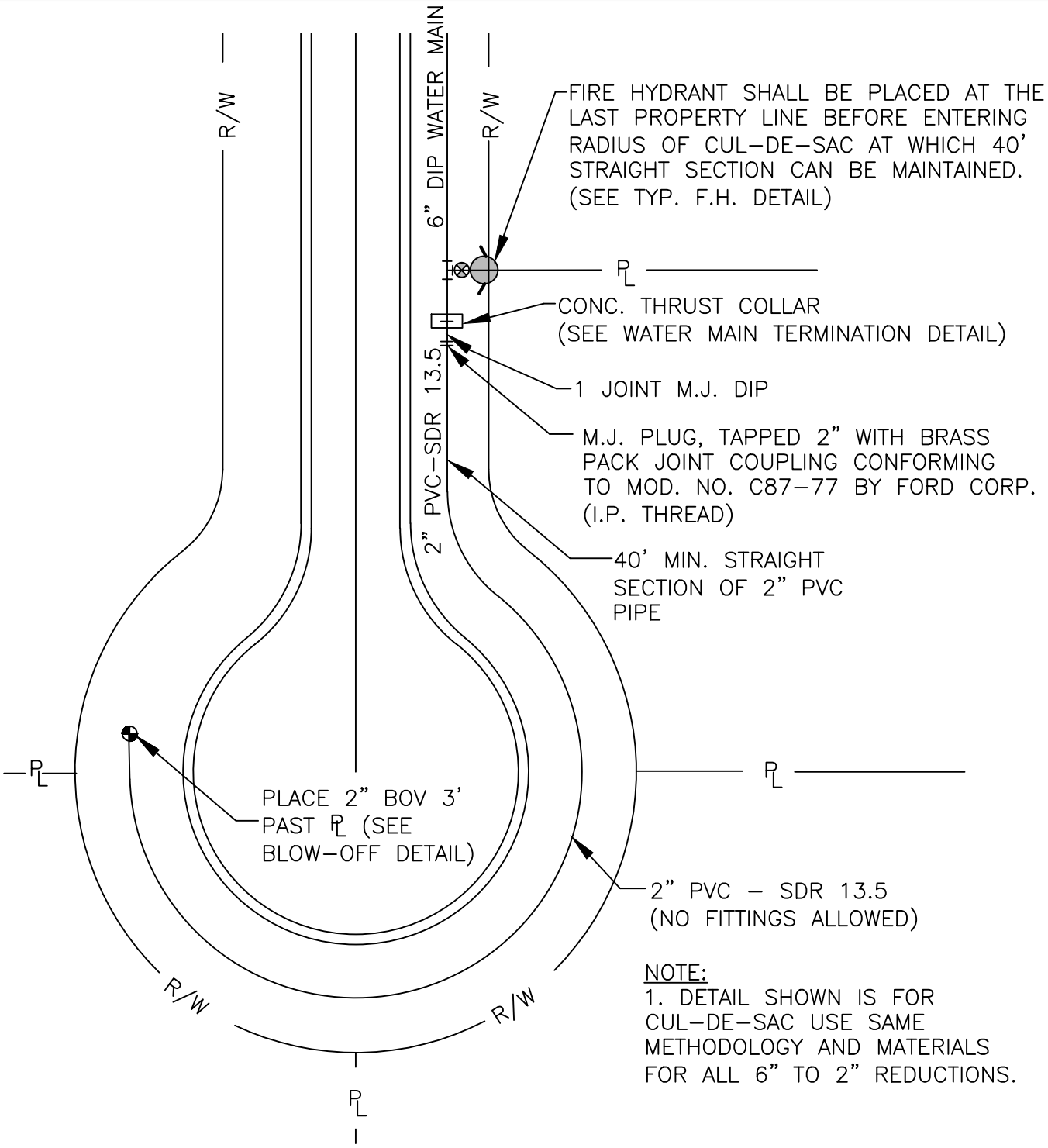
NOTE:
TRACER WIRE SHALL RUN FROM BLOW–OFF PIPE TO FIRE HYDRANT AND BE ATTACHED AS DIRECTED BY INSPECTOR.

BLOW - OFF DETAIL

SD W1

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
BLOW - OFF DETAIL	
DATE: JAN 2013	SD - W1

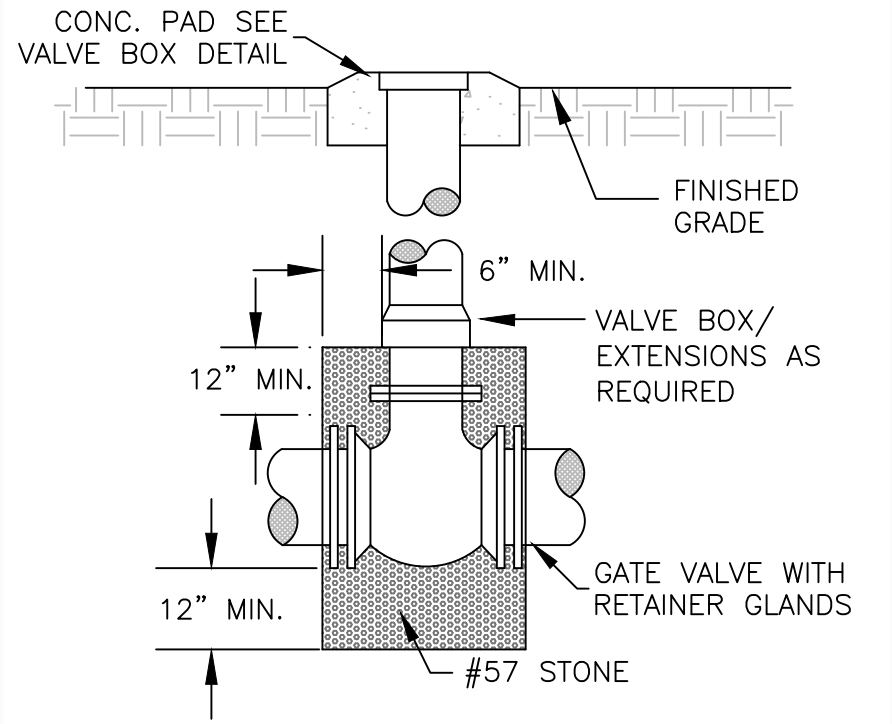


STANDARD 6" TO 2" REDUCTION DETAIL

SCALE: NTS

SD W2

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
STANDARD 6" TO 2" REDUCTION DETAIL	
DATE: JAN 2013	SD - W2

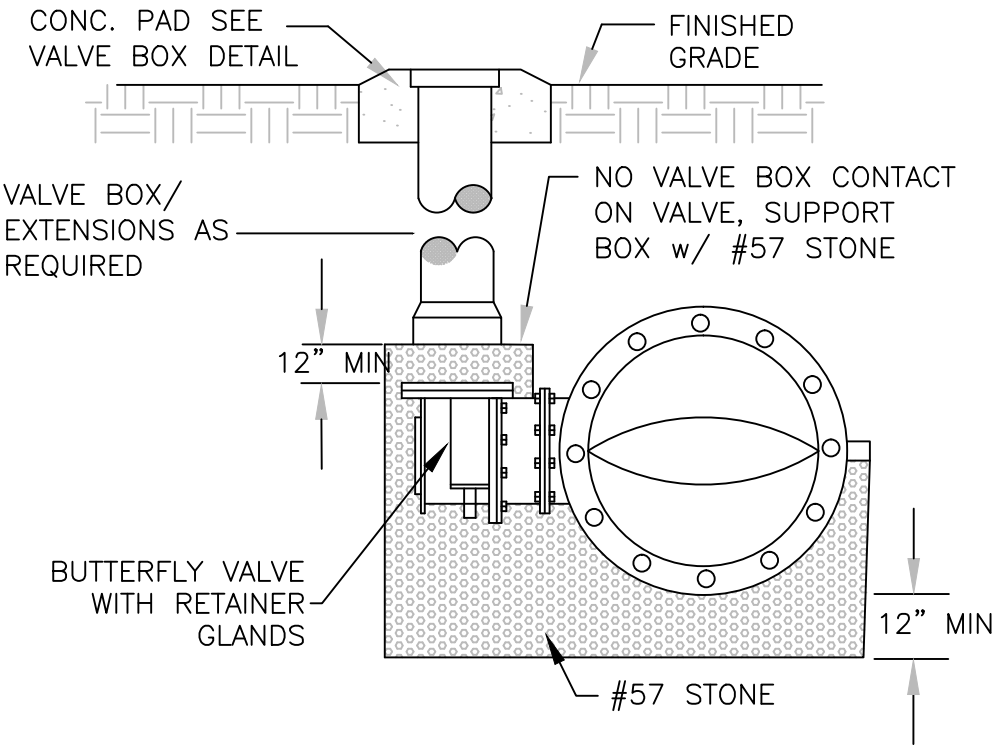


GATE VALVE INSTALLATION DETAIL

SCALE: NTS

SD W3

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
GATE VALVE INSTALLATION DETAIL	
DATE: JAN 2013	SD - W3

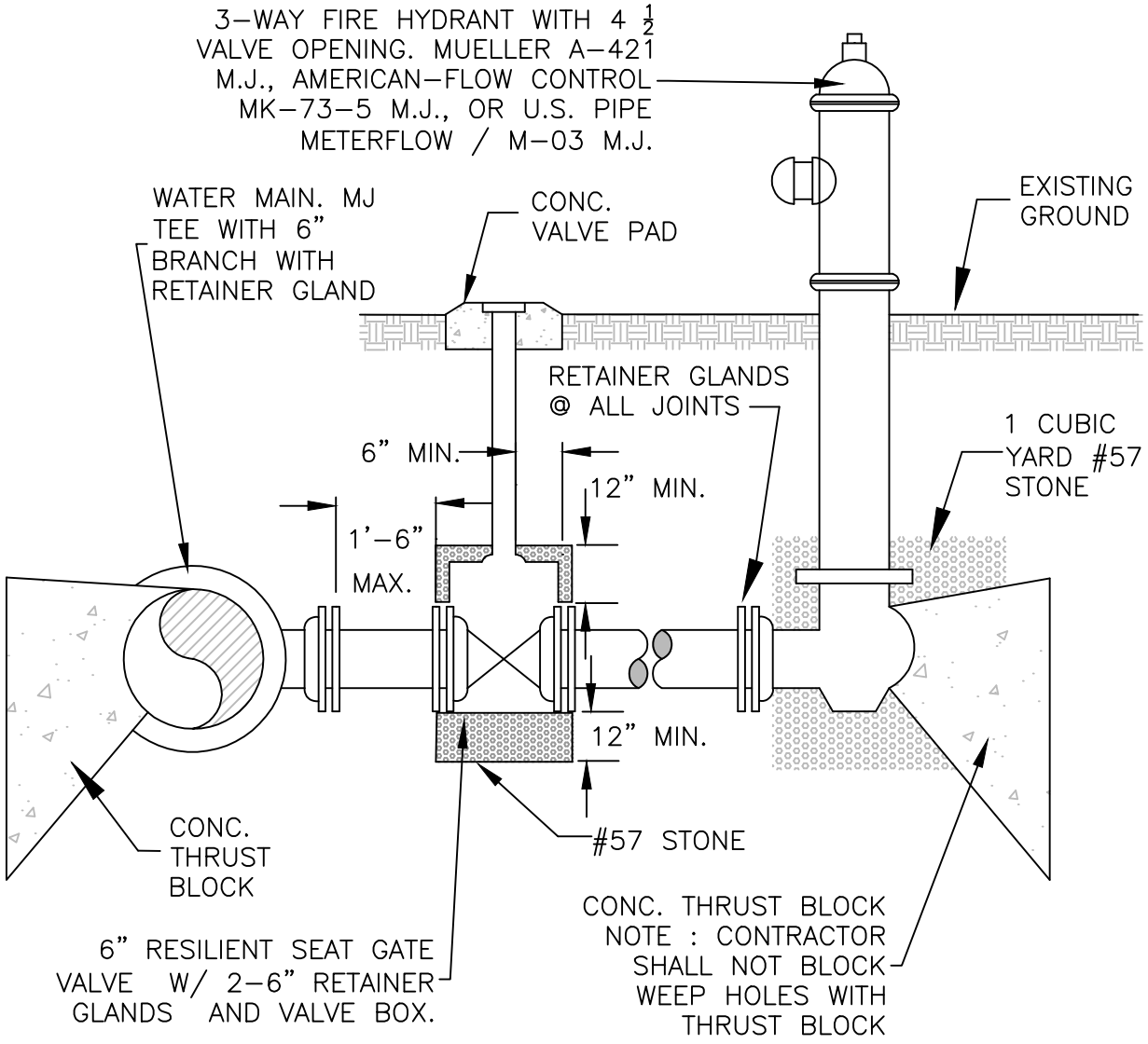


BUTTERFLY VALVE INSTALLATION DETAIL

SCALE: NTS

SD W4

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
BUTTERFLY VALVE INSTALLATION DETAIL	
DATE: JAN 2013	SD - W4



NOTES:

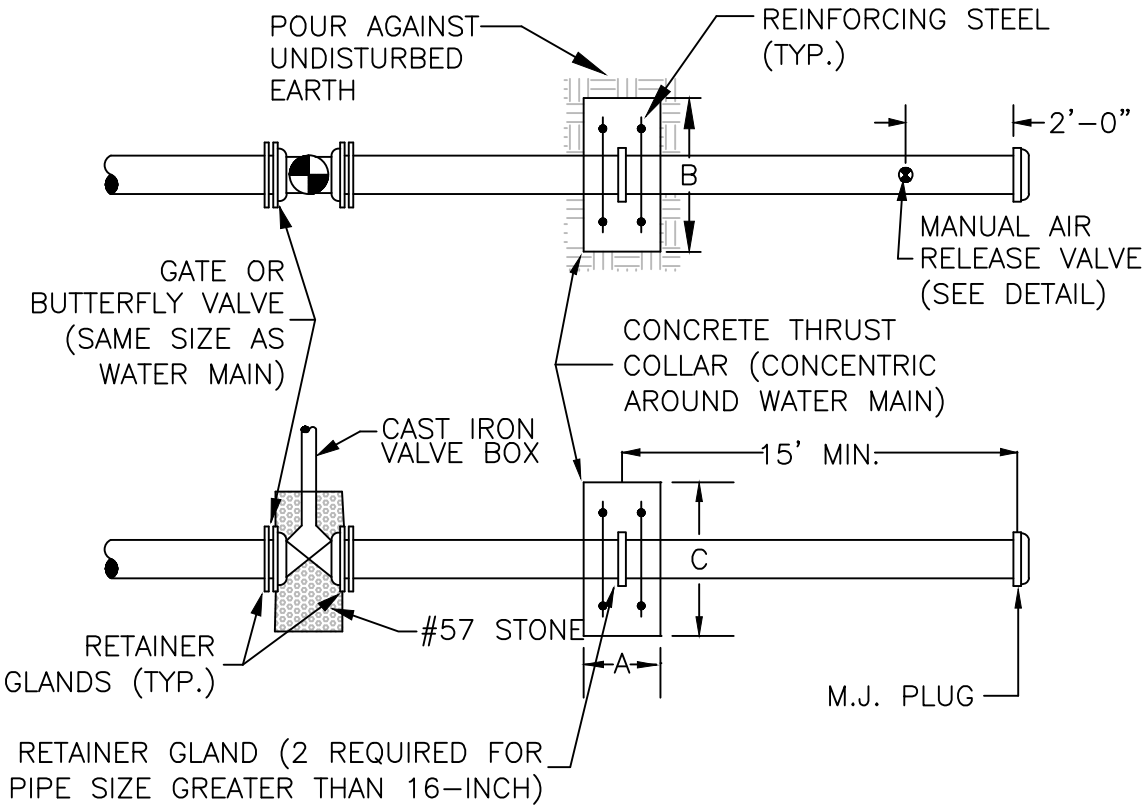
IF SOIL CONDITIONS ARE SUCH THAT CONCRETE BLOCKING IS NOT EFFECTIVE, THE CONTRACTOR SHALL PROVIDE 2 – ¾" HARNESS RODS BETWEEN THE TEE AND GATE VALVE AND BETWEEN THE GATE VALVE AND FIRE HYDRANT IN ADDITION TO RESTRAINT SHOWN. ANCHOR COUPLINGS IN LIEU OF RETAINER GLANDS AND HARNESS RODS ARE ACCEPTABLE.

TYPICAL FIRE HYDRANT DETAIL

SD W5

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
TYPICAL FIRE HYDRANT DETAIL	
DATE: JAN 2013	SD - W5



MAIN DIAMETER	CONC. COLLAR DIM.			STEEL REINFORCING
	A	B	C	
20"	1'-6"	7'-8"	7'-8"	#9 @ 12" O.C. E.W.E.F.
16"	1'-3"	6'-6"	6'-6"	#8 @ 12" O.C. E.W.E.F.
12"	1'-2"	5'-3"	5'-3"	#7 @ 12" O.C. E.W.E.F.
6" OR 8"	1'-0"	4'-0"	4'-0"	#6 @ 12" O.C. E.W.E.F.
TEST PRESSURE: 250 PSI SOIL BEARING PRESSURE: 3000 PSF				

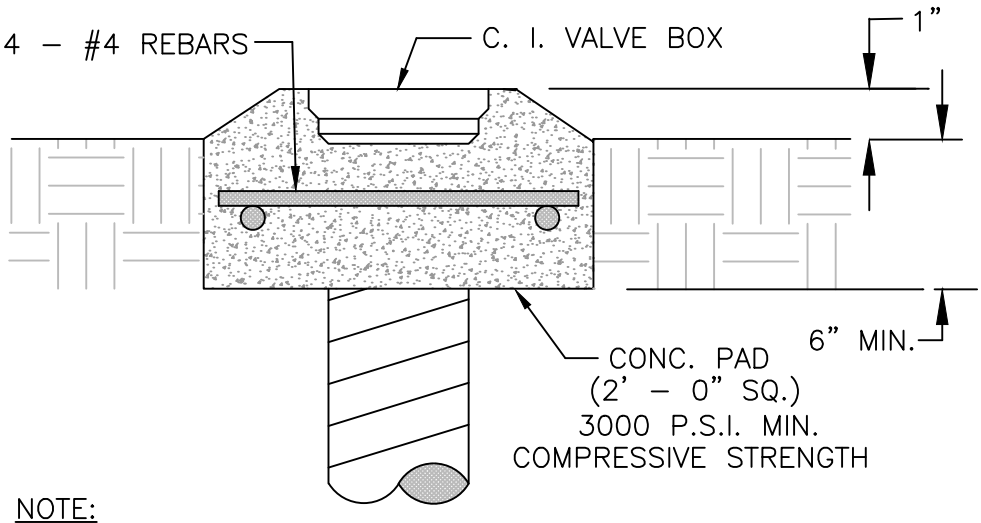
NOTE: FOR USE WHERE FUTURE WATER MAIN EXTENSION IS REQUIRED.

WATER MAIN TERMINATION DETAIL

SCALE: NTS

SD W6

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
WATER MAIN TERMINATION DETAIL	
DATE: JAN 2013	SD - W6



NOTE:

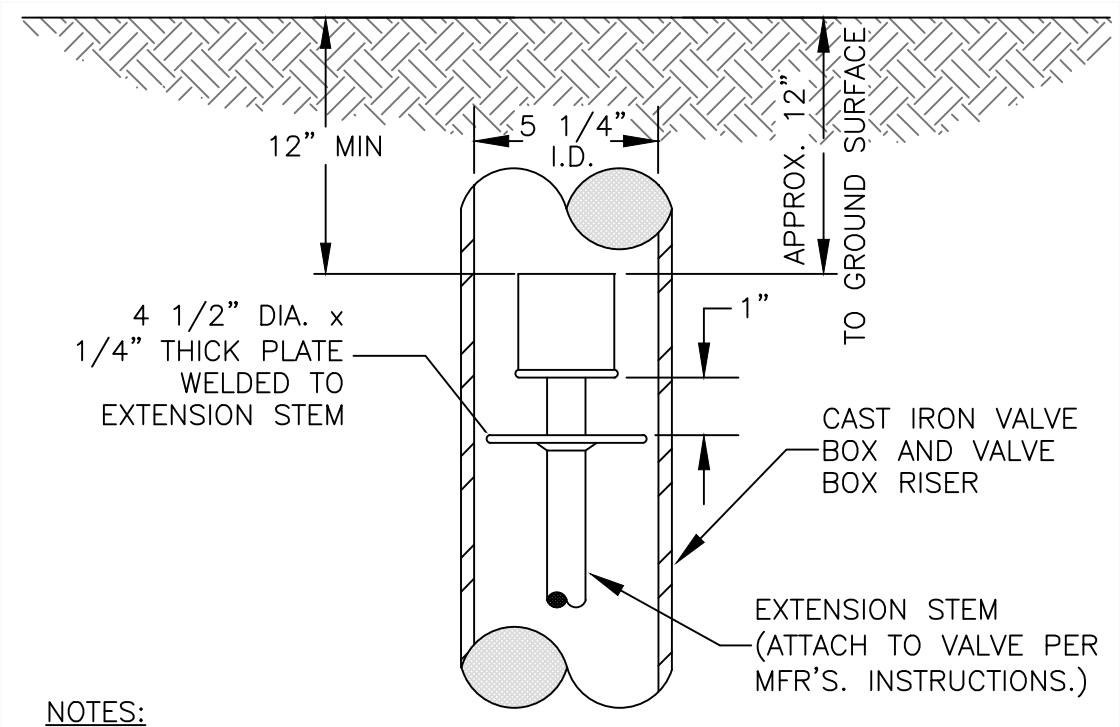
1. IF PRECAST CONCRETE PAD IS FURNISHED, CONTRACTOR SHALL INSTALL APPROVED GROUT BETWEEN VALVE BOX AND PAD.

VALVE BOX PAD DETAIL

SCALE: NTS

SD W7

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
VALVE BOX PAD DETAIL	
DATE: JAN 2013	SD - W7



NOTES:

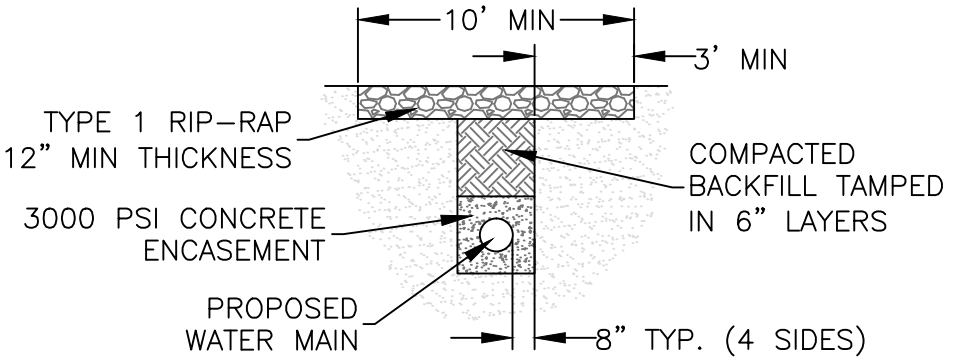
1. VALVE EXTENSION STEM IS REQUIRED IF VALVE OPERATING NUT CANNOT BE OPERATED WITH A 5' VALVE WRENCH.
2. EXTENSION STEM SHALL BRING THE OPERATING NUT TO WITHIN 12–INCHES OF GROUND SURFACE.

EXTENSION STEM DETAIL

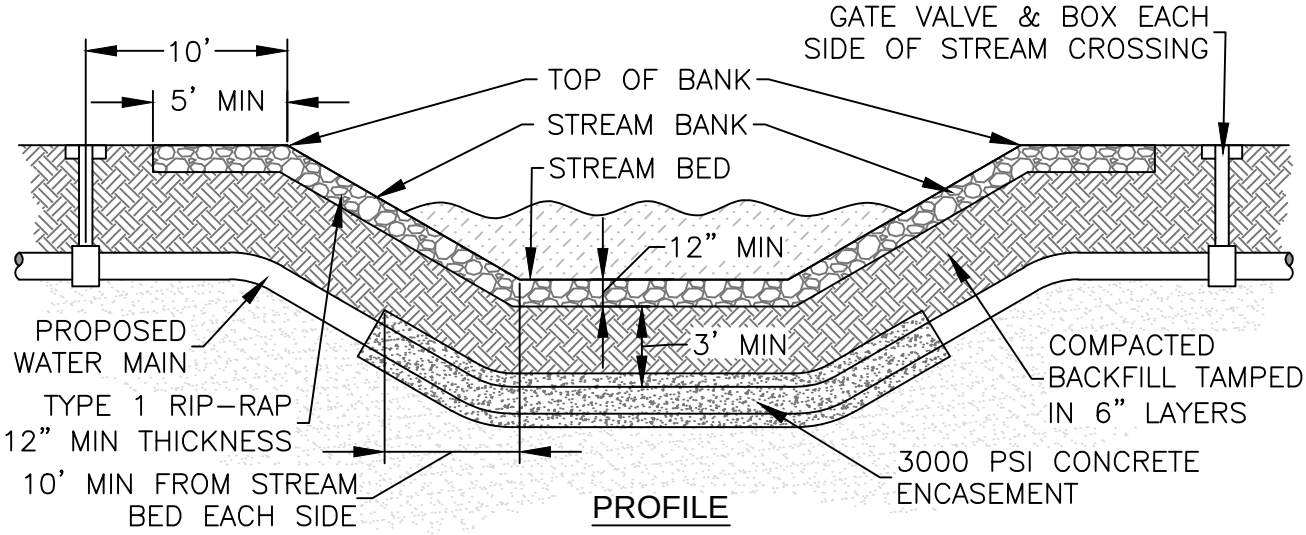
SD W8

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
EXTENSION STEM DETAIL	
DATE: JAN 2013	SD - W8



CROSS SECTION



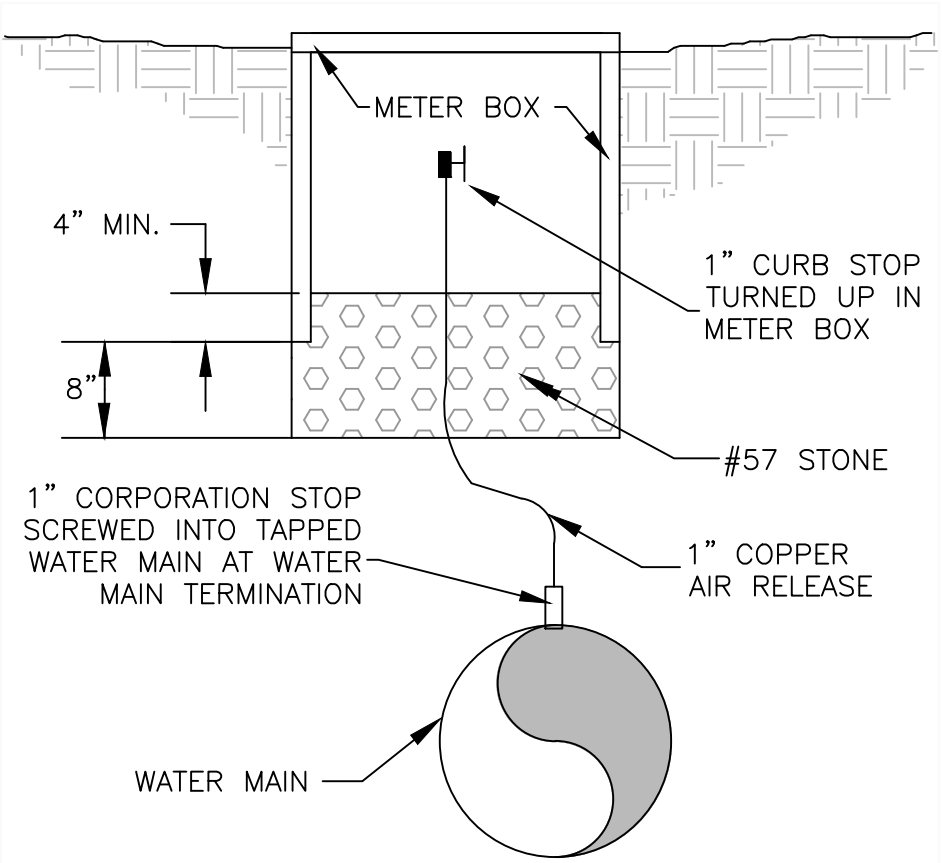
PROFILE

WATER MAIN STREAM CROSSING DETAIL

SD
W9

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
WATER MAIN STREAM CROSSING DETAIL	
DATE: JAN 2013	SD - W9



MANUAL AIR RELEASE VALVE DETAIL

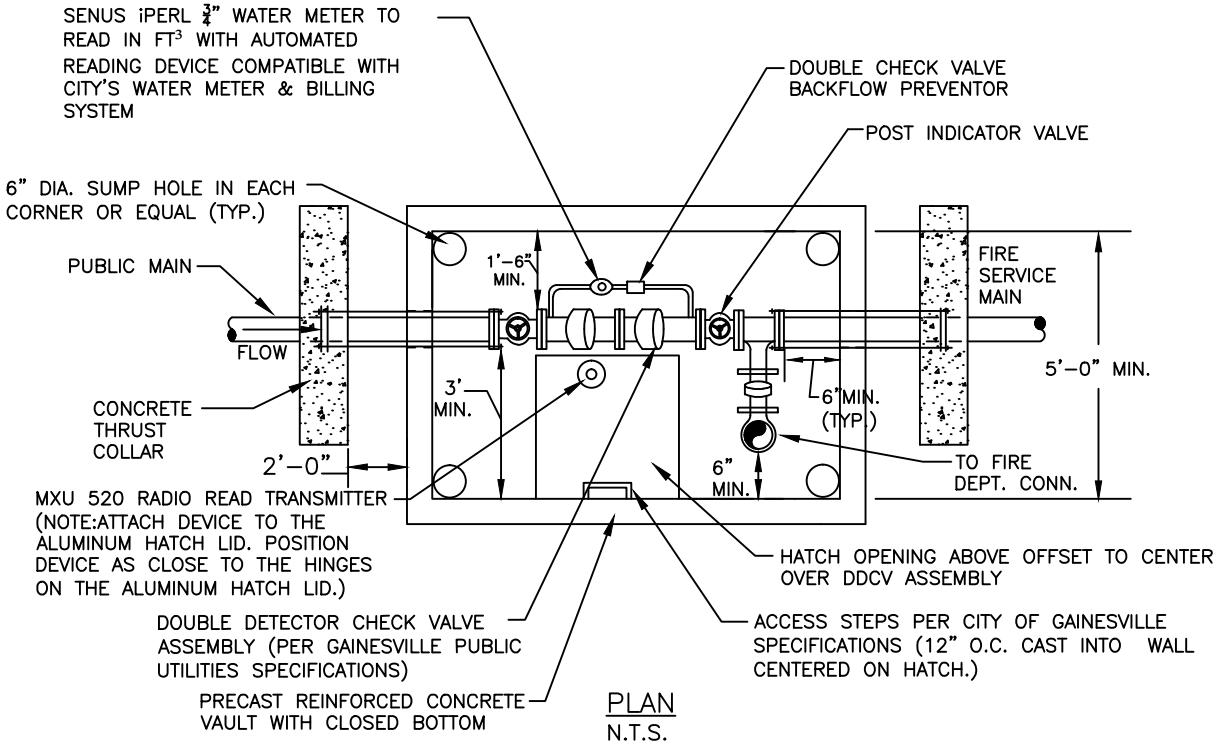
SCALE: NTS

SD W10

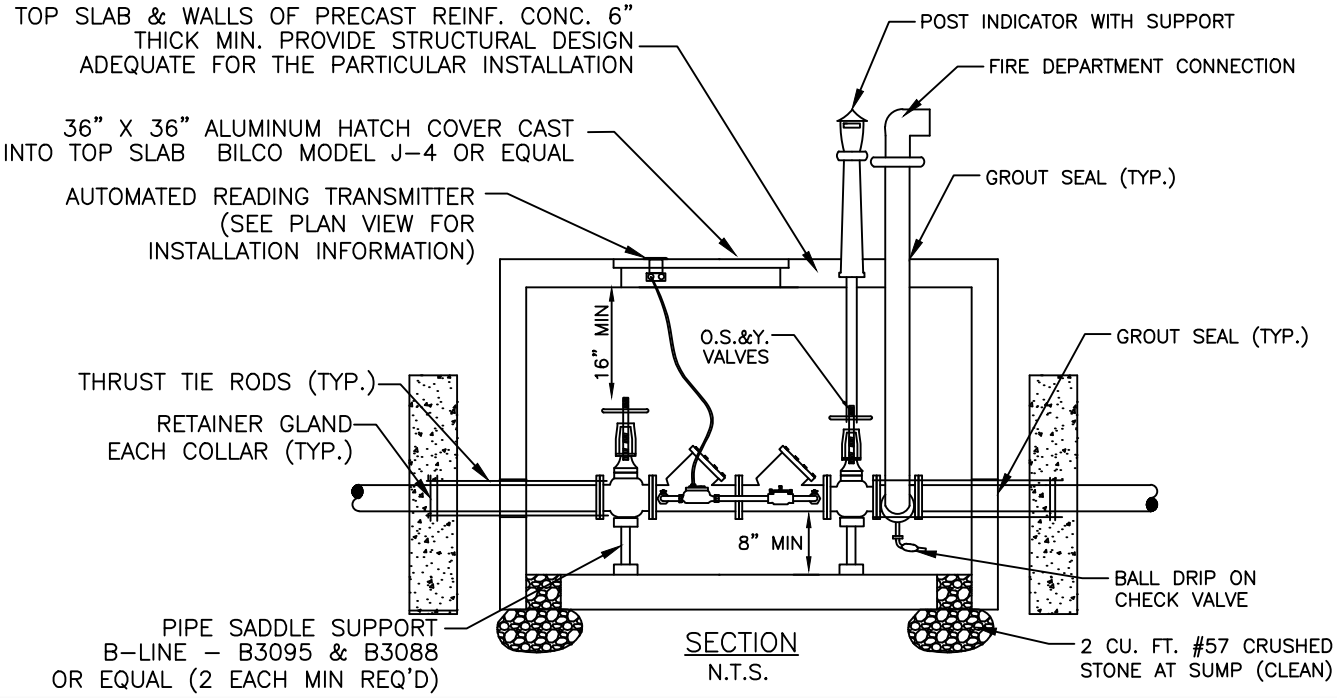
CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
MANUAL AIR RELEASE VALVE	
DATE: JAN 2013	SD - W10

TYPICAL FIRE SERVICE VAULT DETAIL

N.T.S.



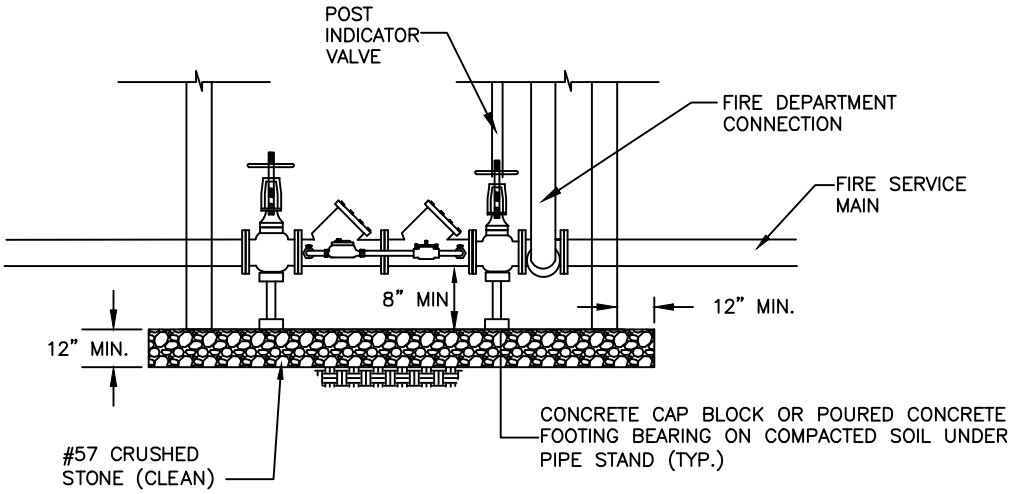
PLAN
N.T.S.



SECTION
N.T.S.

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
TYPICAL FIRE VAULT DETAIL (1 OF 2)	
DATE: JAN 2013	SD-W11A

TYPICAL FIRE SERVICE OPEN BOTTOM VAULT DETAIL

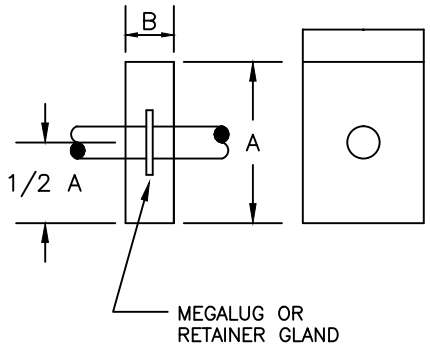


SECTION
N.T.S.

FOR PIPE SIZES 2 1/2" TO 10"

TEST PRESSURE 250 PSI SOIL

BEARING PRESSURE : 2000 PSF



MAIN SIZE	DIMENSION		REINF.
	A	B	
2 1/2"	2'–0"	0'–8"	#4@12' EWEF
3"	2'–0"	0'–8"	#4@12' EWEF
4"	2'–6"	0'–10"	#4@8' EWEF
6"	4'–0"	1'–0"	#6@12' EWEF
8"	4'–0"	1'–0"	#6@12' EWEF
10"	5'–0"	1'–2"	#7@12' EWEF

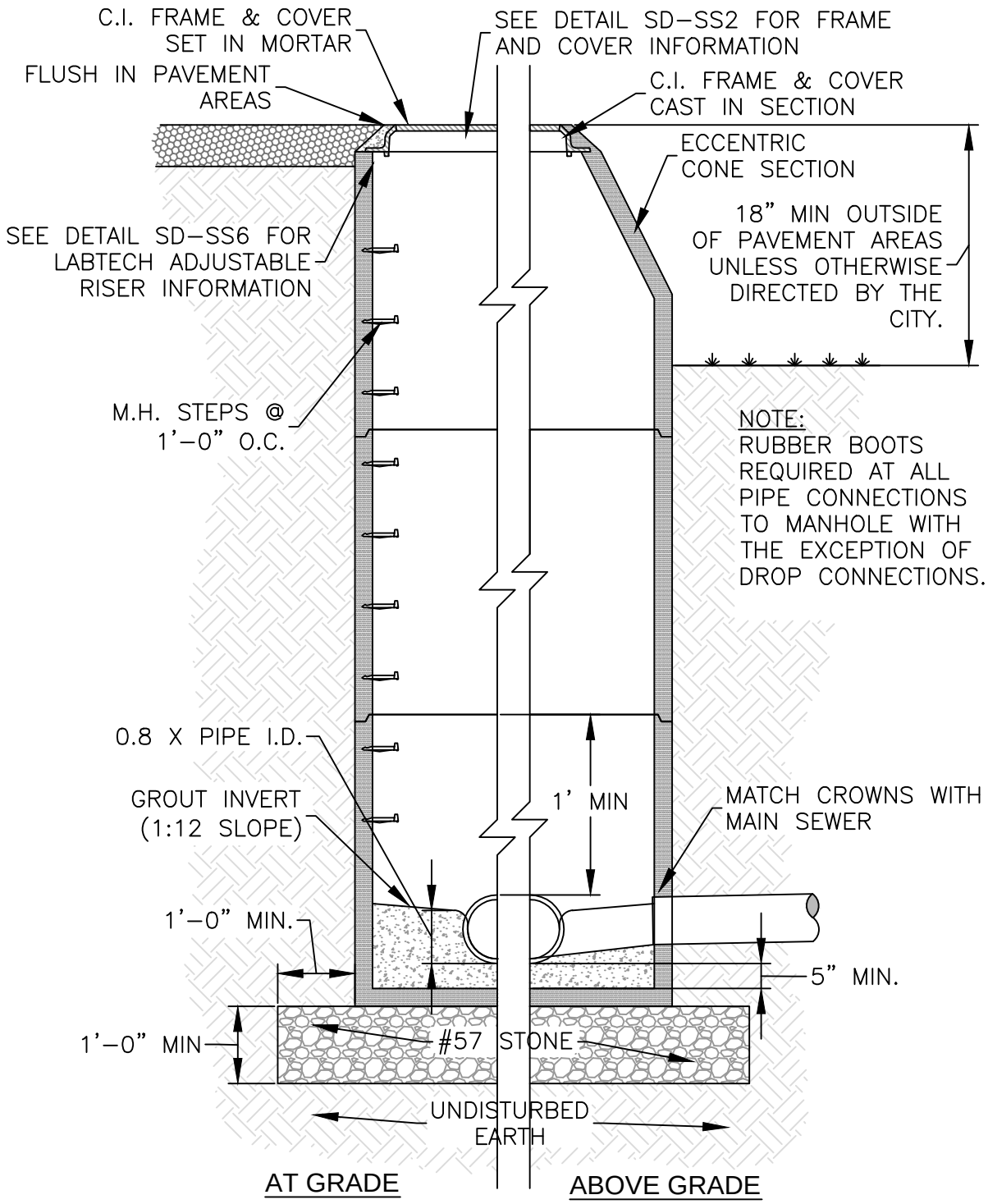
THRUST COLLAR DETAIL

N.T.S

NOTES:

1. DESIGN SHOWN IS FOR NON–TRAFFIC AREAS. PROVIDE STRUCTURAL DESIGN ADEQUATE FOR PARTICULAR INSTALLATION.
2. SUBGRADE UNDER STRUCTURE AND BACKFILL AROUND STRUCTURE AND THRUST COLLARS SHALL BE COMPACTED TO 95% MAX. DRY DENSITY.

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
TYPICAL FIRE VAULT DETAIL (2 OF 2)	
DATE: JAN 2013	SD-W11B

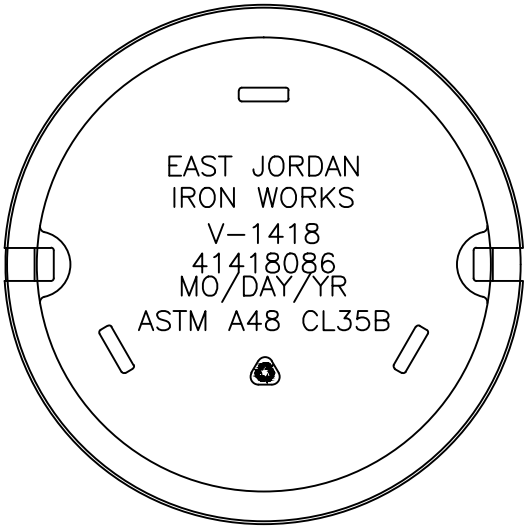


PRECAST CONCRETE MANHOLE DETAIL

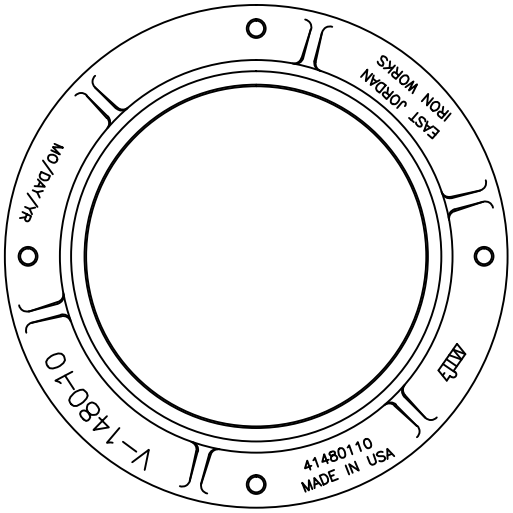
SD SS1

SCALE: NTS

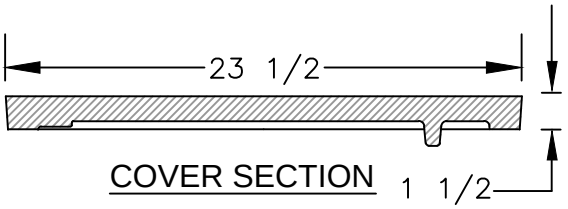
CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PRECAST CONCRETE MANHOLE DETAIL	
DATE: JAN 2013	SD - SS1



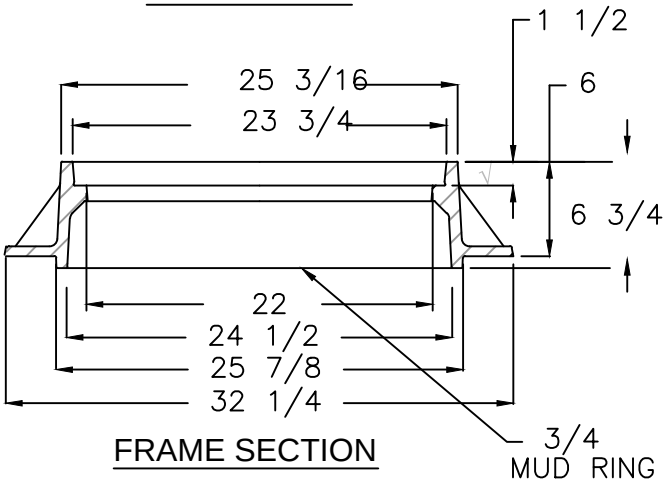
COVER BACK



FRAME PLAN

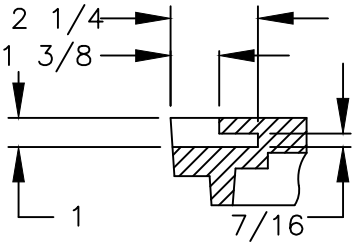


COVER SECTION



FRAME SECTION

COVER FACE



(2) TYPE TWO NON–PENETRATING PICKHOLES

NOTES:

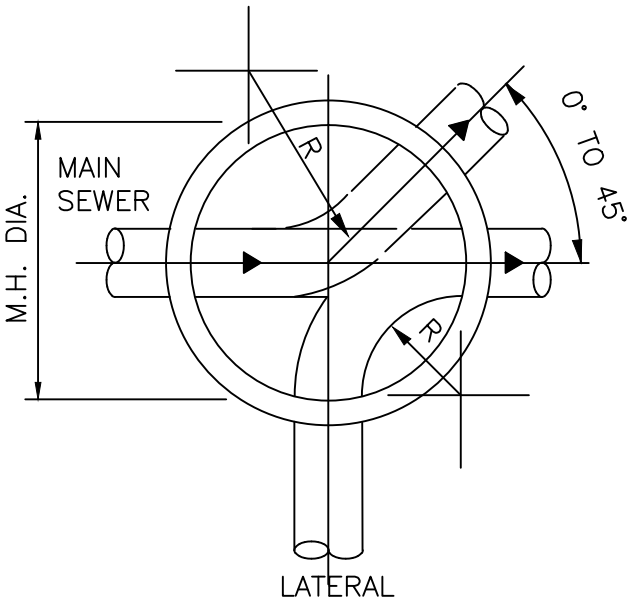
1. COVER SHALL BE V–1418 (SHOWN), U.S. FOUNDRY 362, OR APPROVED EQUAL.
2. ALL DIMENSIONS ARE IN INCHES.

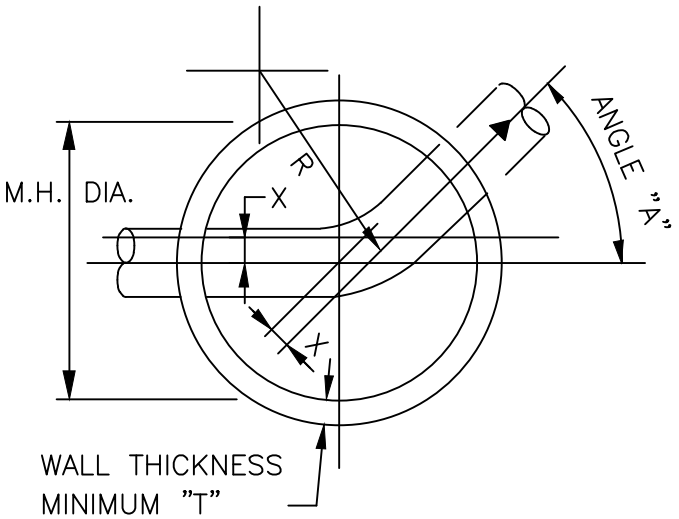
MANHOLE FRAME AND COVER DETAIL

SD SS2

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
MANHOLE FRAME AND COVER DETAIL	
DATE: JAN 2013	SD - SS2





STANDARD MANHOLE SCHEDULE OF GOVERNING DIMENSIONS				
PIPE SIZE	ANGLE "A"	MH. DIA.	"T"	"X"
8" TO 12"	0° TO 90°	4'–0"	5"	0"
15" TO 18"	60° TO 90°	5'–0"	6"	6"
24" TO 36"	0° TO 90°	6'–0"	7"	0"

NOTE:

1. MINIMUM ℄ RADIUS (R) OF M.H. INVERT = 1.5 x PIPE DIAMETER

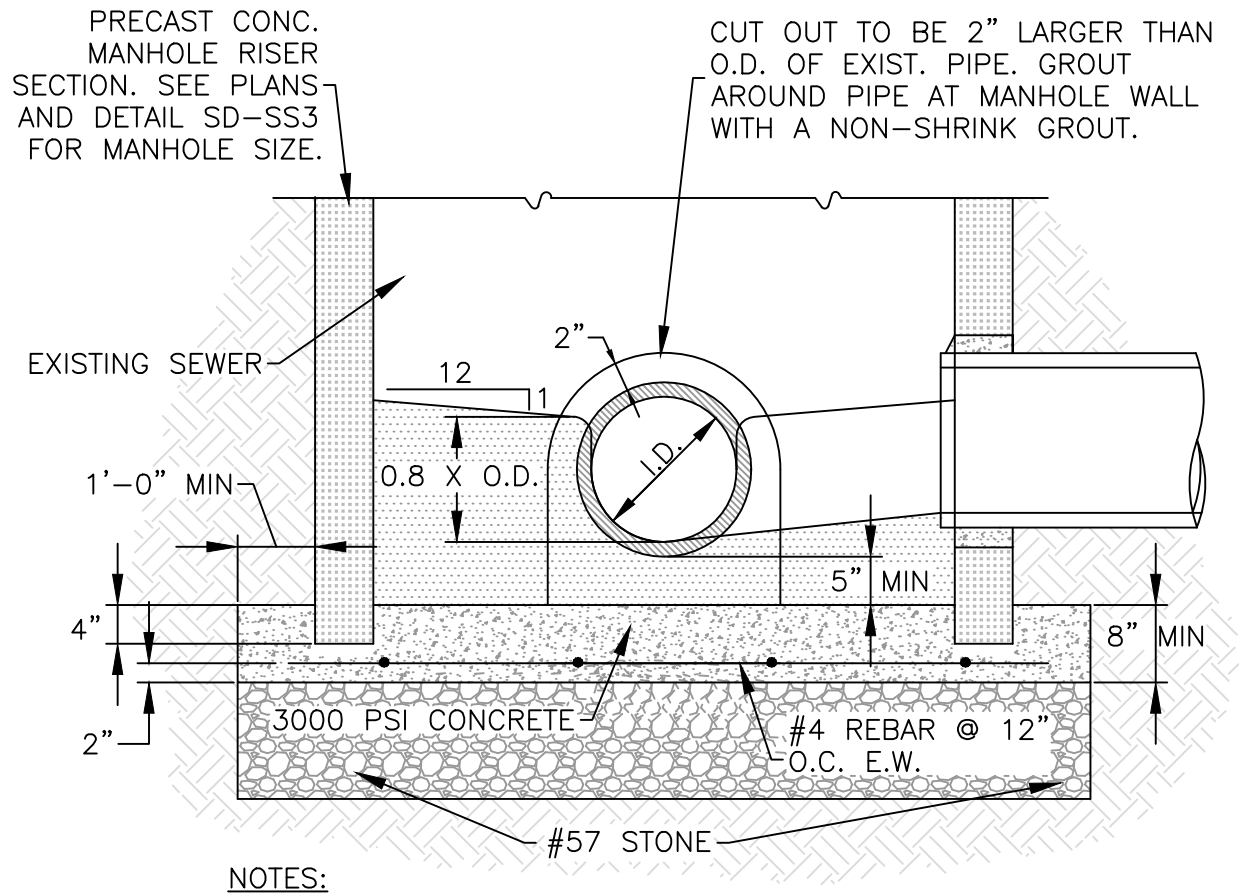
TYPICAL PLANS

STANDARD MANHOLE INVERT DETAIL

SD
SS3

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
STANDARD MANHOLE INVERT DETAIL	
DATE: JAN 2013	SD - SS3



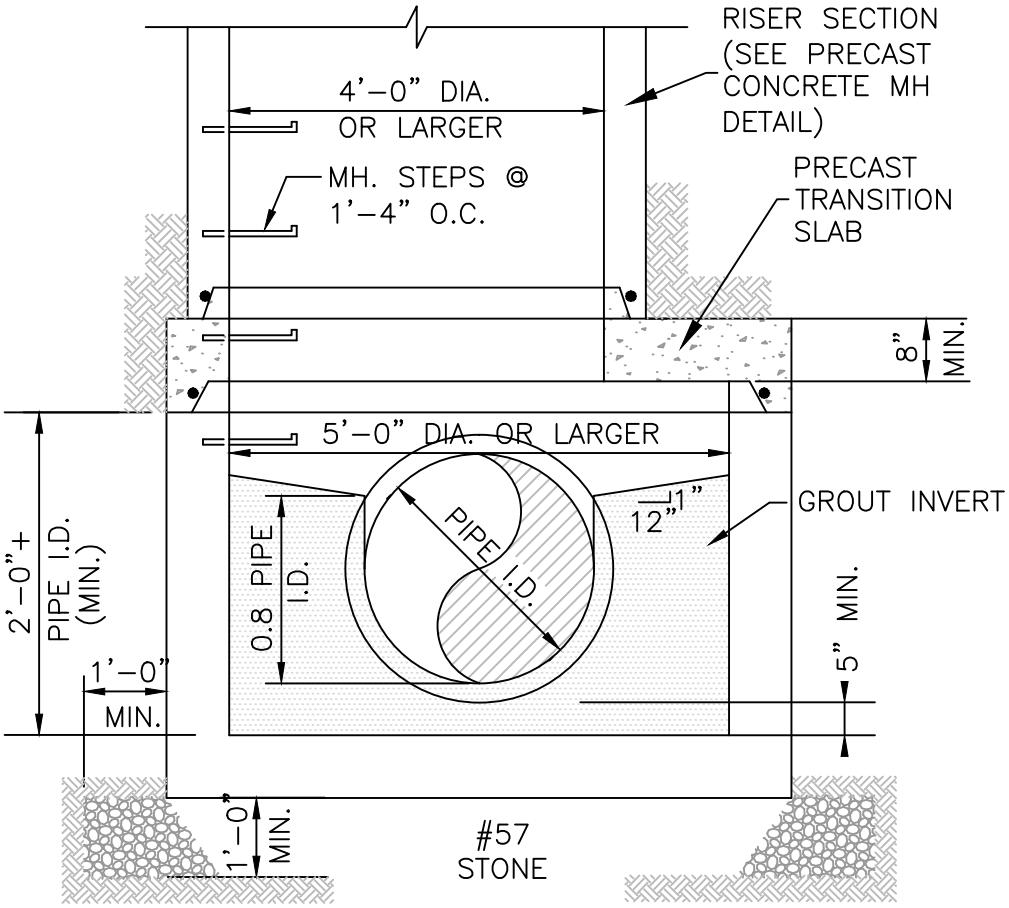
NOTES:
BRICK OR CEMENT BLOCK SHALL BE USED AS SPACERS TO SUPPORT PRECAST STRUCTURE PRIOR TO POURING CONCRETE.

PRECAST MANHOLE OVER EXISTING SEWER DETAIL

SCALE: NTS

SD
SS4

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PRECAST MANHOLE OVER EXISTING SEWER DETAIL	
DATE: JAN 2013	SD - SS4



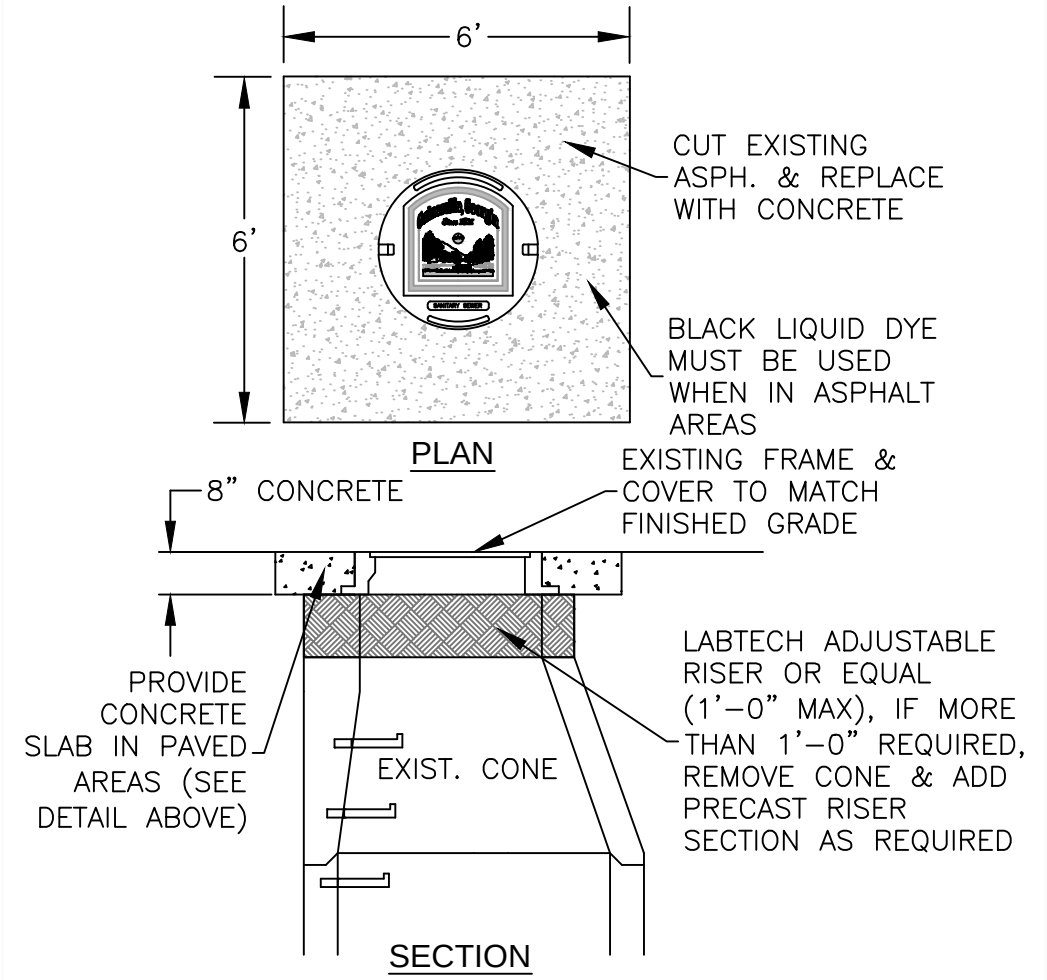
LOWER SECTION
5'-0" DIA. OR LARGER

PRECAST MANHOLE BASE DETAIL

SD
SS5

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
PRECAST MANHOLE BASE DETAIL	
DATE: JAN 2013	SD - SS5

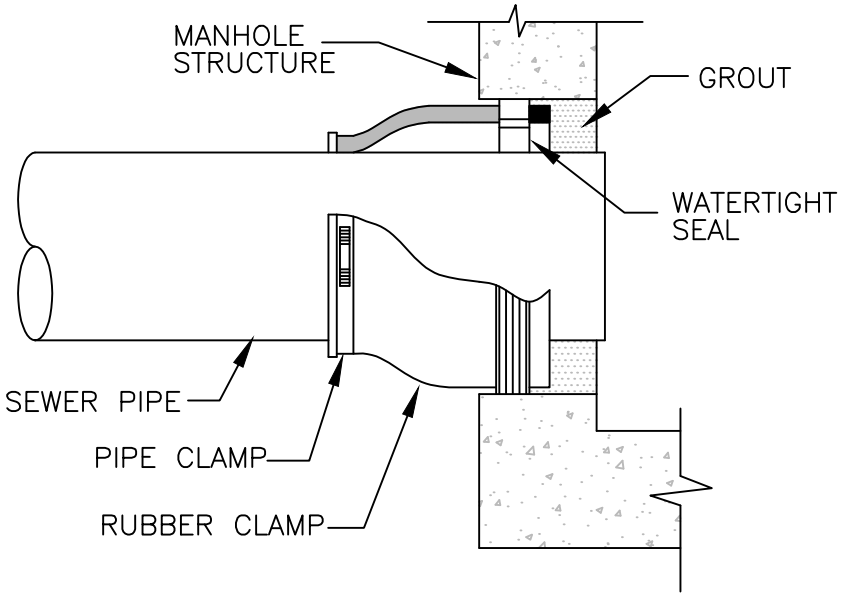


TYPICAL MANHOLE ADJUSTMENT DETAIL

SCALE: NTS

SD SS6

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
TYPICAL MANHOLE ADJUSTMENT DETAILS	
DATE: JAN 2013	SD - SS6

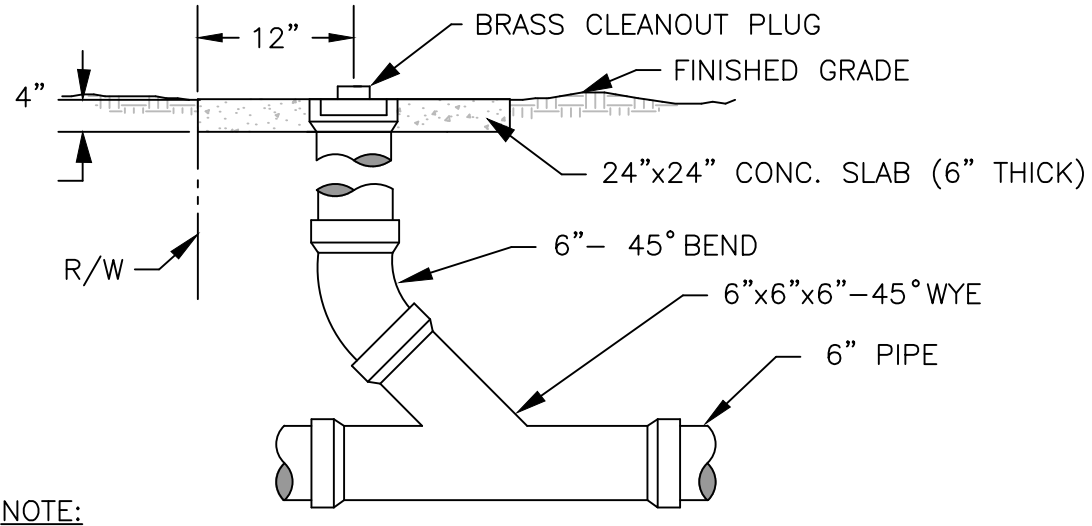


RUBBER BOOT DETAIL

SD
SS7

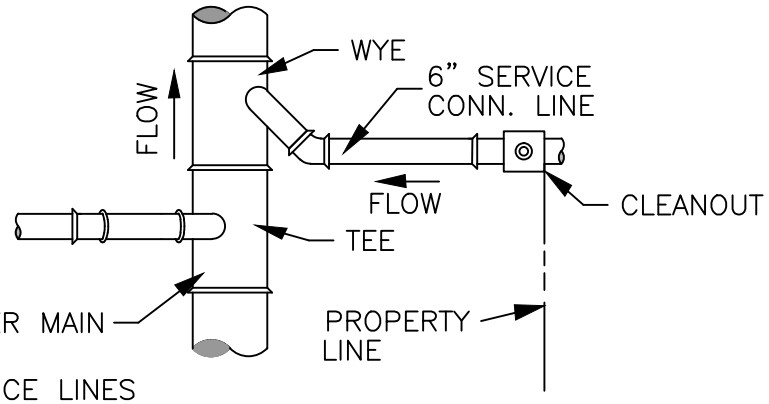
SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
RUBBER BOOT DETAIL	
DATE: JAN 2013	SD - SS7

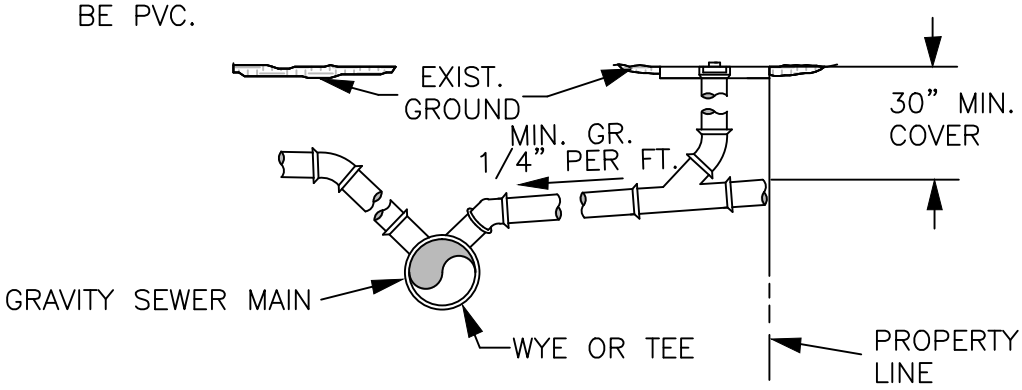


NOTE:

CLEANOUT WITH BRASS PLUG REQUIRED AT PROPERTY LINE, RIGHT OF WAY LINE, OR EASEMENT LINE AS APPLICABLE.



NOTE: ALL SERVICE LINES AND FITTINGS SHALL BE PVC.

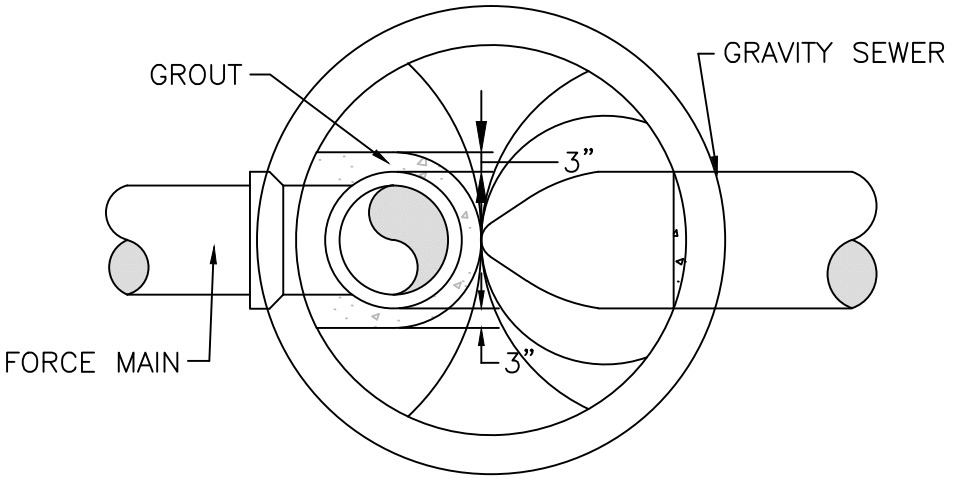


CLEAN OUT AND SERVICE CONNECTION DETAIL

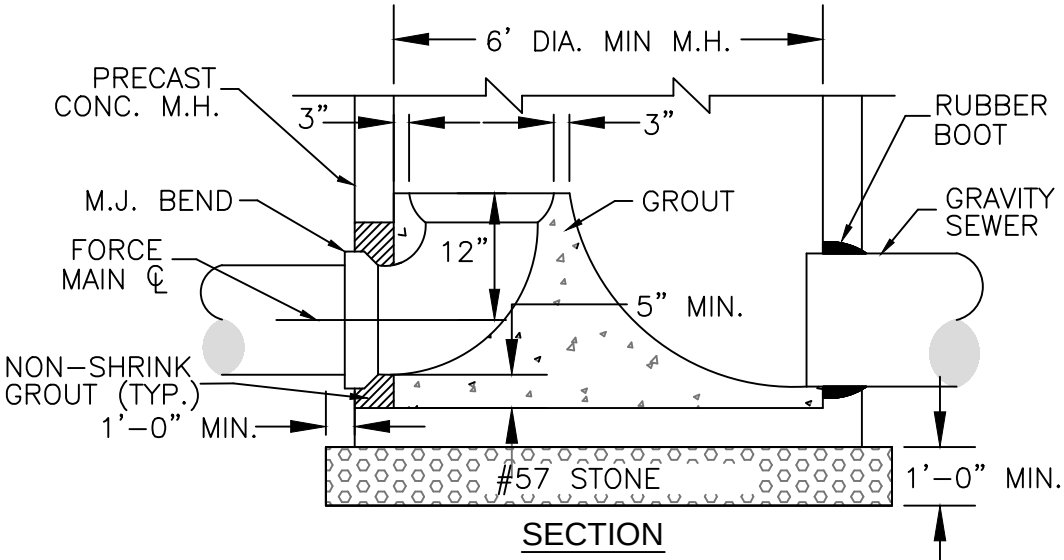
SCALE: NTS

SD SS8

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
CLEAN OUT AND SERVICE CONNECTION DETAIL	
DATE: JAN 2013	SD - SS8



PLAN



SECTION

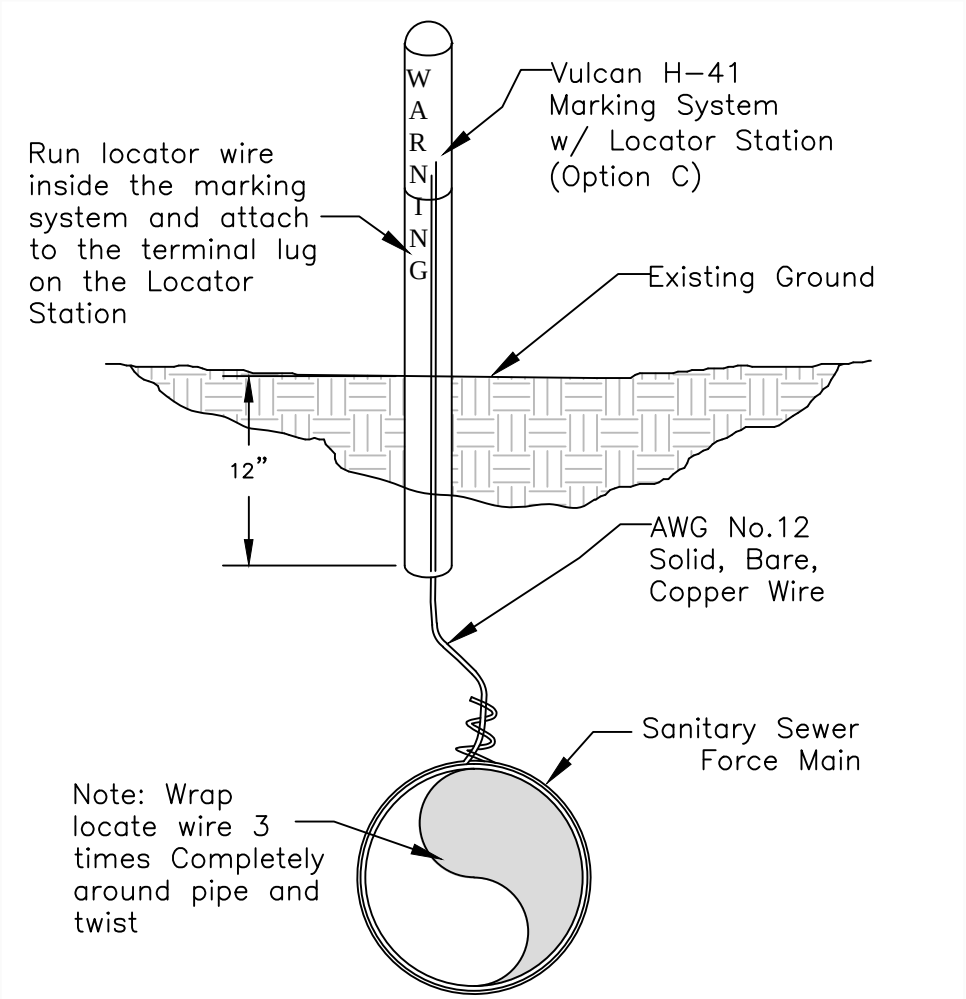
NOTE: USE VENTED COVER AND BOLT TO FRAME.

FORCE MAIN CONNECTION DETAIL

SD SS9

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
FORCE MAIN CONNECTION DETAIL	
DATE: JAN 2013	SD - SS9

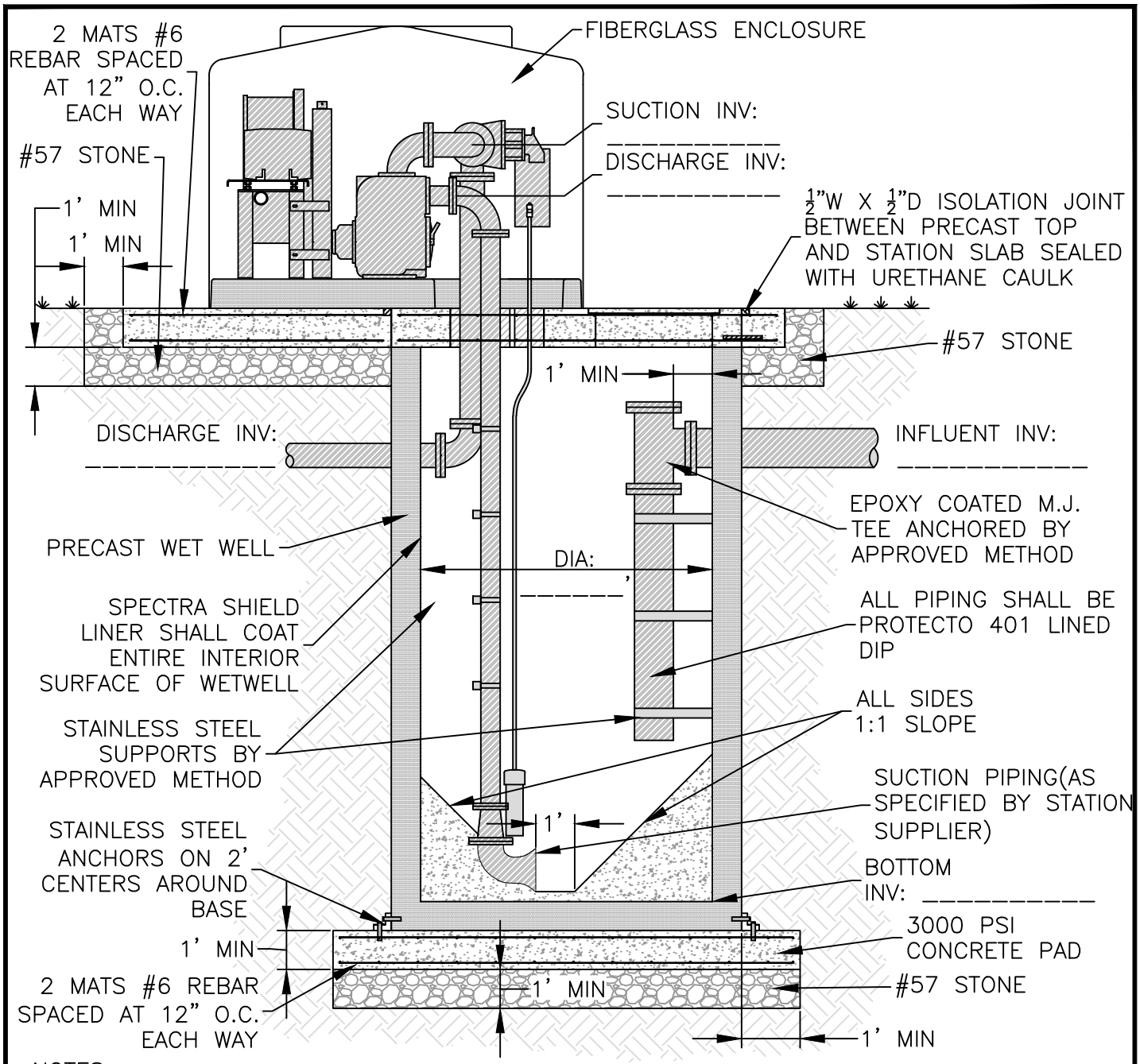


FORCE MAIN LOCATION POINT DETAIL

SCALE: NTS

SD
SS10

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
FORCE MAIN LOCATION POINT	
DATE: JAN 2013	SD - SS10



NOTES:

1. PUMP STATION DESIGN SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.
2. ELECTRICAL CONDUIT SHALL BE INSTALLED AS DIRECTED BY THE OWNER. INSTALLATION SHALL BE INSPECTED BY CITY PERSONNEL PRIOR TO POURING SLAB.
3. THE PUMP STATION PAD AND GENERATOR PAD SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, WITH APPROVAL FROM THE CITY.

STANDARD WETWELL DETAIL

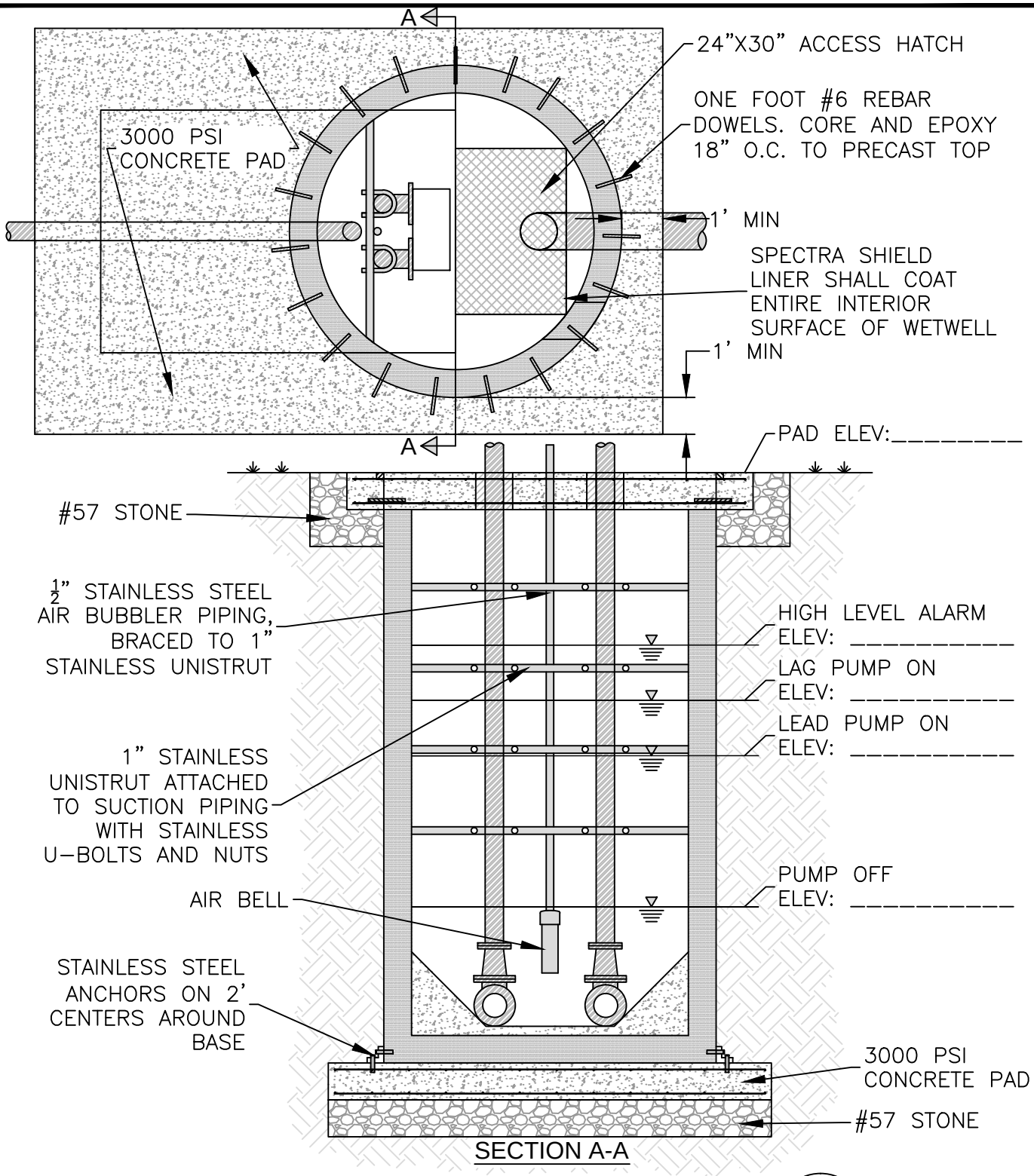
SCALE: NTS

SD
SS11A

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES

STANDARD WET WELL DETAIL
(1 OF 2)

DATE: JAN 2013 | SD - SS11A



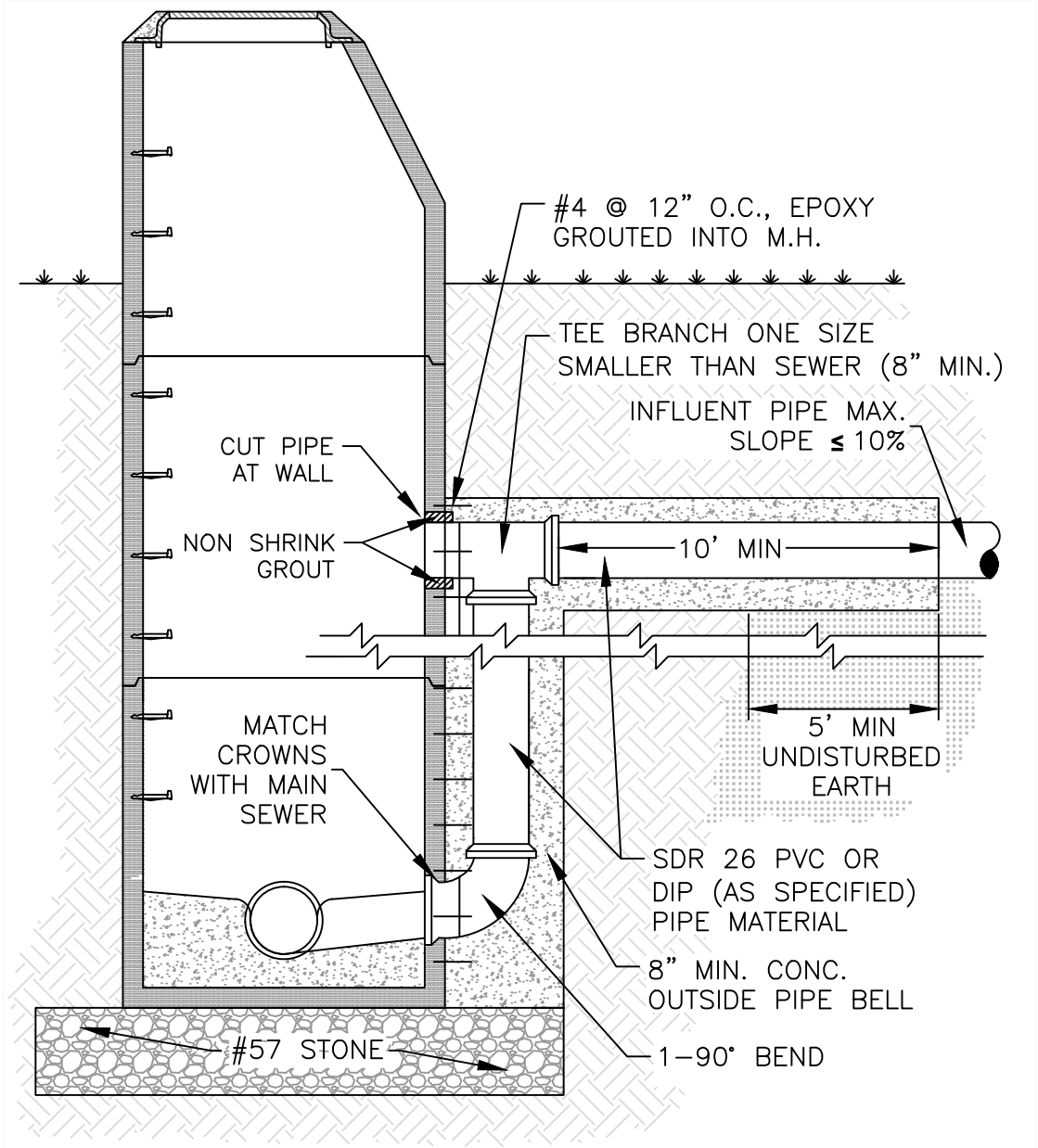
SECTION A-A

STANDARD WETWELL DETAIL

SD SS11B

SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
STANDARD WETWELL DETAIL (2 OF 2)	
DATE: JAN 2013	SD - SS11B

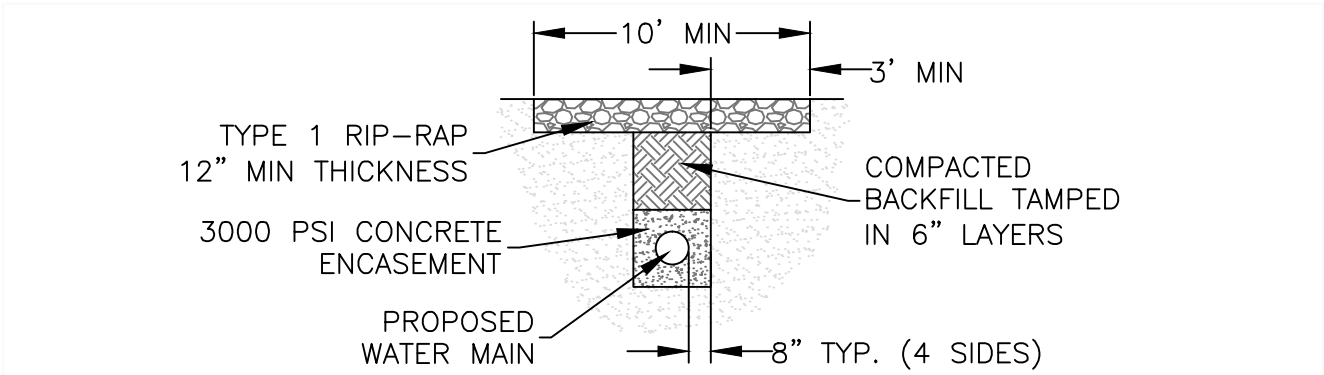


OUTSIDE DROP MANHOLE DETAIL

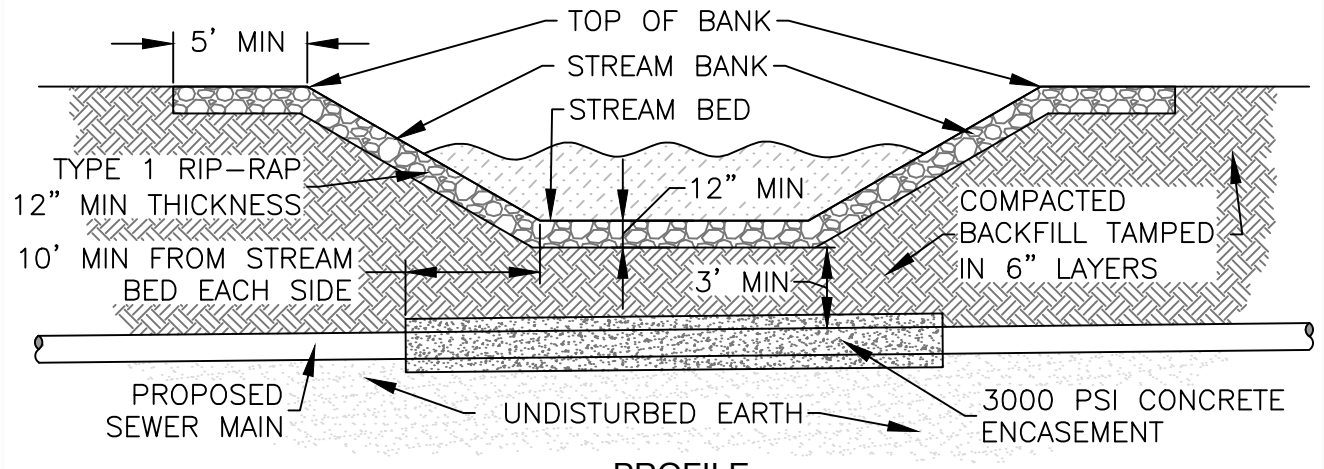
SCALE: NTS

SD
SS12

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
OUTSIDE DROP MANHOLE DETAIL	
DATE: JAN 2013	SD - SS12



CROSS SECTION



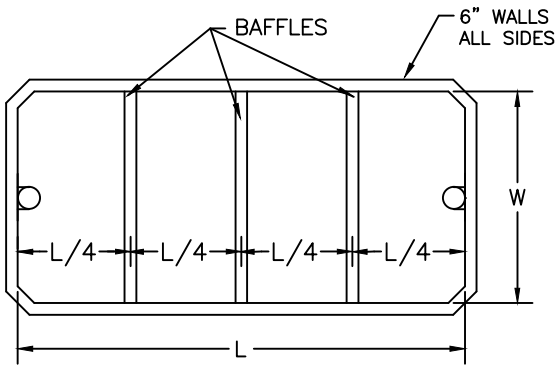
PROFILE

SEWER STREAM CROSSING DETAIL

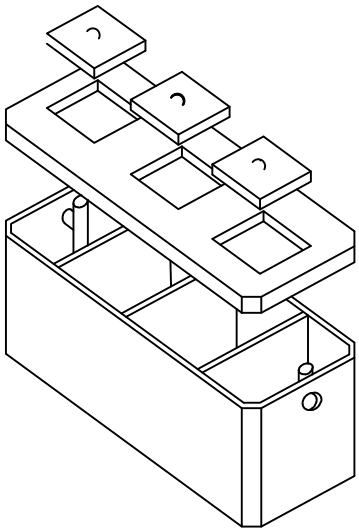
SD
SS13

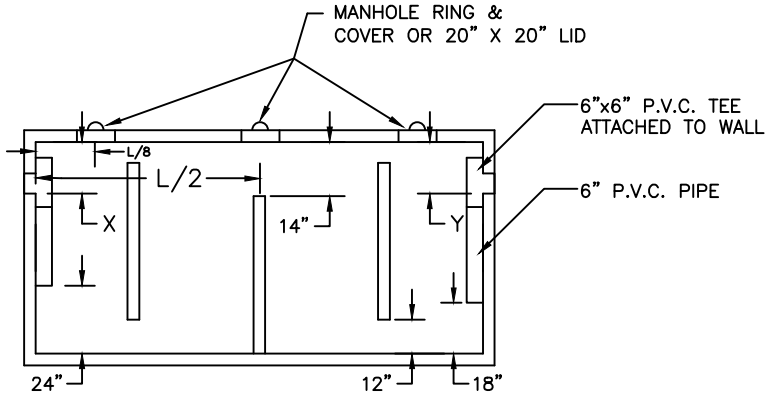
SCALE: NTS

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
SEWER STREAM CROSSING DETAIL	
DATE: JAN 2013	SD - SS13

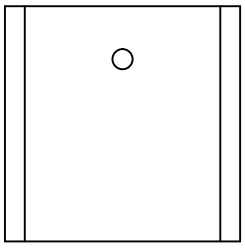


PLAN VIEW





SECTIONAL VIEW–SIDE



SECTIONAL VIEW–END

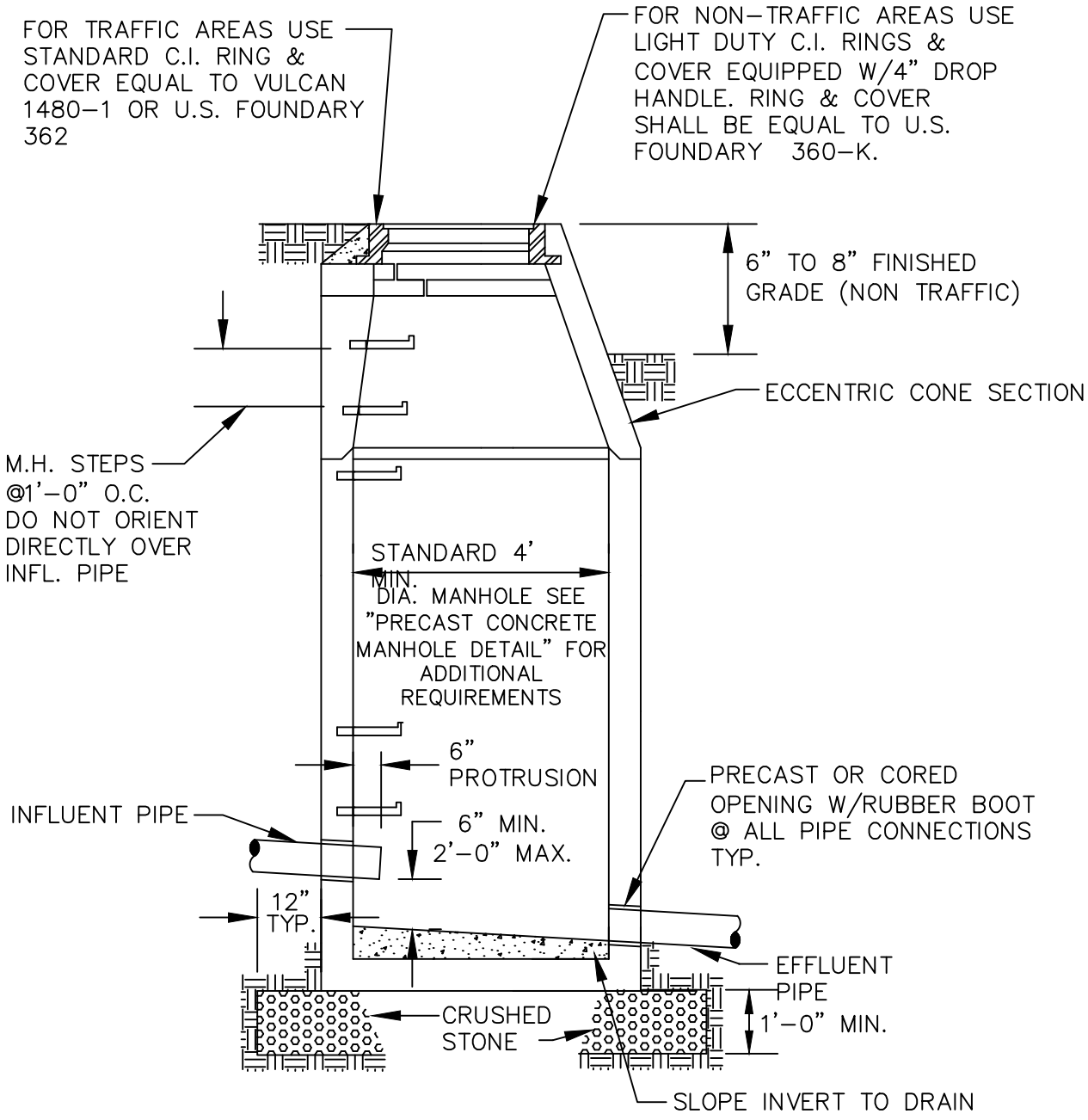
TANK CAPACITY LIQUID GALLONS	L	W	D	INLET INVERT X	OUTLET INVERT Y	APROX. WT. OF TANK IN LBS.	MINIMUM DIMENSIONS FOR EXCAVATION LENGTH X WIDTH X DEPTH	NO. LIDS
1500	10'–0"	4'–6"	5'–0"	10"	12"	13088	12'–0" X 7'–0" X 6'–0"	3

- MINIMUM CAPACITY OF GREASE TRAP IS 1500 GALLONS.
- DESIGN SHOWN IS FOR NON–TRAFFIC AREAS. PROVIDE STRUCTURAL DESIGN ADEQUATE FOR PARTICULAR INSTALLATION.

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES

PRECAST CONCRETE GREASE TRAP

DATE: JAN 2013 | SD-SS14



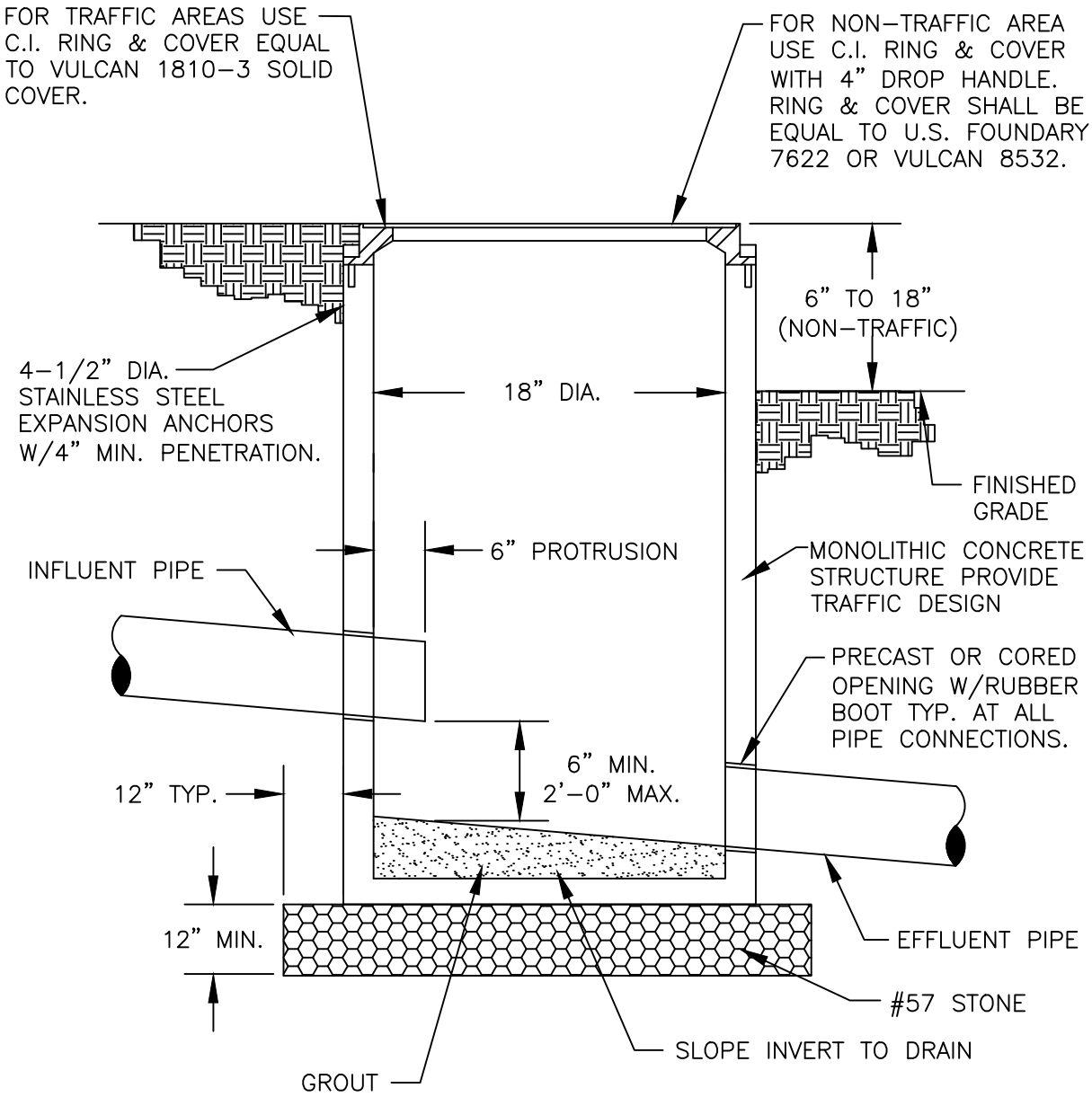
NOTES:

1. PROVIDE FREEZE– PROOF HYDRANT EQUIPPED W/ANTI–SIPHON TYPE BACFLOW PREVENTER WITHIN 6' OF MANHOLE
2. PROVIDE 120V, 20 AMP DUPLEX RECEPTABLE WITHIN 6' OF MANHOLE
3. PROVIDE DUSK TO DAWN POLE MOUNTED OVERHEAD. LIGHT DIRECTLY OVER MANHOLE
4. PROVIDE 8'x8'x6' HIGH CHAIN LINK FENCE WITH 3'–0" GATE.

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES

SAMPLE STATION MANHOLE INDUSTRIAL INSTALLATION

DATE: JAN 2013 | SD-SS15



NOTE:

1. WHERE DEPTH OF STRUCTURES EXCEEDS 4'–0", MEET THE STRUCTURAL REQUIREMENTS OF SAMPLE STATION MANHOLE INDUSTRIAL INSTALLATION.

CITY OF GAINESVILLE DEPARTMENT OF WATER RESOURCES	
SAMPLE STATION MANHOLE COMMERCIAL INSTALLATION	
DATE: JAN 2013	SD-SS16