

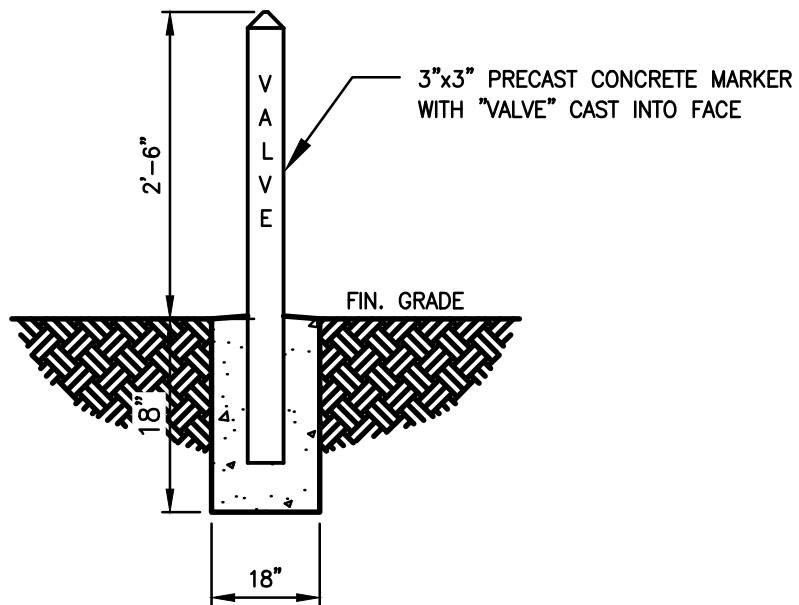
NOTES:

1. ALL LATERAL STREET CUTS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICEABLE DEFLECTION. PLATES TO REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HOUR MINIMUM).
2. ON LONGITUDINAL CUTS EXCEEDING 150 FEET IN LENGTH, THE CONCRETE IN THE TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT AND THE ENTIRE WIDTH OF THE ROADWAY RESURFACED WITH ASPHALT TOPPING COURSE AS DIRECTED BY THE CITY OF DAHLONEGA ENGINEER.

**CITY OF DAHLONEGA STANDARD DETAIL G1  
PAVEMENT PATCH**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





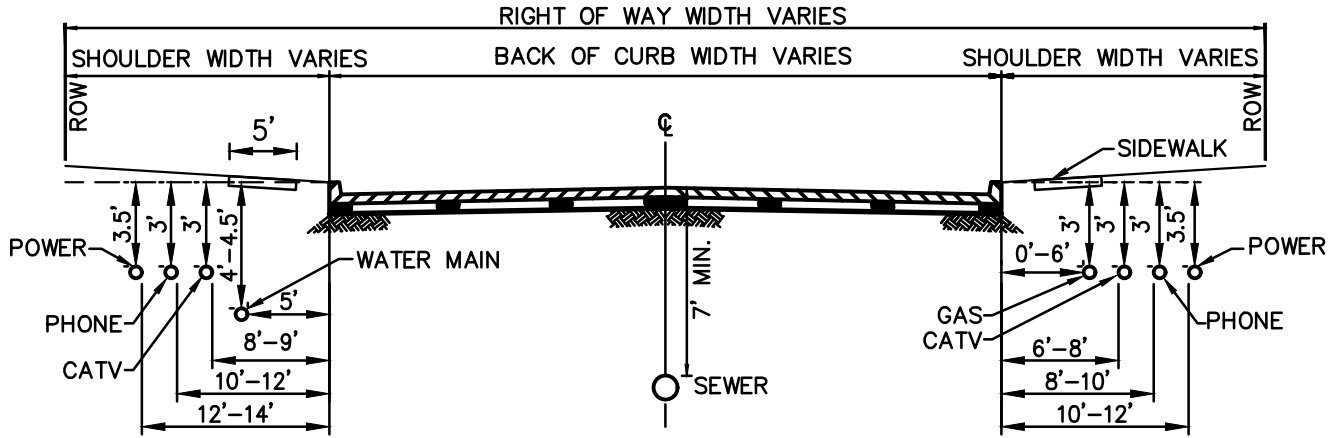
**CITY OF DAHLONEGA STANDARD DETAIL G2  
VALVE MARKER**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**



**NOTES:**

1. MEASURE UTILITY LOCATION FROM BACK OF CURB.
2. LOCATE WATER ON NORTH OR WEST SIDE OF STREET. LOCATE GAS ON SOUTH OR EAST SIDE OF STREET. RECOMMENDED PLACEMENT IS BACK OF EDGE OF CORRIDOR TO MINIMIZE DAMAGE TO SIDEWALKS.



RIGHT OF WAY WITH CURB & GUTTER

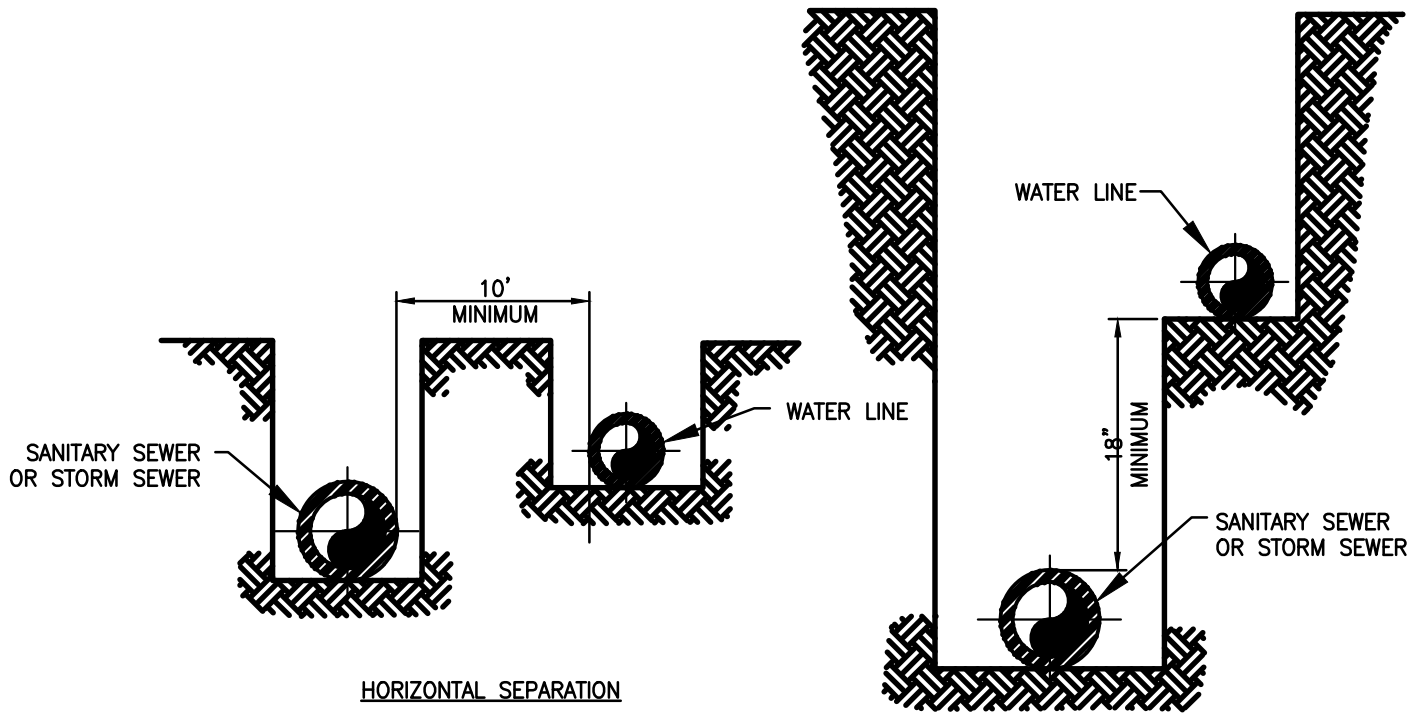
**NOTES:**

1. MEASURE UTILITY LOCATION FROM ROW (SEE ILLUSTRATION).
2. LOCATE WATER ON NORTH OR WEST SIDE OF STREET. LOCATE GAS ON SOUTH OR EAST SIDE OF STREET.
3. MINIMUM WATER MAIN SIZE IS 8" DIP.

**CITY OF DAHLONEGA STANDARD DETAIL G3  
UTILITY PLACEMENT**

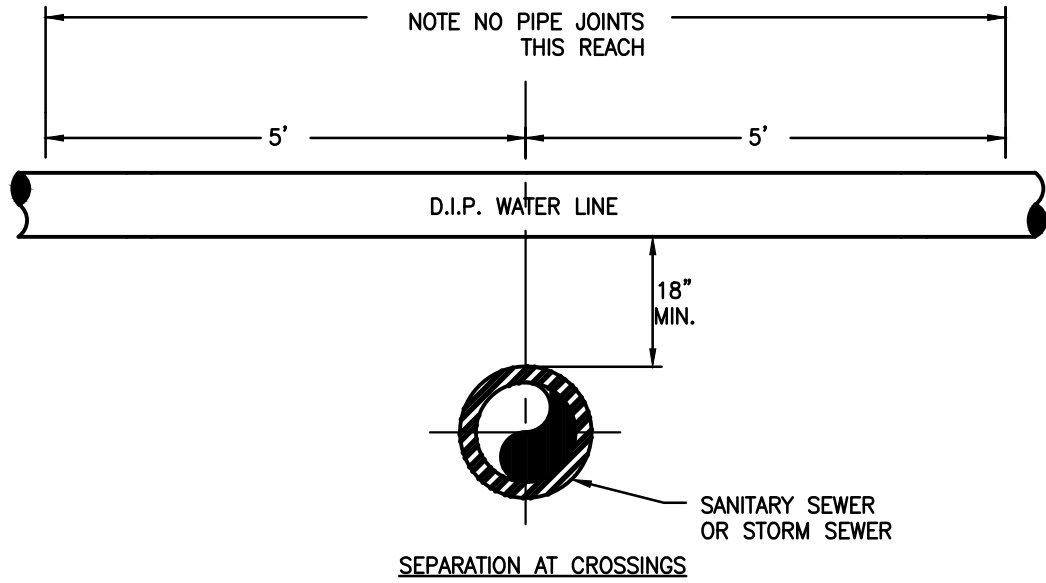
**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





HORIZONTAL SEPARATION

VERTICAL SEPARATION



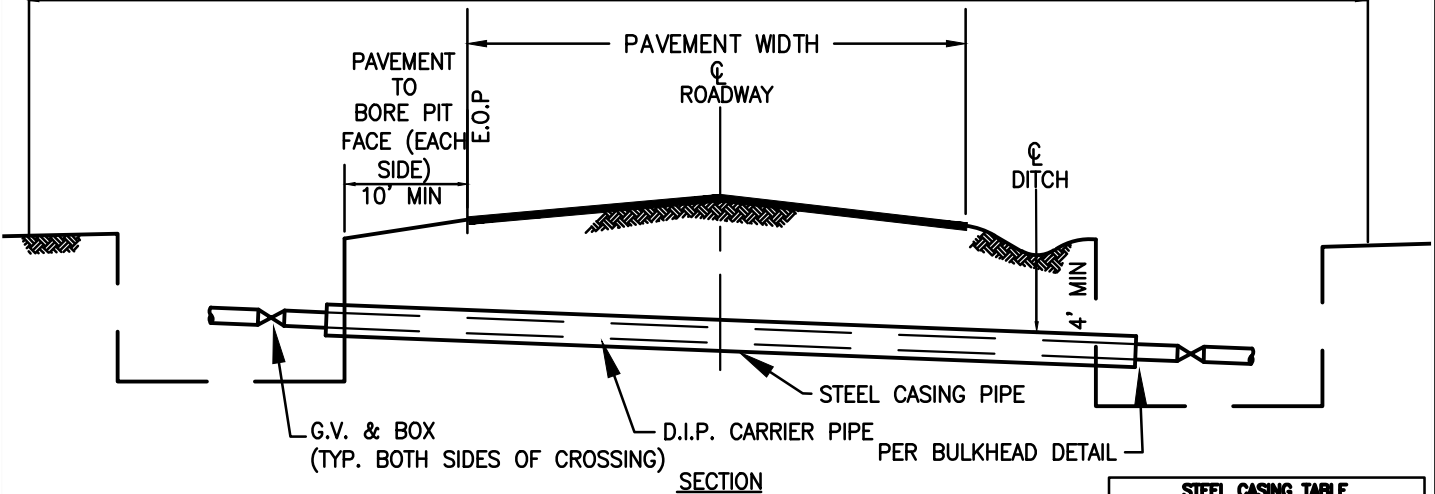
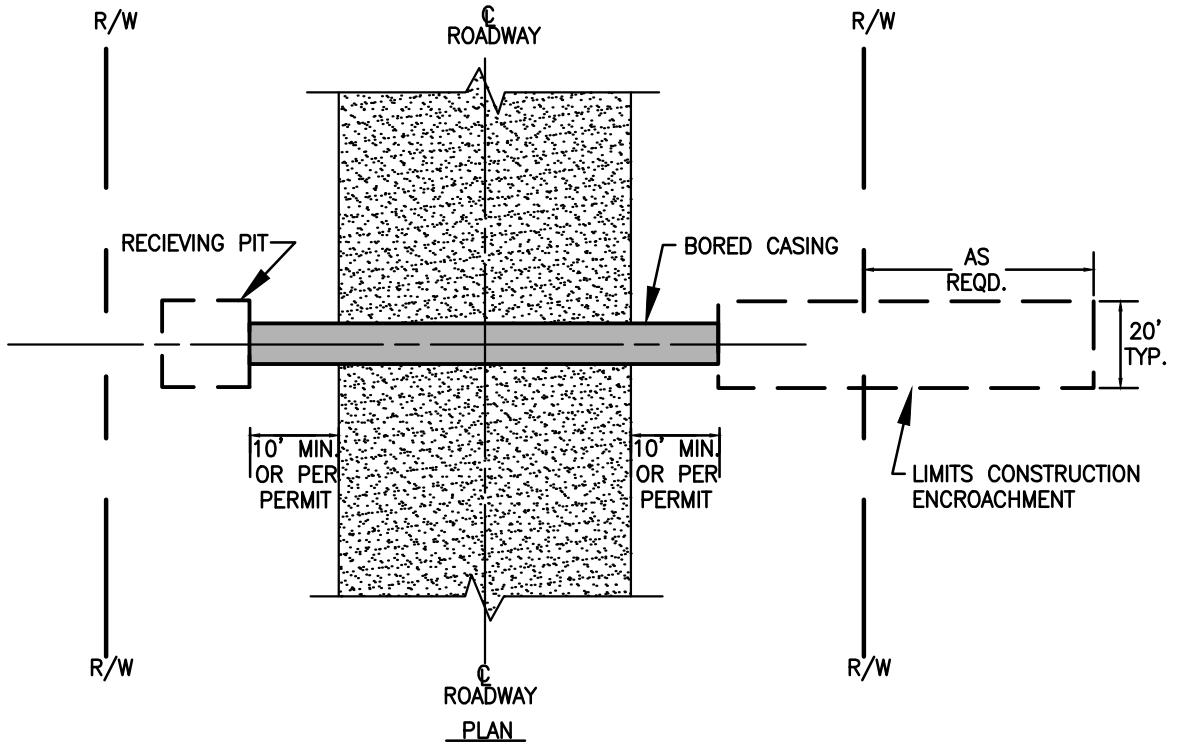
NOTES:

1. WHERE MINIMUM CLEARANCES CANNOT BE MAINTAINED, ALTERNATE PROCEDURES ARE REQUIRED. REF. CITY STANDARDS

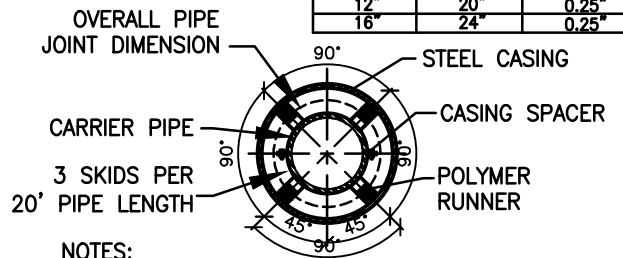
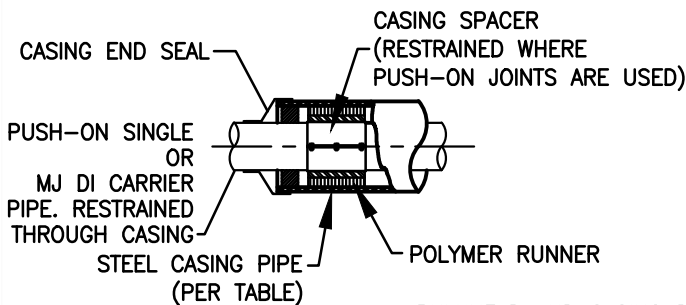
**CITY OF DAHLONEGA STANDARD DETAIL G4  
WATER AND SEWER CLEARANCE**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





STEEL CASING TABLE		
PIPE SIZE	CASING SIZE	PIPE WALL (IN.)
6"	14"	0.25"
8"	16"	0.25"
12"	20"	0.25"
16"	24"	0.25"



**NOTES:**

1. CASING PIPE TO MEET ASTM A-139, GRADE B.
2. CASING PIPE TO HAVE BITUMINOUS COATING.

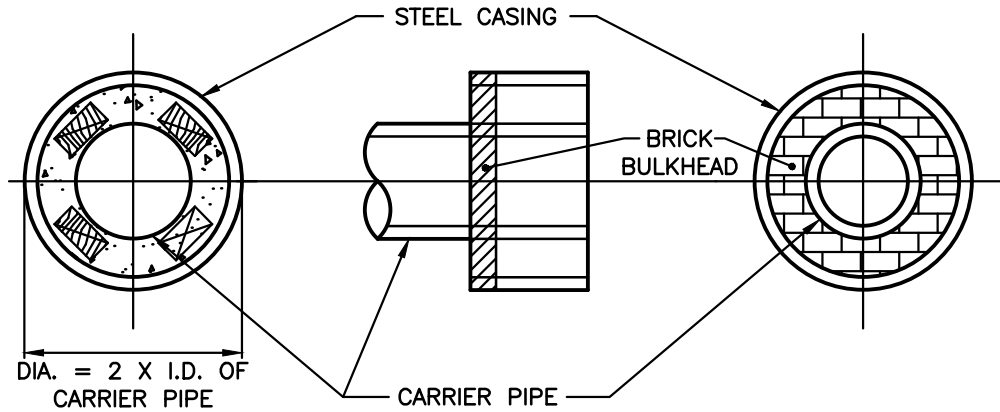
**CITY OF DAHLONEGA STANDARD DETAIL G5  
BORED HIGHWAY CROSSING**

SCALE: NTS  
DATE OF LAST REVISION: 03/22



TREATED WOOD SKIDS SECURED AT BELL  
END OF EACH JOINT OF CARRIER PIPE  
(24" MINIMUM LENGTH).

WOOD SKIDS SHALL BE TREATED IN  
ACCORDANCE WITH AMERICAN WOOD  
PRESERVES BUREAU STANDARD LP-22.



**BLOCKING DETAIL**

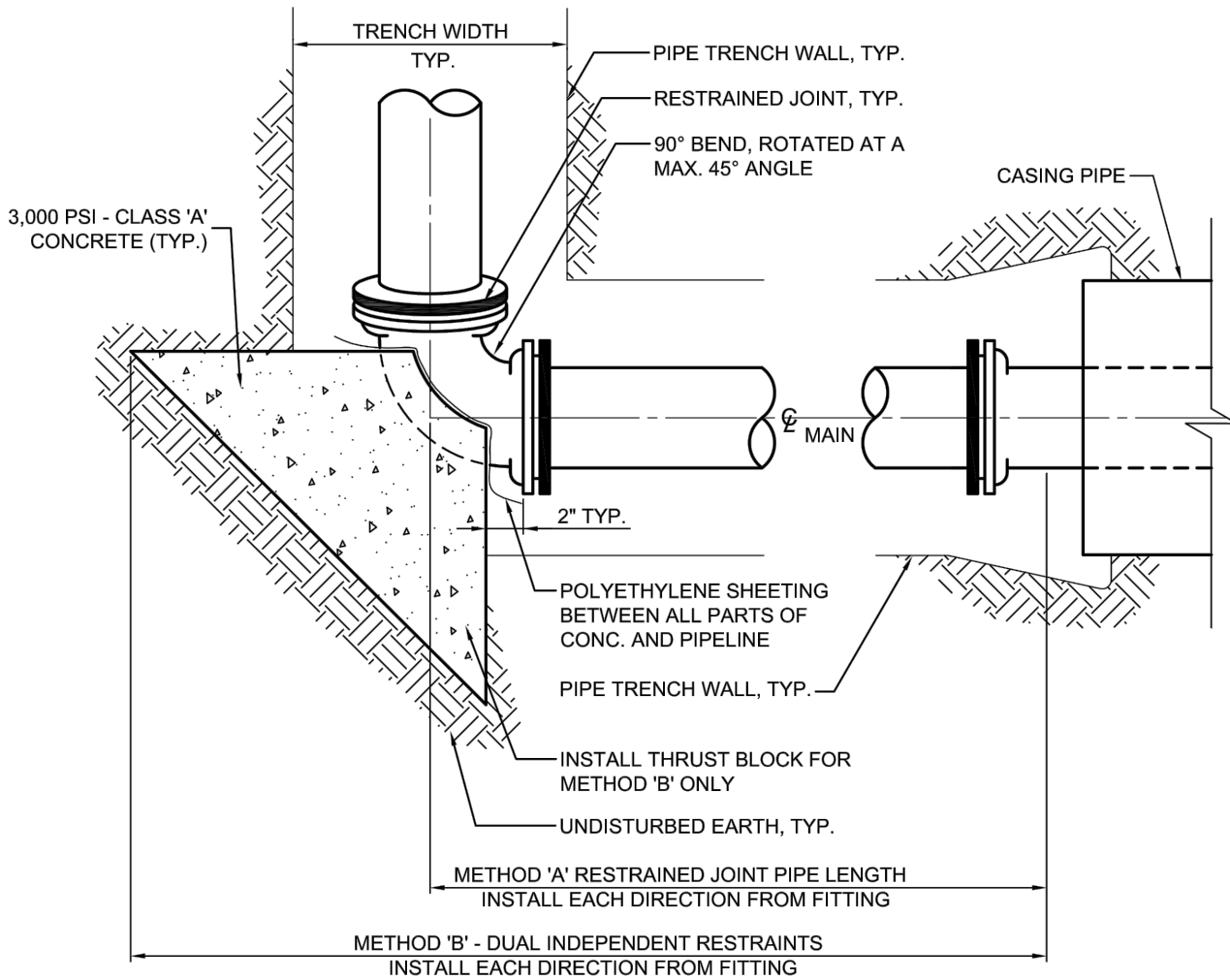
**BULKHEAD DETAILS**

NOTE: BLOCKING SHALL BE PLACED  
WHEN REQUIRED BY ENGINEER

**CITY OF DAHLONEGA STANDARD DETAIL G6  
AUGURED JACKED CASING**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





## PLAN

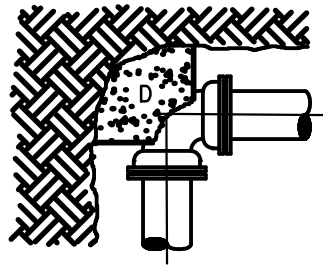
### NOTES:

1. SEE TYPICAL HORIZONTAL THRUST RESTRAINT DRAWING G8 FOR METHOD 'A'.
2. IN LIEU OF THRUST BLOCK AND MEG-A-LUGS SHOWN FOR METHOD 'B', TIE-RODS AND MEG-A-LUGS MAY BE USED.
3. REFER TO TYPICAL HORIZONTAL THRUST BLOCK DRAWING G7 AND TYPICAL HORIZONTAL THRUST RESTRAINT DRAWING G8 FOR ADDITIONAL DETAILS.
4. WELDING OF EYE BOLTS TO CASING IS PROHIBITED.
5. RESTRAINED JOINT METHOD A: RESTRAINT JOINT PIPE AND FITTINGS.
6. RESTRAINED JOINT METHOD B: ONE (1) OF THE FOLLOWING DUAL (2) INDEPENDENT RESTRAINTS:
  - A. MEGA-LUGS PLUS THRUST BLOCKING.
  - B. MEGA-LUGS PLUS RODDING.

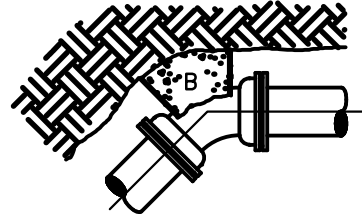
## CITY OF DAHLONEGA STANDARD DETAIL G7 WATER MAIN RESTRAINT AT JACK AND BORE INSTALLATION

SCALE: NTS  
DATE OF LAST REVISION: 03/22

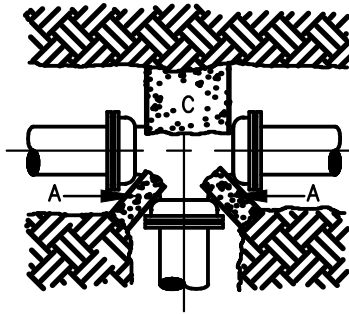




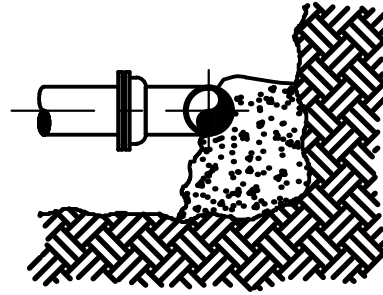
90° BEND



45° BEND



TEE



TYPICAL SECTION

THRUST BLOCK										
THRUST BLOCKS	MINIMUM CU. YDS. CONC.					MIN. SQ. FT. OF BEARING				
	4"	6"	8"	10"	12"	4"	6"	8"	10"	12"
A	.50	.50	.50	.75	.75	4.0	4.0	5.0	8.0	8.0
B	.75	.75	.75	1.0	1.0	6.0	6.0	6.0	8.0	8.0
C	.75	.75	1.25	1.5	1.5	6.0	6.0	7.5	12.0	12.0
D	.75	.75	1.25	1.5	1.5	6.0	6.0	7.5	16.0	16.0

**NOTES:**

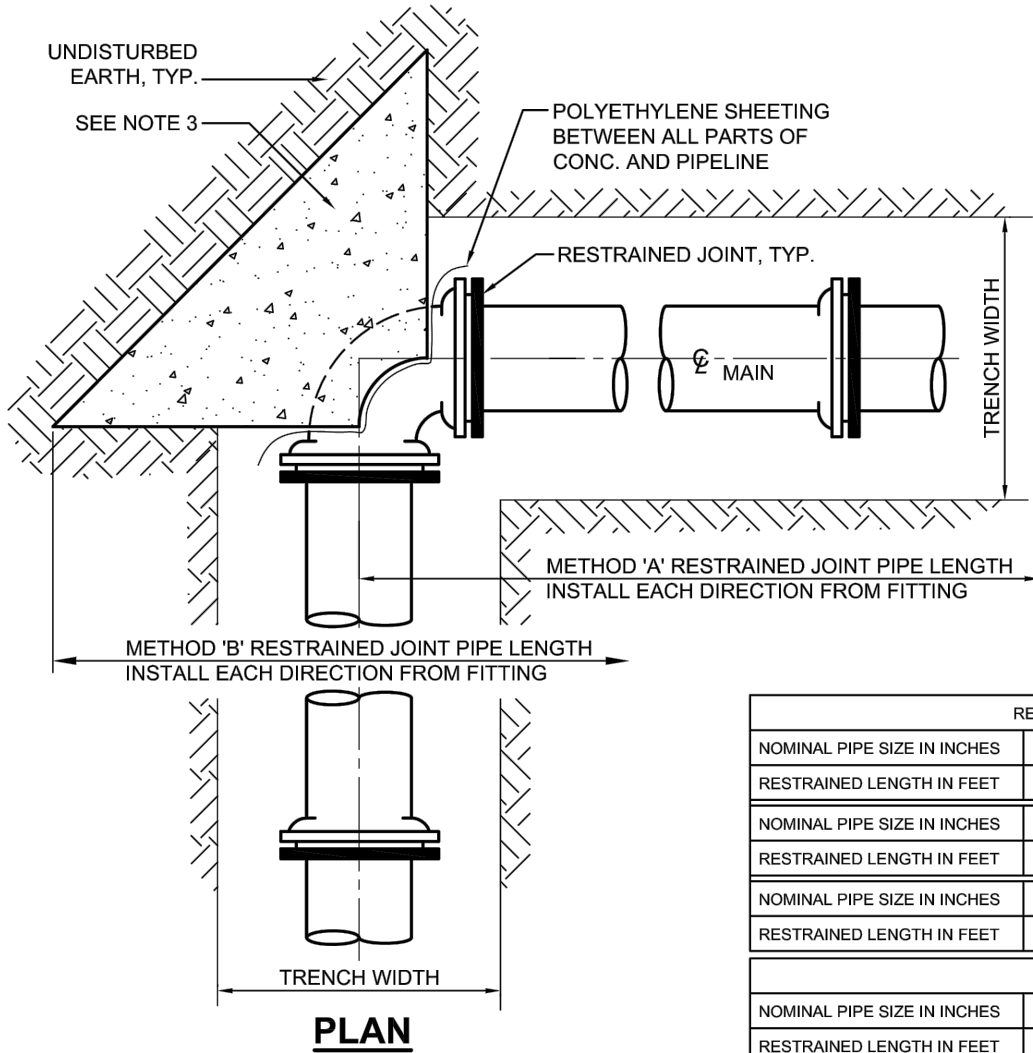
1. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
2. IN THE CASE OF FIRE HYDRANTS, WOOD SHEETING AND COMPACTED ROCK BACKING MAY BE OMITTED WHERE SOLID BEARING CAN BE OBTAINED.
3. ON TEES AND BENDS, EXTEND THRUST BLOCK FULL LENGTH. PUT WOOD BLOCKING IN FRONT OF PLUG BEFORE POURING CONCRETE THRUST BLOCK.
4. BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SAND AND ROCK FRAGMENTS. ANY MUCK ENCOUNTERED SHALL BE REPLACED WITH ACCEPTABLE BACKFILL.

**CITY OF DAHLONEGA STANDARD DETAIL G8  
THRUST BLOCKS**

SCALE: NTS  
DATE OF LAST REVISION: 03/22







REDUCER							
NOMINAL PIPE SIZE IN INCHES		6x4	8x6	10x8	12x10	14x12	16x14
RESTRAINED LENGTH IN FEET		42	44	42	44	44	44
NOMINAL PIPE SIZE IN INCHES			8x4	10x6	12x8	14x10	16x12
RESTRAINED LENGTH IN FEET			76	80	78	80	82
NOMINAL PIPE SIZE IN INCHES				10x4	12x6	14x8	16x10
RESTRAINED LENGTH IN FEET				104	110	112	116
TEE							
NOMINAL PIPE SIZE IN INCHES	4	6	8	10	12	14	16
RESTRAINED LENGTH IN FEET	54	76	100	120	140	160	180
DEAD END OR CLOSED VALVE							
NOMINAL PIPE SIZE IN INCHES	4	6	8	10	12	14	16
RESTRAINED LENGTH IN FEET	54	76	100	120	140	160	180
90 DEGREE BEND							
NOMINAL PIPE SIZE IN INCHES	4	6	8	10	12	14	16
RESTRAINED LENGTH IN FEET	54	76	99	120	140	160	180
45 DEGREE BEND							
NOMINAL PIPE SIZE IN INCHES	4	6	8	10	12	14	16
RESTRAINED LENGTH IN FEET	23	32	41	50	58	67	75
22 1/2 DEGREE BEND							
NOMINAL PIPE SIZE IN INCHES	4	6	8	10	12	14	16
RESTRAINED LENGTH IN FEET	11	15	20	24	28	32	36

**NOTES:**

1. SOIL PREPARATION SHALL BE APPROVED BY THE CITY PRIOR TO POURING CONCRETE.
2. REFER TO TYPICAL HORIZONTAL THRUST BLOCKING DRAWING G7 FOR DETAILS.
3. INSTALL THRUST BLOCK ONLY WHEN METHOD 'B' PIPE RESTRAINT IS UTILIZED.
4. FOR PIPE SIZES LARGER THAN 16" THE DESIGN ENGINEER SHALL PROVIDE CALCULATIONS FOR RESTRAINED JOINT LENGTHS TO DWR FOR REVIEW PRIOR TO INSTALLATION.
5. RESTRAINED JOINT METHOD A: RESTRAINED JOINT PIPE AND FITTINGS.
6. RESTRAINED JOINT METHOD B: ONE (1) OF THE FOLLOWING DUAL (2) INDEPENDENT RESTRAINTS:  
 A. MEGA-LUGS PLUS THRUST BLOCKING.  
 B. MEGA-LUGS PLUS RODDING.

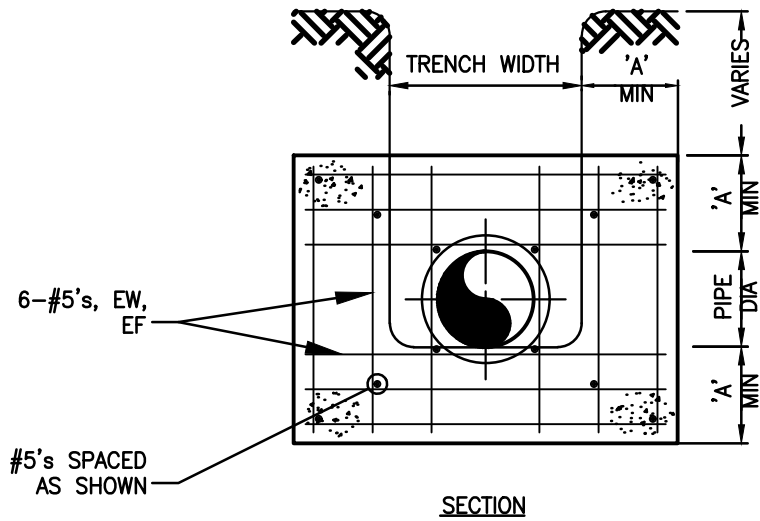
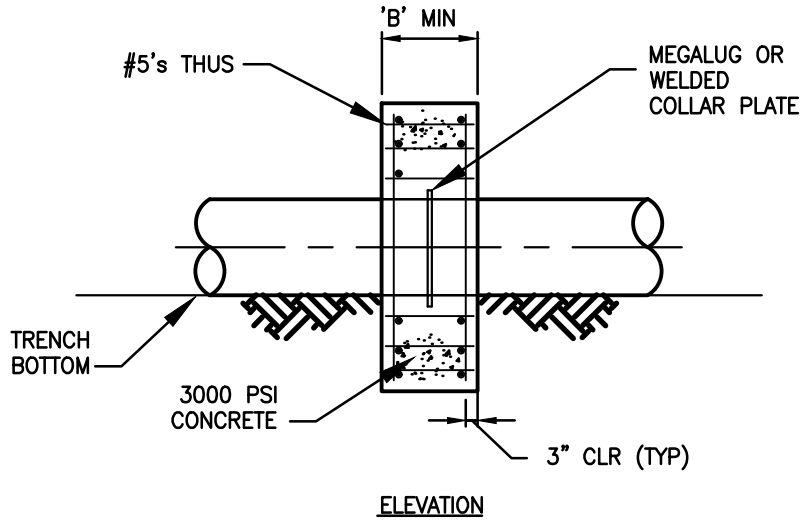
**DESIGN CRITERIA:**

1. THRUST RESTRAINT DIMENSIONS ARE BASED ON PRESSURE CLASS DUCTILE IRON PIPE WITH BITUMASTIC EXTERIOR COATING, (WITHOUT POLYWRAP), MINIMUM SOIL BEARING PRESSURE OF 2,000 PSF, SILTY SOIL, TEST PRESSURE OF 250 PSI, 4 FEET OF UNSATURATED SOIL COVER, CLASS "D" PIPE BEDDING CONDITION, WITH A SAFETY FACTOR OF 1.5.

**CITY OF DAHLONEGA STANDARD DETAIL G9  
 TYPICAL HORIZONTAL THRUST RESTRAINT**

**SCALE: NTS  
 DATE OF LAST REVISION: 03/22**



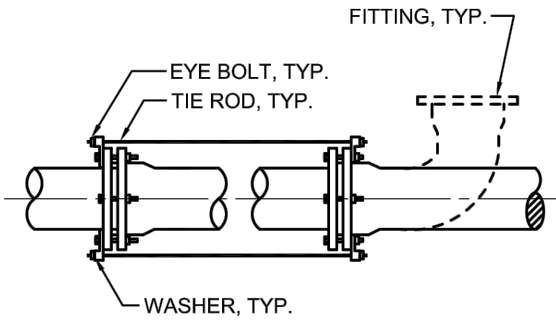


PIPE DIAMETER	'A' DIMENSION	'B' DIMENSION
6" - 24"	1' - 4"	1' - 8"
> 24"	PER ENGR.	PER ENGR.

**CITY OF DAHLONEGA STANDARD DETAIL G10  
THRUST COLLAR**

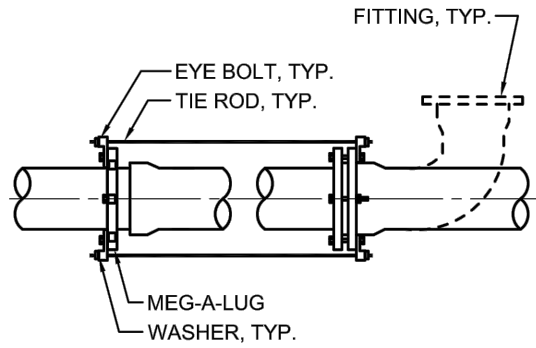
SCALE: NTS  
DATE OF LAST REVISION: 03/22





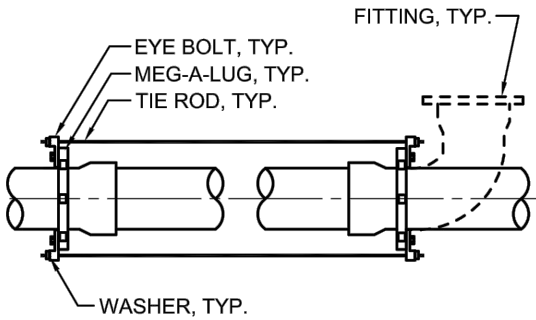
EYE BOLT TO EYE BOLT

**TYPE 1  
FITTING RESTRAINT**



EYE BOLT TO MEG-A-LUG

**TYPE 2  
FITTING RESTRAINT**



MEG-A-LUG TO MEG-A-LUG

**TYPE 3  
FITTING RESTRAINT**

PIPE SIZE (IN.)	ROD SIZE (IN.)	NO. OF RODS (TEES, PLUGS, AND VALVES)	NO. OF RODS (11-1/4° - 22-1/2° BENDS)	NO. OF RODS (45° - 90° BENDS)
6	3/4	3	2	3
8	3/4	3	3	3
10	3/4	4	4	4
12	3/4	4	4	6
14	3/4	6	4	6
16	3/4	6	6	6
20	3/4	6	6	6
24	3/4	8	8	8
30	1	6	6	6
36	1	6	6	6

THRUST RESTRAINT

**TIE ROD CHART**

**NOTES:**

1. RODS SHALL BE A MINIMUM 304 S.S. ALL THREAD RODS WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
2. USE LISTED NUMBER OF RODS AS SHOWN ON TIE ROD CHART (MINIMUM NUMBER SHOWN).
3. RODS MUST HAVE A MINIMUM OF 6" OF THREAD ON EACH END.
4. ALL STEEL MUST BE CLEANED AND COATED WITH ROYSTON ROSKOTE, KOPPERS SUPER SERVICE BLACK OR APPROVED EQUAL.
5. ALL NUTS USED ON TIE RODS MUST HAVE A WASHER.

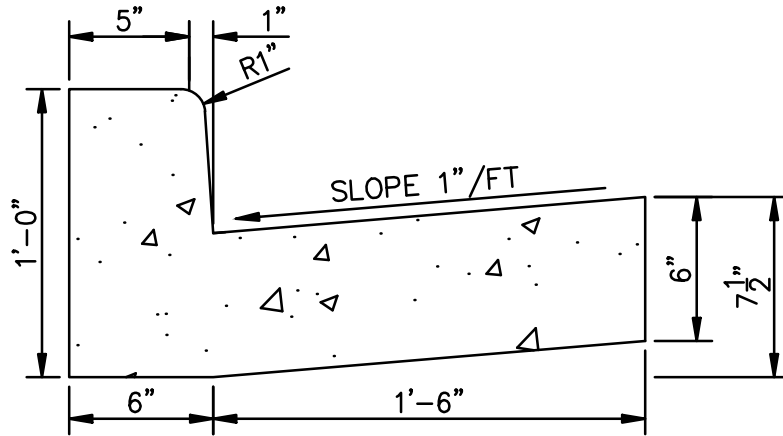
**DESIGN CRITERIA:**

1. FITTING SHOWN IS REPRESENTATIVE FOR ALL FITTINGS, VALVES, DEAD ENDS AND PLUGS.
2. FOR WATER MAINS AT A RATED TEST PRESSURE OF 250 PSI.

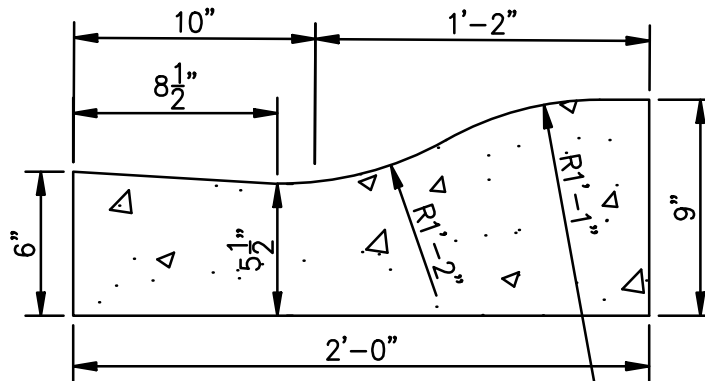
**CITY OF DAHLONEGA STANDARD DETAIL G11  
TYPICAL TIE ROD RESTRAINT INSTALLATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





STANDARD



ROLL BACK

(DEVELOPER'S OPTION IN SINGLE FAMILY RESIDENTIAL AREAS)

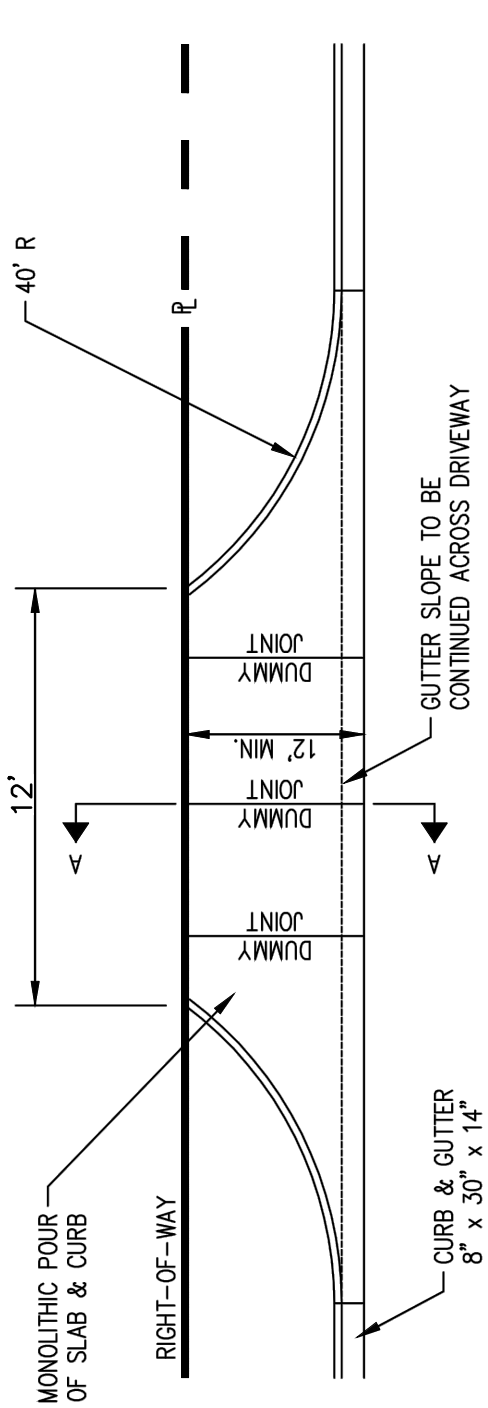
NOTES:

1. PROVIDE CONTRACTION JOINTS AT INTERVALS OF 10 FEET. FORM OR SAW CONTRACTION JOINTS TO A DEPTH OF NOT LESS THAN 1.5 INCHES.
2. PROVIDE EXPANSION JOINTS WHERE CURB AND GUTTER ABUTS STRUCTURES. FORM EXPANSION JOINTS WITH FULL DEPTH, 1/2" THICK PRE-MOLDED JOINT FILLER.
3. PROVIDED FINAL CONCRETE SURFACE HAVING STIFF BRISTLE BROOM FINISH TRANSVERSE TO THE LINE OF TRAFFIC.

**CITY OF DAHLONEGA STANDARD DETAIL G12  
TYPICAL CURB**

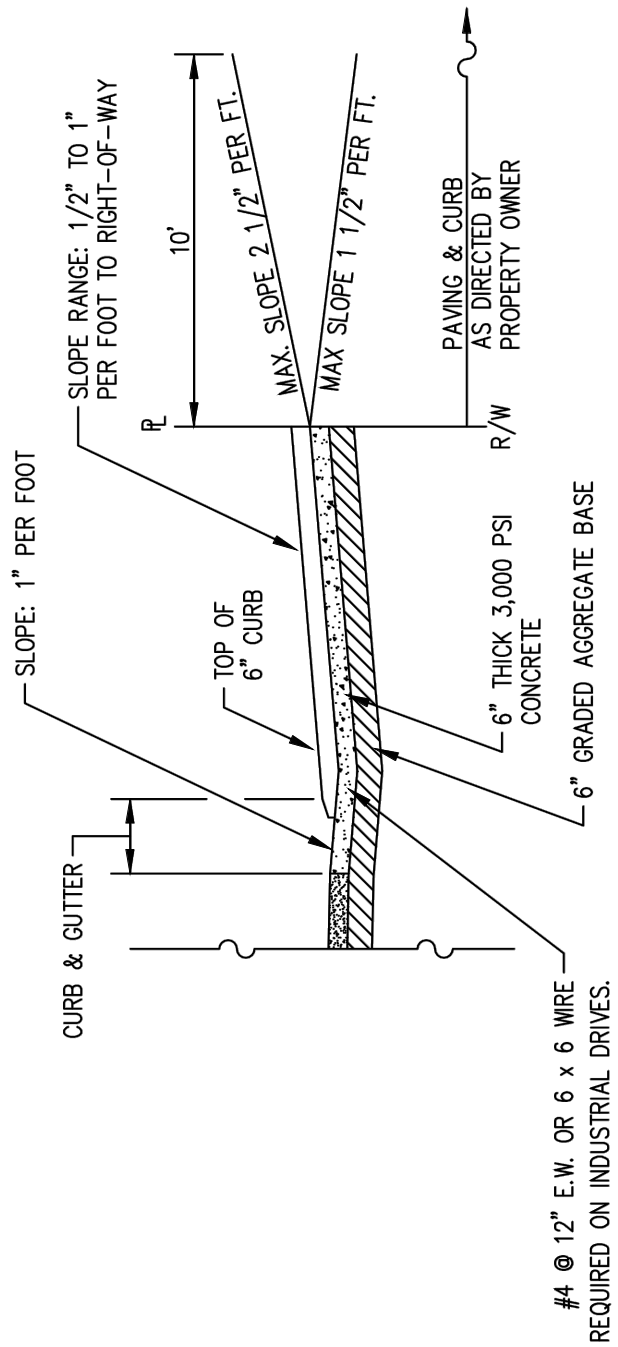
**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





ORIGINAL CURB AND GUTTER TO BE REMOVED.  
ASPHALT TO BE PATCHED AS REQUIRED.

PLAN



#4 @ 12" E.W. OR 6 x 6 WIRE  
REQUIRED ON INDUSTRIAL DRIVES.

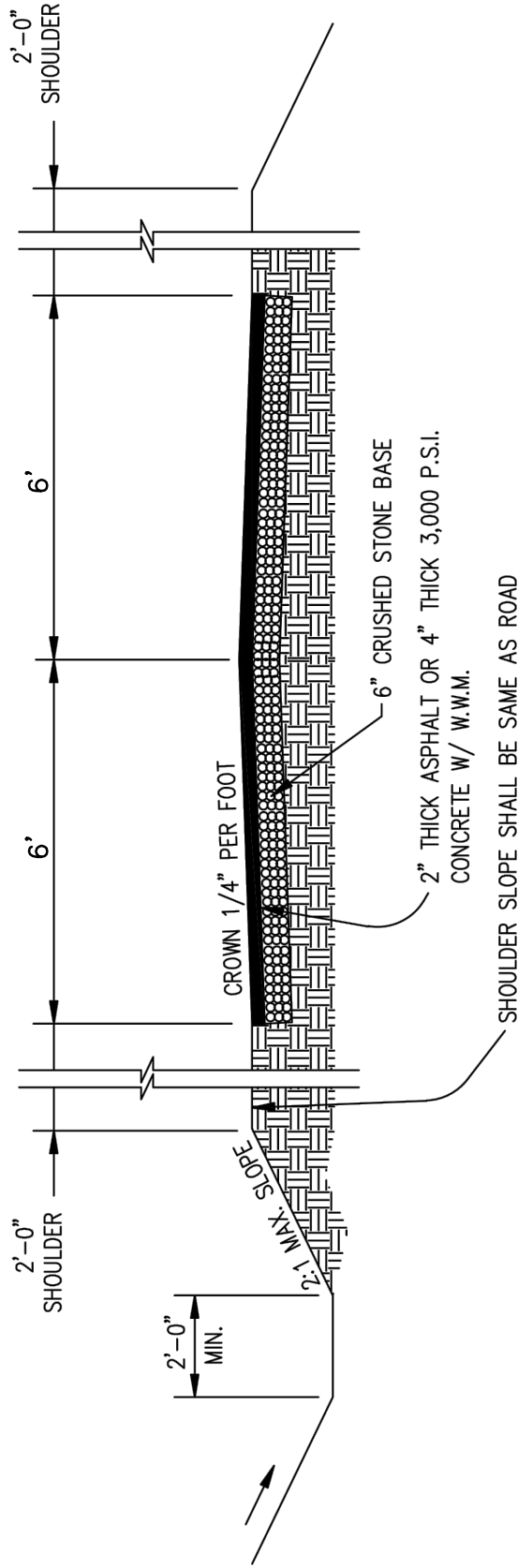
PAVING & CURB  
AS DIRECTED BY  
PROPERTY OWNER

SECTION A-A

**CITY OF DAHLONEGA STANDARD DETAIL G13  
ACCESS ROAD ENTRANCE**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**



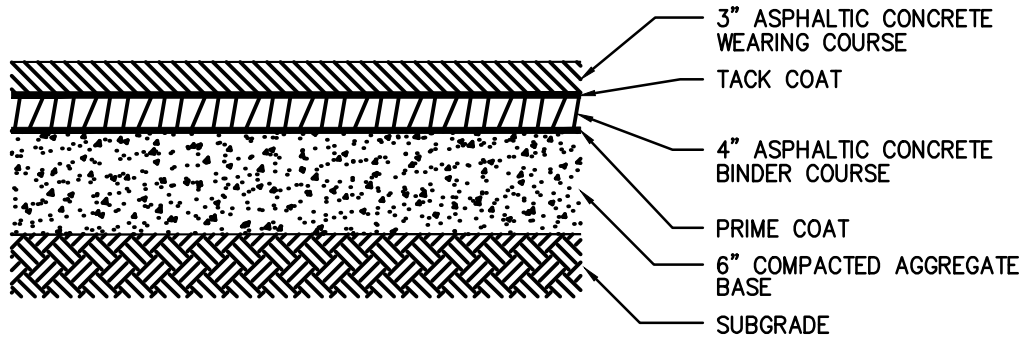


NOTES:  
 ENGINEER SHALL SUBMIT COPY OF PLAN AND PROFILE OF ACCESS ROAD FROM PUMP STATION SITE TO EXISTING ROAD OR STREET.  
 SLOPE OF ACCESS ROAD SHALL COMPLY WITH CITY REGULATIONS.

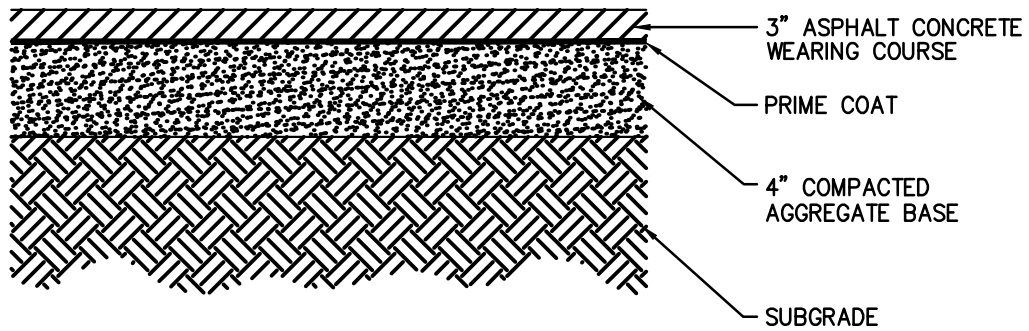
**CITY OF DAHLONEGA STANDARD DETAIL G14  
 ACCESS ROAD SECTION**

**SCALE: NTS  
 DATE OF LAST REVISION: 03/22**





HEAVY DUTY ASPHALT PAVEMENT



LIGHT DUTY ASPHALT PAVEMENT

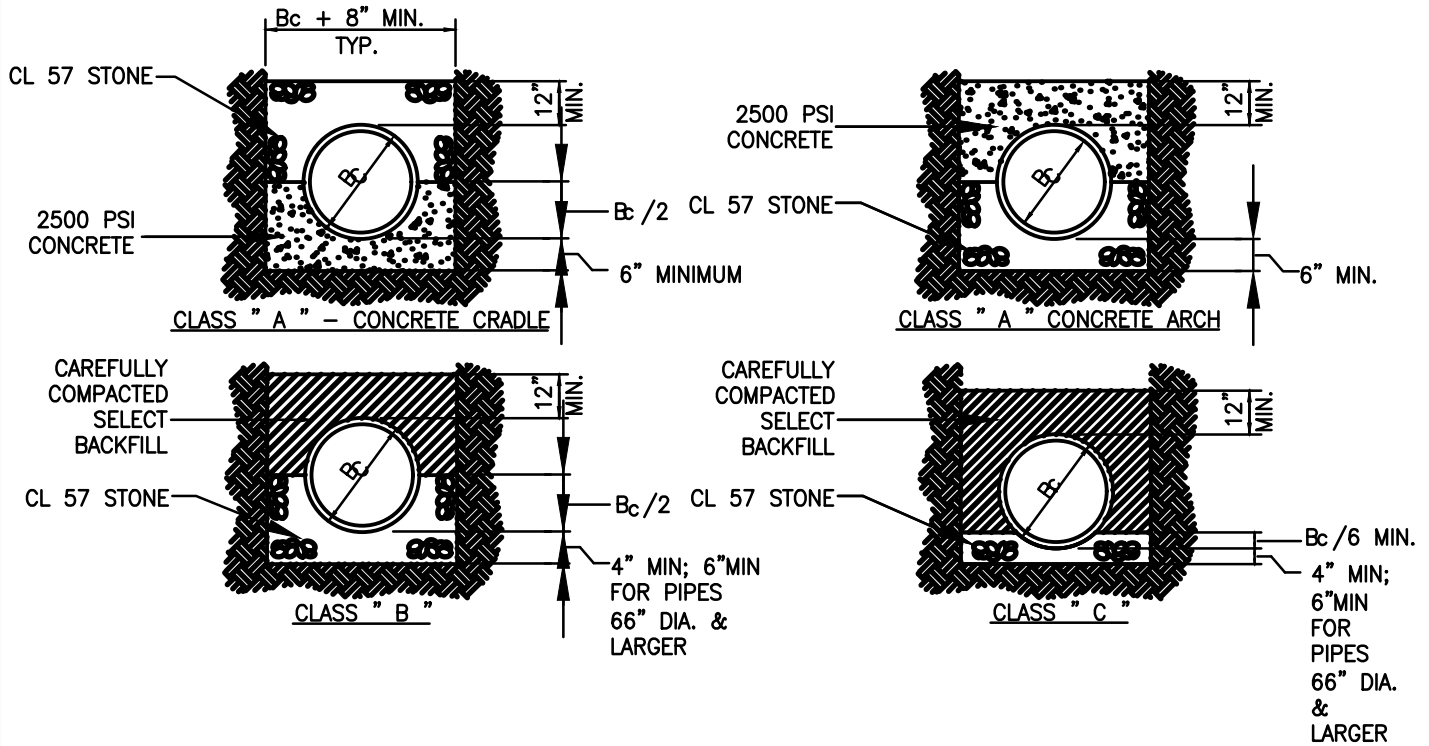
NOTES:

1. 12.5MM OR 9.5MM MIX FOR CITY ROADWAYS TO BE CHOSEN AT THE DISCRETION OF THE CITY ENGINEER.

**CITY OF DAHLONEGA STANDARD DETAIL G15  
TYPICAL PAVEMENT SECTIONS**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**NOTES:**

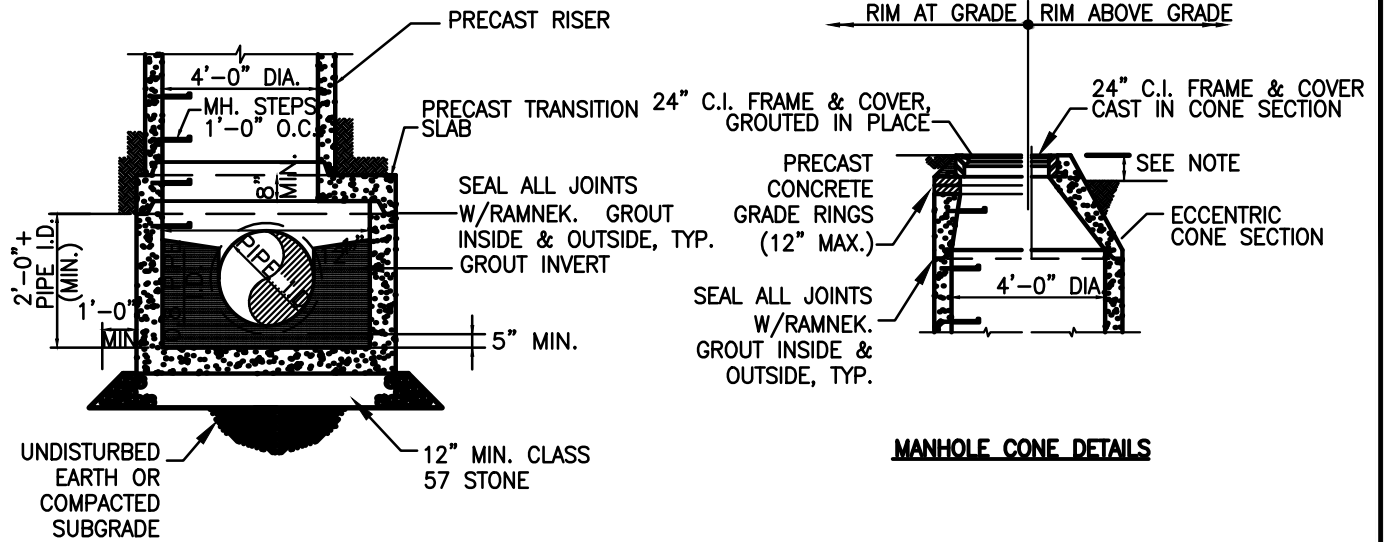
1. COMPACTION: BACKFILL SHALL BE BUILT UP IN LAYERS AND EACH LAYER SHALL BE THOROUGHLY COMPACTED BEFORE BEGINNING ANOTHER LAYER. LAYERS SHALL BE NO MORE THAN 6" IN DEPTH. PUDDLING WILL NOT BE PERMITTED, FROZEN OR WET MATERIAL SHALL NOT BE PLACED IN TRENCHES.
2. COMPACTION STANDARDS: ALL BACKFILL MATERIALS USED SHALL CONTAIN A SUFFICIENT AMOUNT OF MOISTURE FOR PROPER COMPACTION AND THESE MATERIALS SHALL BE COMPACTED AT NOT LESS THAN 95% OF THEIR OPTIMUM CLASSIFICATION AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D698.
3. COMPACTION TESTS: COMPACTION TESTS SHALL BE REQUIRED IN EXISTING OR PROPOSED STREETS, SIDEWALKS, DRIVES AND OTHER EXISTING OR PROPOSED PAVED AREAS AT VARYING DEPTHS AND AT INTERVALS AS DETERMINED BY THE CITY WITH A MINIMUM OF ONE TEST ON EACH JOB AND A MAXIMUM OF ONE REQUIRED TEST FOR EACH 400' OR LESS OF UTILITY MAIN CONSTRUCTION, UNLESS SOIL CONDITIONS OR CONSTRUCTION PRACTICES, IN THE OPINION OF THE CITY, WARRANT THE NEED FOR ADDITIONAL TESTS.
4. FOR EXCAVATION IN POOR SOIL OR ROCK: REMOVE UNSUITABLE MATERIAL WIDTH AND DEPTH DIRECTED BEFORE PIPE IS LAID. THE SUBGRADE SHALL BE BACKFILLED WITH AN APPROVED MATERIAL IN 6" LAYERS. EACH LAYER SHALL BE THOROUGHLY TAMPED TO 95% COMPACTION.
5. NO BOULDERS OR LOOSE ROCKS PERMITTED IN THE BACKFILL FROM BOTTOM OF PIPE TRENCH TO 2'-0" ABOVE PIPE.
6. FOR LOADING FACTORS LESS THAN 1.5 WHERE SUITABLE, UNDISTURBED SOIL IS PRESENT, USE CLASS "D" BEDDING. USE CLASS "C" BEDDING IF THE PIPE WILL BE SUBJECTED TO A LOADING FACTOR LESS THAN 1.5 AND IF OVEREXCAVATION OCCURS DUE TO ROCK AND/OR UNSUITABLE MATERIAL BEING ENCOUNTERED. USE CLASS "B" BEDDING FOR PIPES SUBJECTED TO A LOADING FACTOR GREATER THAN 1.5.

**CITY OF DAHLONEGA STANDARD DETAIL S1  
SEWER PIPE BEDDING DETAILS**

SCALE: NTS  
DATE OF LAST REVISION: 03/22

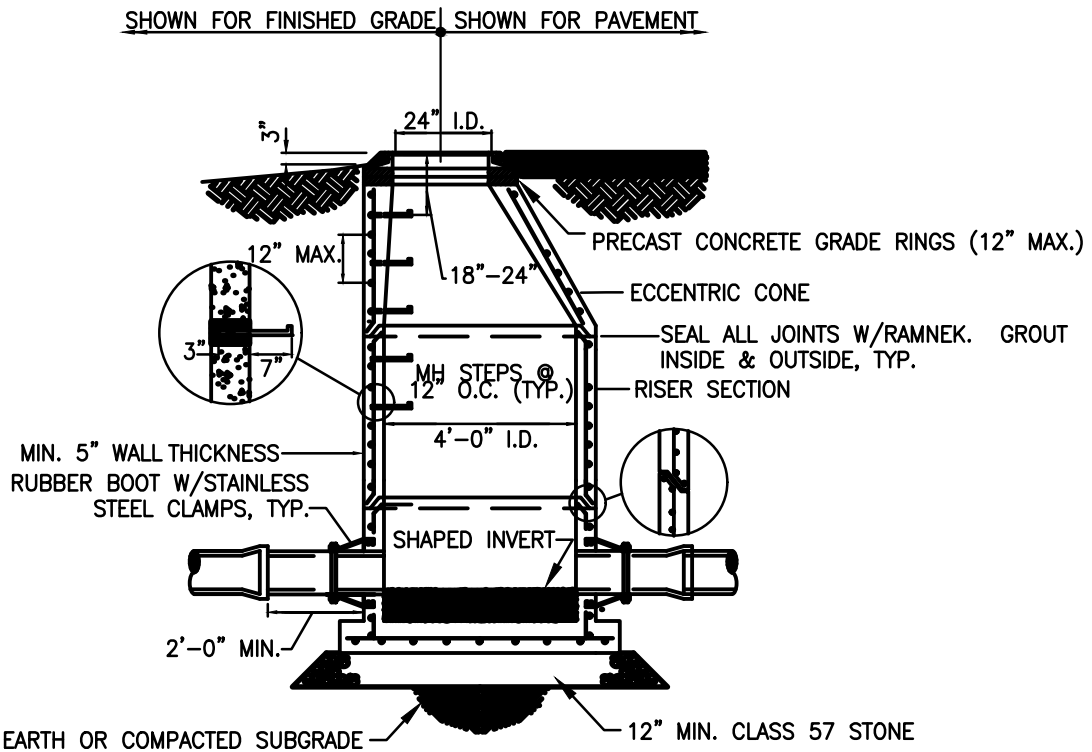






**MANHOLE BASE DETAIL FOR 5'-0" DIA. OR LARGER BASES**

NOTE: SET RIM ELEVATION 3' ABOVE GRADE IN FLOOD-PRONE OR SWAMPY AREAS OR WHERE DIRECTED BY THE CITY.

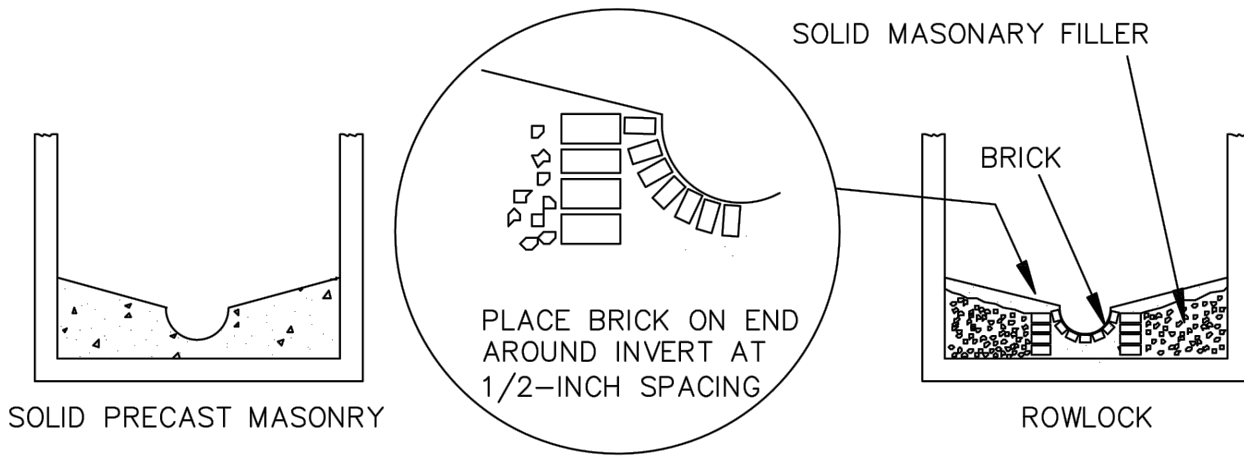
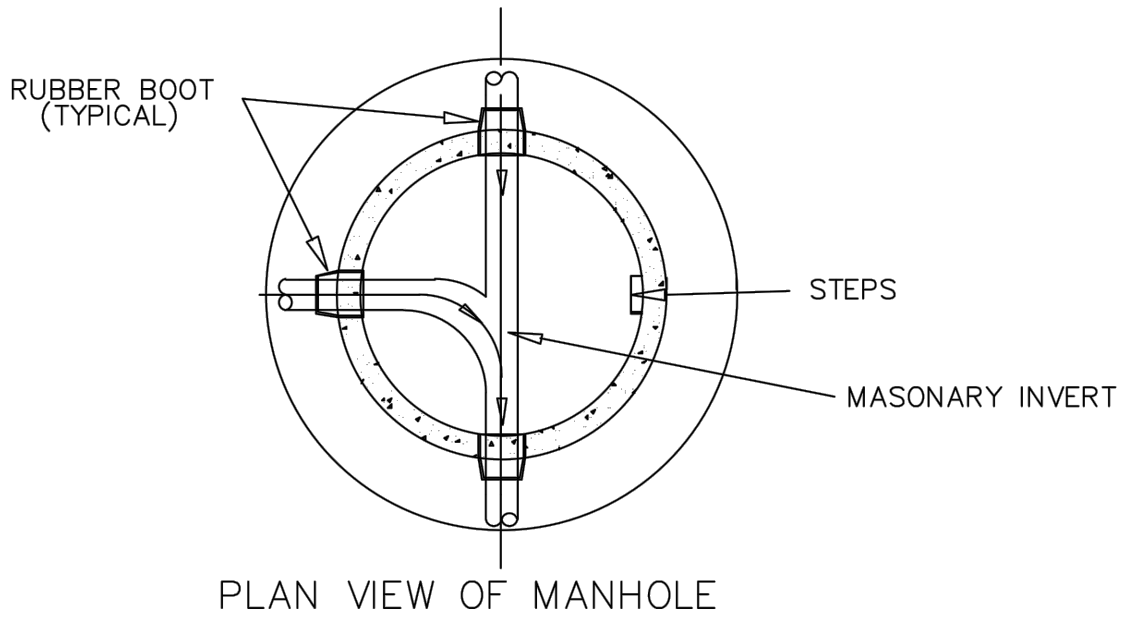


**STANDARD PRECAST CONCRETE MANHOLE**

**CITY OF DAHLONEGA STANDARD DETAIL S2  
MANHOLE DETAILS**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**NOTE:**

1. PRECAST INVERTS AREA ACCEPTABLE (NO FIELD MODIFICATIONS ALLOWED).
2. ENSURE A 0.2 FOOT DROP ACROSS INVERT.
3. FIELD INSTALLED INVERTS MUST BE ROWLOCK.
4. INVERTS FOR MANHOLES RECEIVING FORCEMAINS SHALL BE SIMILARLY CONSTRUCTED.
5. NO FIELD-MODIFICATION OF PRE-CAST INVERTS ALLOWED.
6. MAXIMUM GROUT SPACING BETWEEN BRICK SHALL BE 3/8".

PIPE SIZE	DEFLECTION	MIN. MH DIA.
8" & 15"	0° - 90°	4' - 0"
18"	0° - 60°	4' - 0"
18"	60° - 90°	5' - 0"
21" & 24"	0° - 60°	5' - 0"
21" & 24"	60° - 90°	6' - 0"

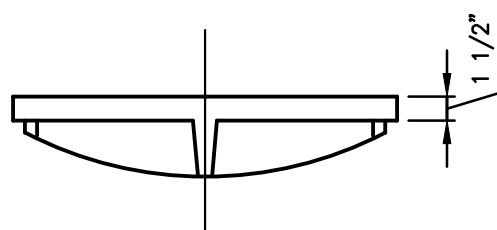
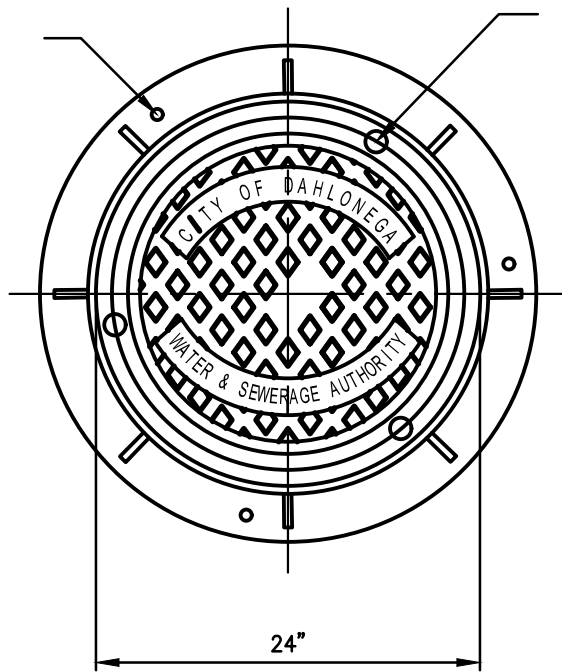
**CITY OF DAHLONEGA STANDARD DETAIL S3  
STANDARD INVERT**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**

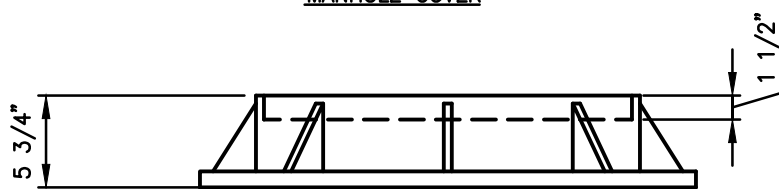


3/4" DIA. HOLE FOR BOLTING  
FRAME TO CONCRETE RISER

1 3/8" DIA. C'BORE  
5/8" THRU HOLE



MANHOLE COVER



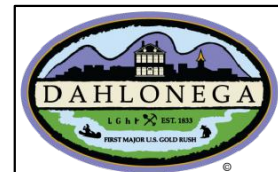
MANHOLE FRAME

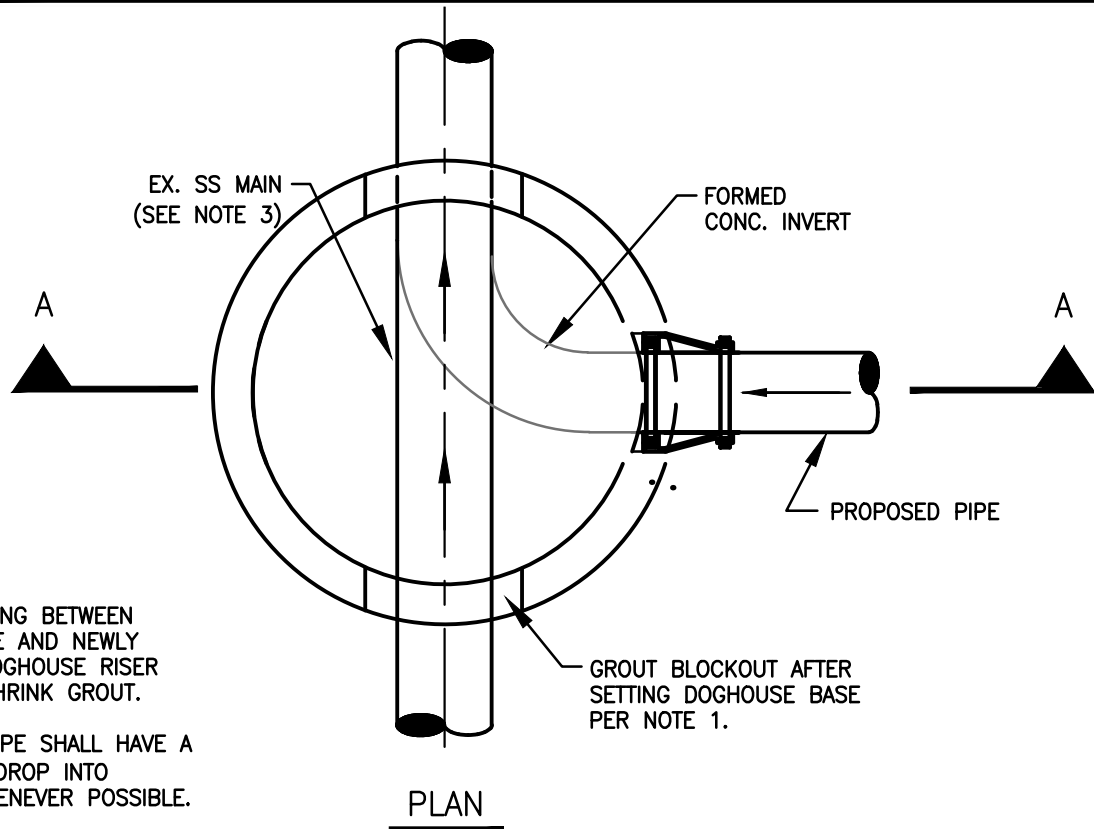
NOTES:

1. HEAVY DUTY CAST IRON FRAME AND COVER TO BE RATED FOR H-20 LOADING WITH LETTERING ON COVER AS SHOWN.
2. USE BOLT DOWN, GASKETED FRAME AND COVER WITHIN 100-YEAR FLOODPLAIN, JURISDICTIONAL WETLANDS OR OTHER AREAS PRONE TO FLOODING.

**CITY OF DAHLONEGA STANDARD DETAIL S4  
24" MANHOLE RING AND COVER**

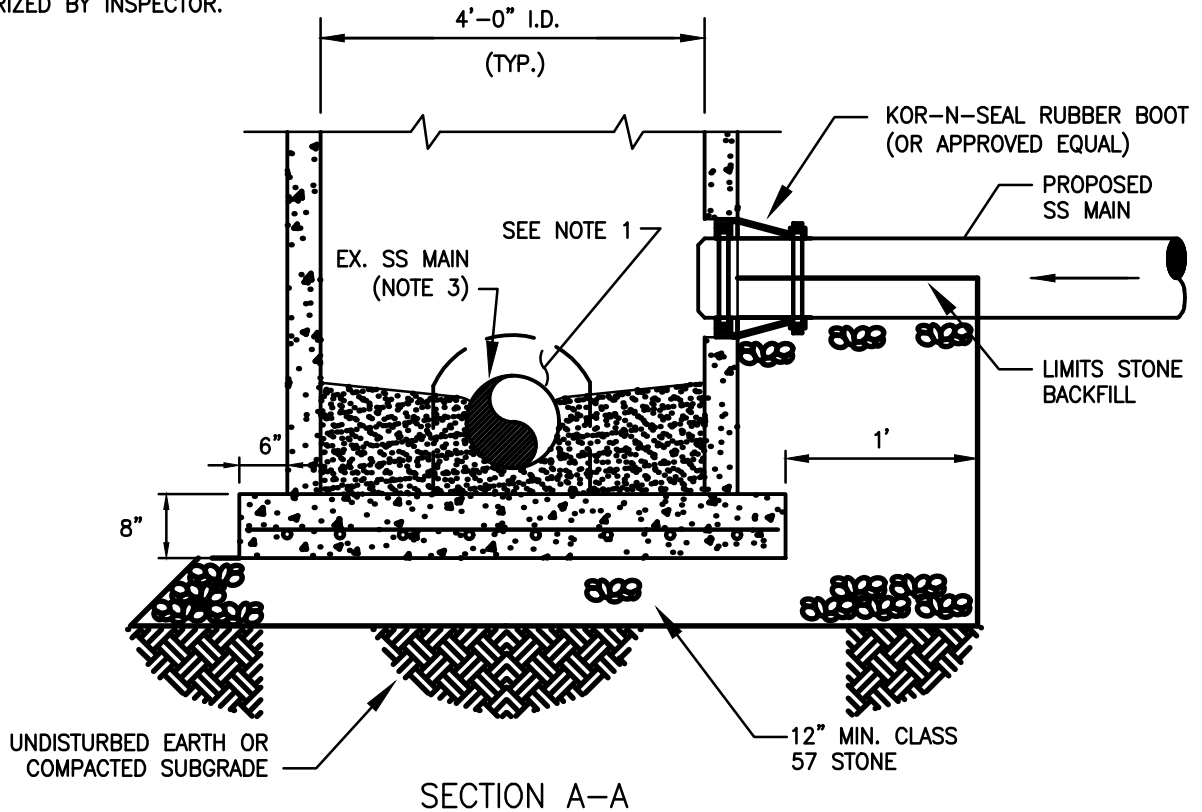
**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





NOTES

1. GROUT OPENING BETWEEN EXISTING PIPE AND NEWLY INSTALLED DOGHOUSE RISER WITH NON-SHRINK GROUT.
2. PROPOSED PIPE SHALL HAVE A MINIMUM 8" DROP INTO MANHOLE WHENEVER POSSIBLE.
3. TOP PORTION OF EXISTING PIPE SHALL NOT BE REMOVED UNTIL AUTHORIZED BY INSPECTOR.

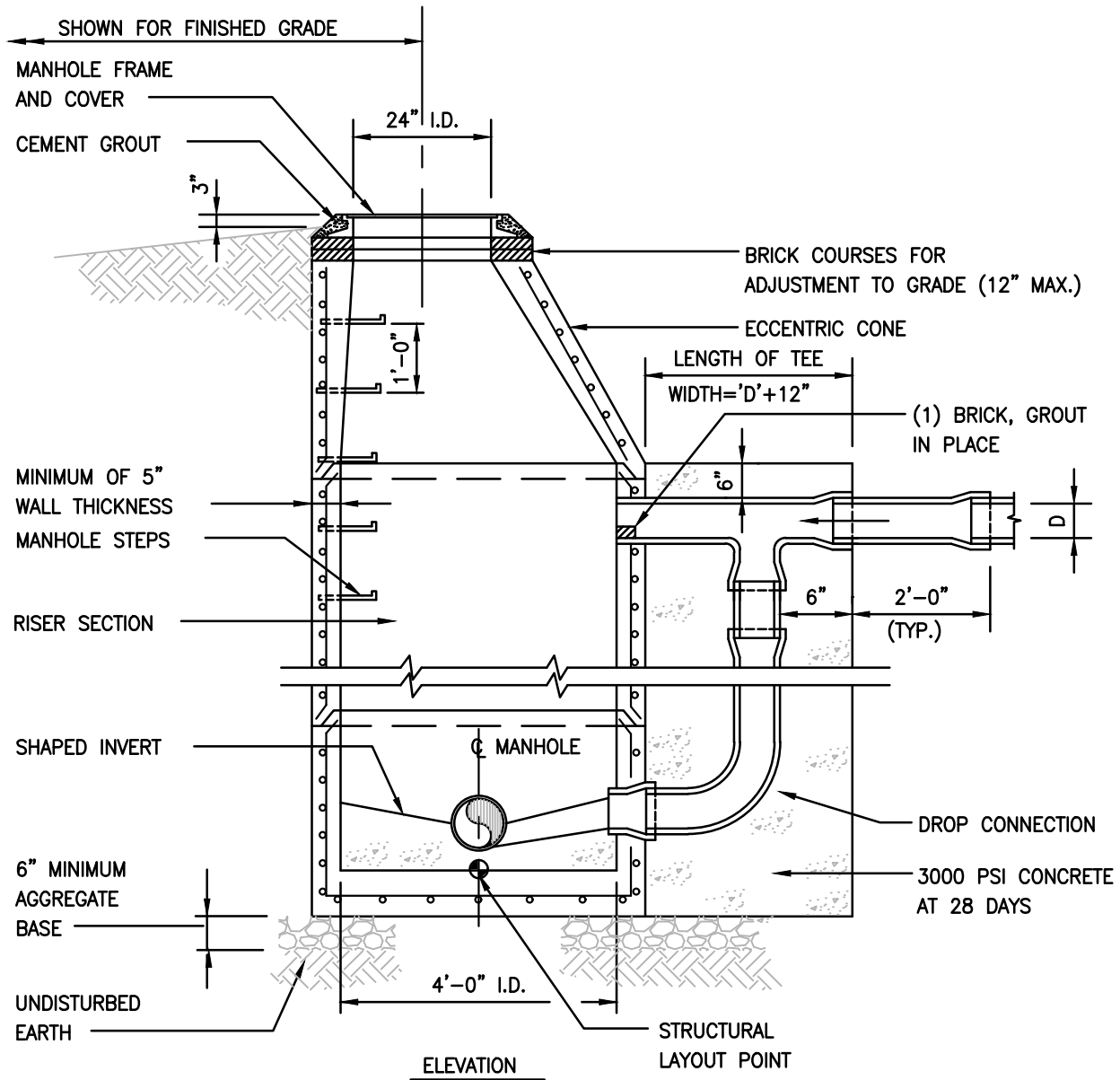


**CITY OF DAHLONEGA STANDARD DETAIL S5  
DOGHOUSE MANHOLE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22



R:\2047-0001 Dahlonega-Standards & Specifications\3 ENGINEERING\Drawings\S6 - Outside Drop Manhole.DWG Fri, 03/17/23 3:09 PM

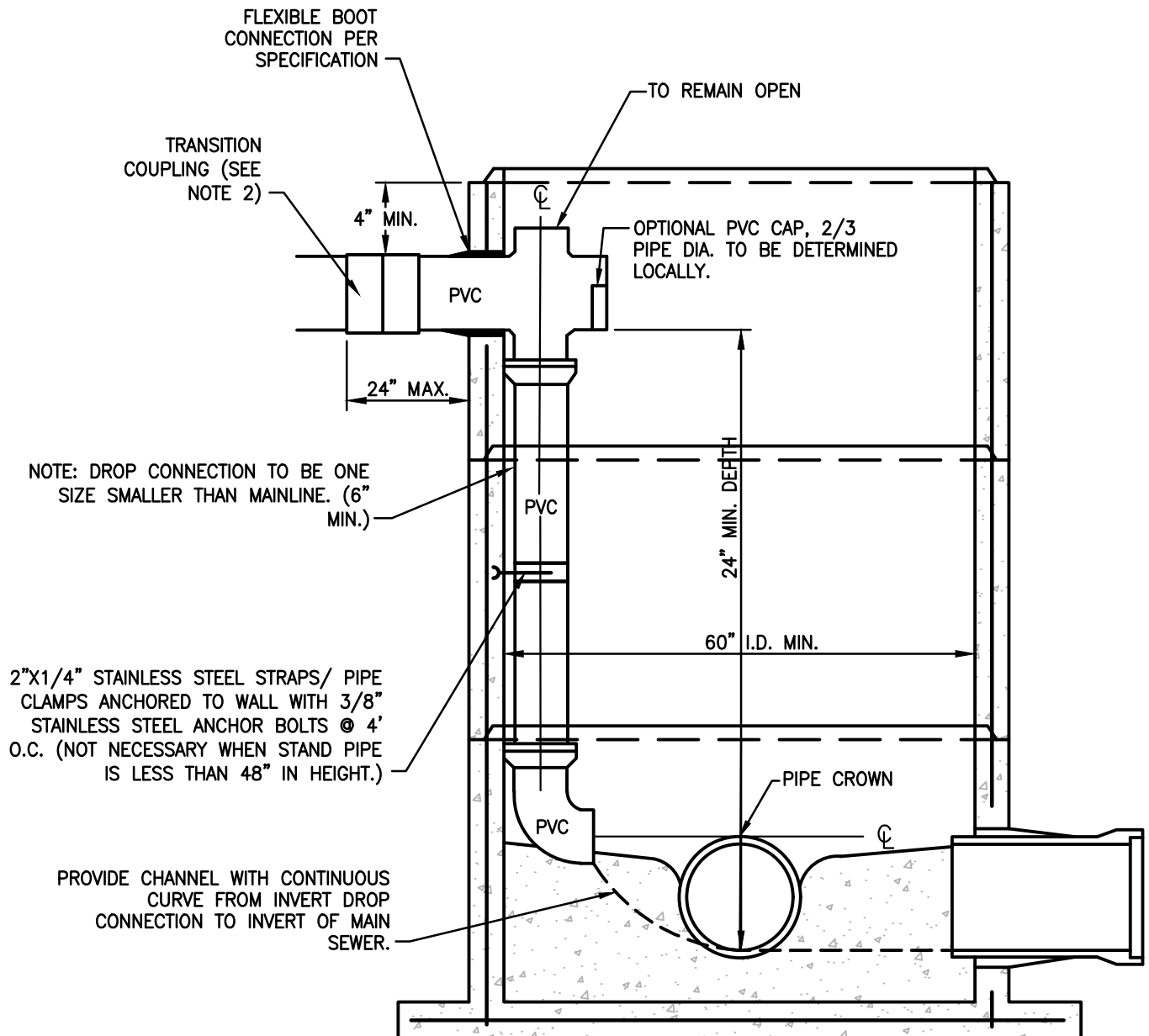


NOTE: TO BE USED WHERE DROP IS MORE THAN 2'-0".

**CITY OF DAHLONEGA STANDARD DETAIL S6  
OUTSIDE DROP MANHOLE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





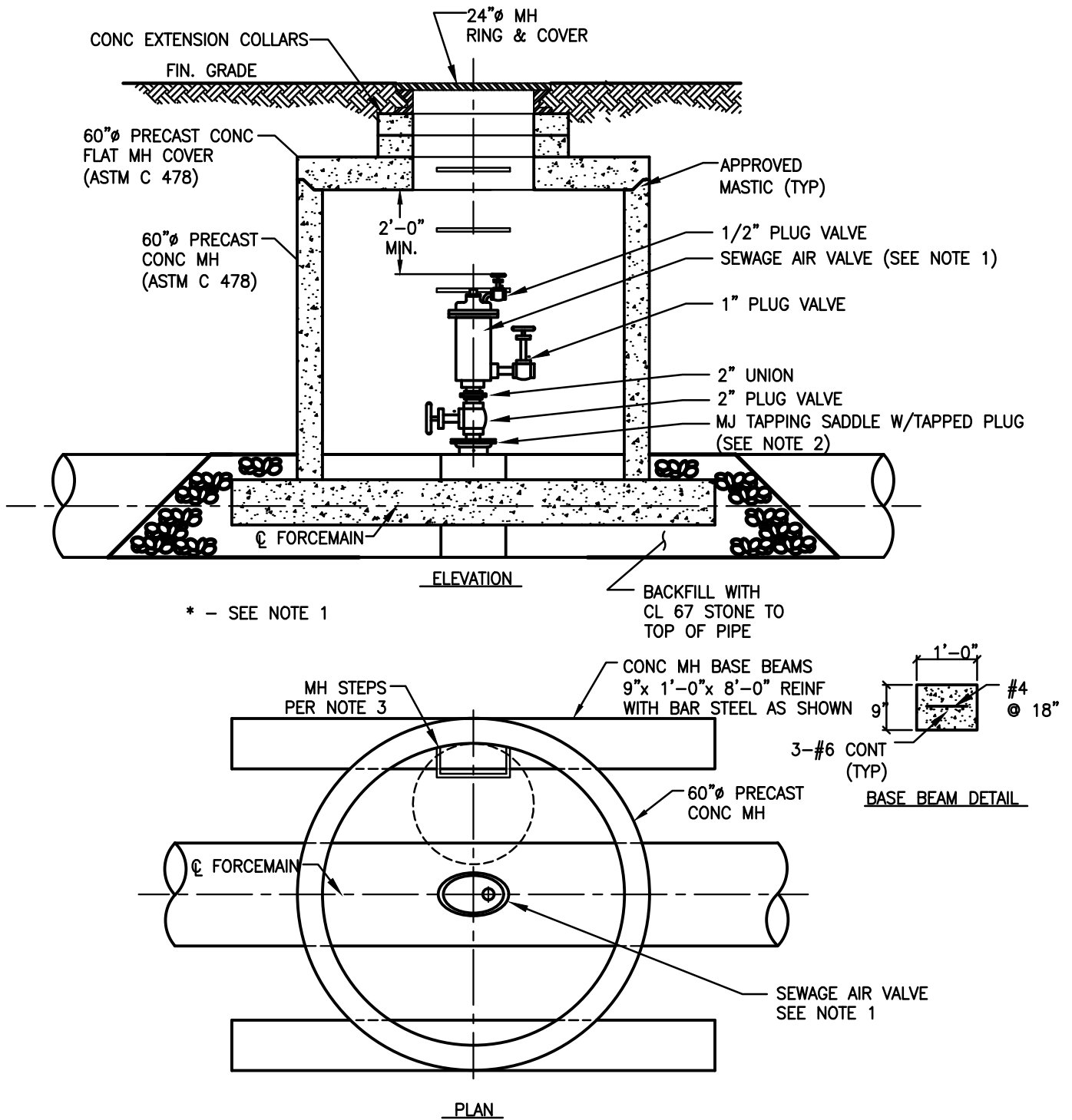
**NOTES:**

1. INTERIOR DROP TO BE USED IN NEW MANHOLES.
2. SOLVENT WELD JOINTS ON ALL INSIDE PIPING AND FITTINGS.
3. MAINLINE TO PVC DROP CONNECTION SHALL BE MADE WITH APPROVED COUPLING.
4. PLACEMENT OF DROP CONNECTION SHALL NOT CONFLICT WITH THE PLACEMENT OF THE MANHOLE STEPS.
5. BOTTOM 90 DEGREE BEND TO BE AT 45 DEGREES WITH RESPECT TO THE DOWNSTREAM FLOW.
6. MANHOLE TO RECEIVE FACTORY APPLIED COATING OF SKIDGAURD 62 OR EQUAL, MIN. THICKNESS TO BE 10 MIL. SKIDGAURD 62, OR APPROVED EQUAL, TO BE APPLIED TO ANY EXPOSED INTERIOR SURFACE OF MANHOLE AFTER GROUTING.
7. PRECAST CONCRETE MANHOLE TO BE IN COMPLIANCE WITH ASTM C-478.

**CITY OF DAHLONEGA STANDARD DETAIL S7  
INSIDE DROP MANHOLE**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





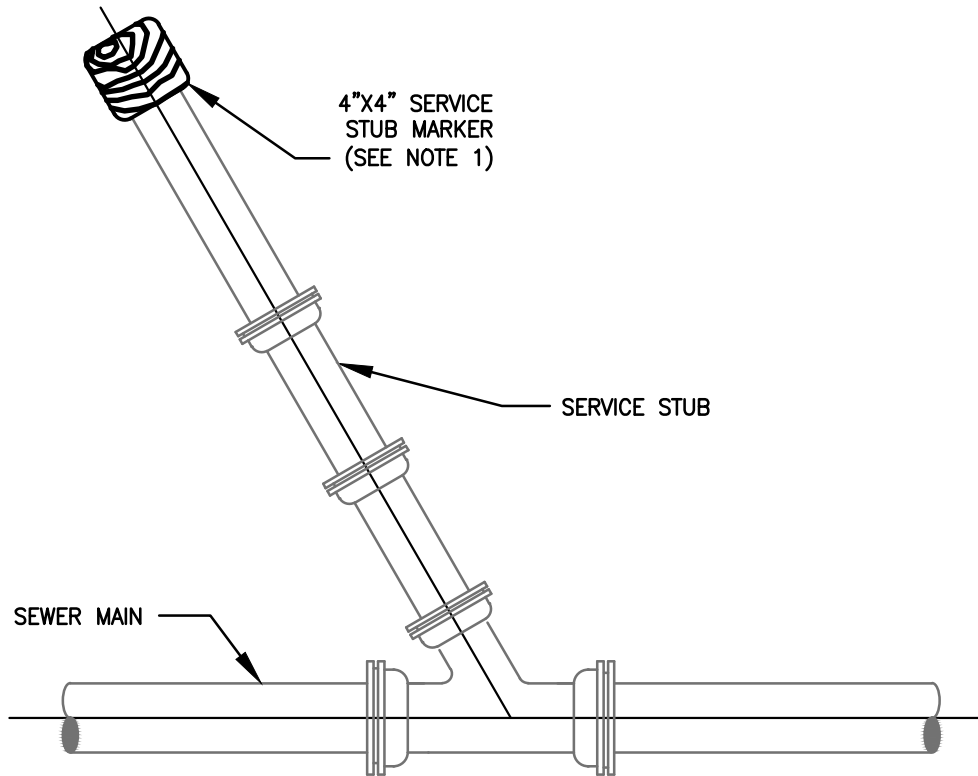
**NOTES:**

1. SIZE AIR VALVES PER MANUF. RECOMMENDATIONS BASED ON FORCEMAIN SIZE AND CONFIGURATION.
2. USE 8" MJ TAPPING SADDLE FOR 12" AND LARGER FORCEMANS, USE 4" MJ TAPPING SADDLE FOR 10" AND SMALLER FORCEMANS.
3. THE DISTANCE BETWEEN RUNGS, CLEATS, AND STEPS SHALL NOT EXCEED 12 INCHES AND SHALL BE UNIFORM THROUGHOUT THE LENGTH OF THE LADDER. LADDER RUNGS ARE REQUIRED IN PRECAST CONC MH.

**CITY OF DAHLONEGA STANDARD DETAIL S8  
SEWAGE AIR RELEASE VALVE MANHOLE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**NOTES:**

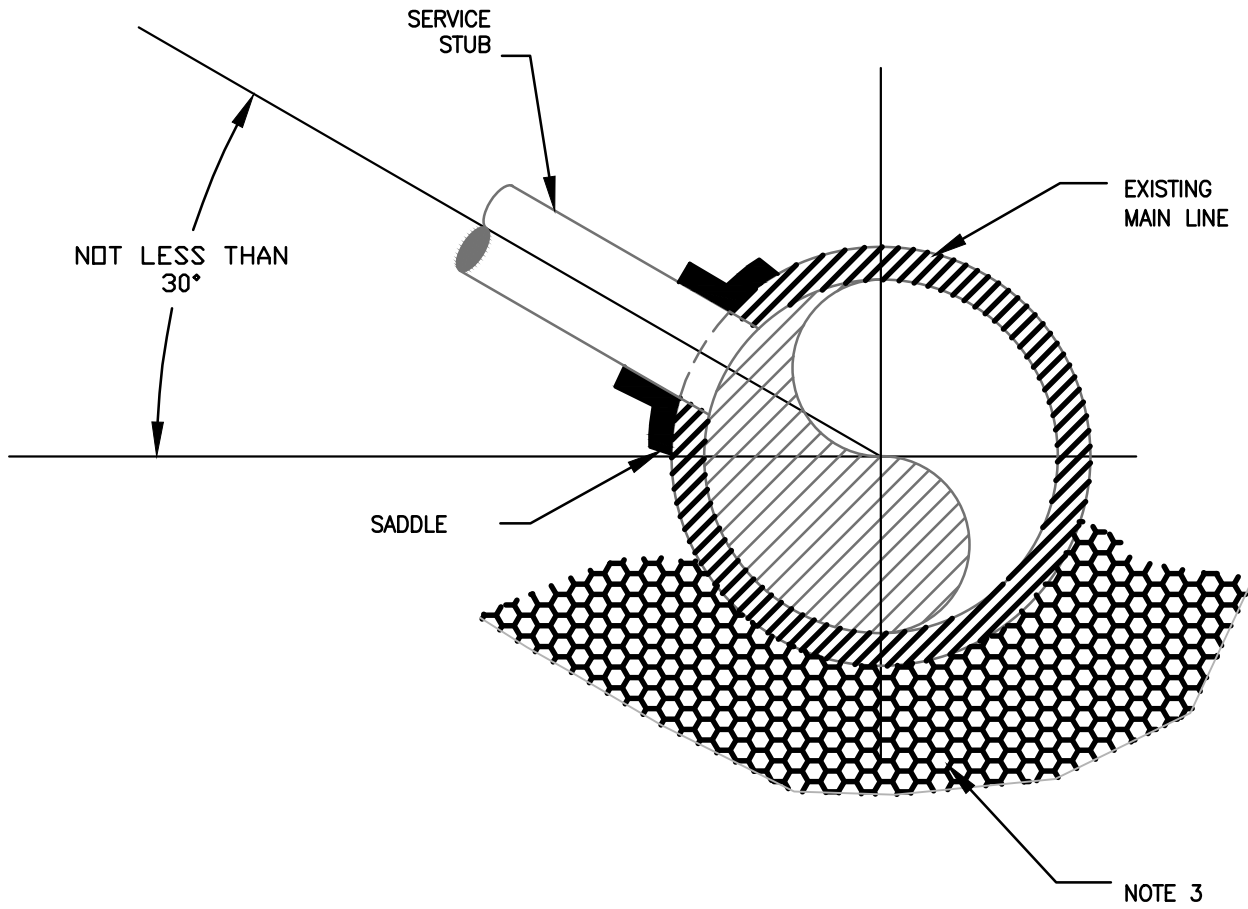
1. IDENTIFY SERVICE STUB MARKER AS PER OSHA SAFETY STANDARD SPECIFICATION 1910.4 UTILITY PROTECTION MARKING PAINT (GREEN).
2. EXTEND SERVICE STUB 5' WITHIN PROPERTY LINE.

**CITY OF DAHLONEGA STANDARD DETAIL S9  
SERVICE CONNECTION LOCATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**







**NOTES:**

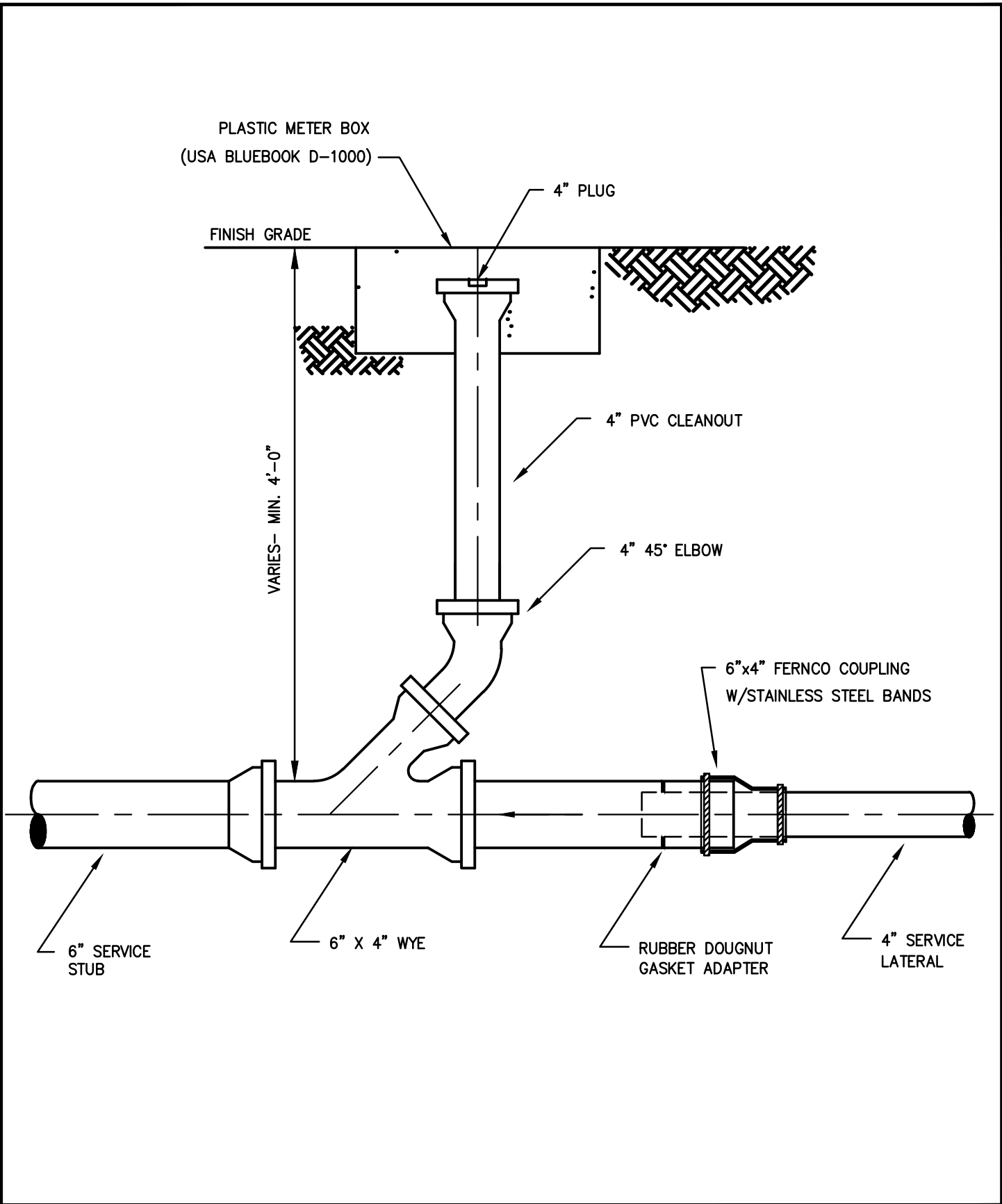
1. ALL TAPS TO BE MADE BY THE CITY OF DAHLONEGA.
2. CONTRACTOR TO OPEN DITCH AND EXPOSE PIPE PRIOR TO REQUESTING THE CITY TO MAKE TAP.
3. CONTRACTOR SHALL NOT DISTURB EXISTING PIPE BEDDING.

**CITY OF DAHLONEGA STANDARD DETAIL S10  
SERVICE CONNECTION TAP**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**



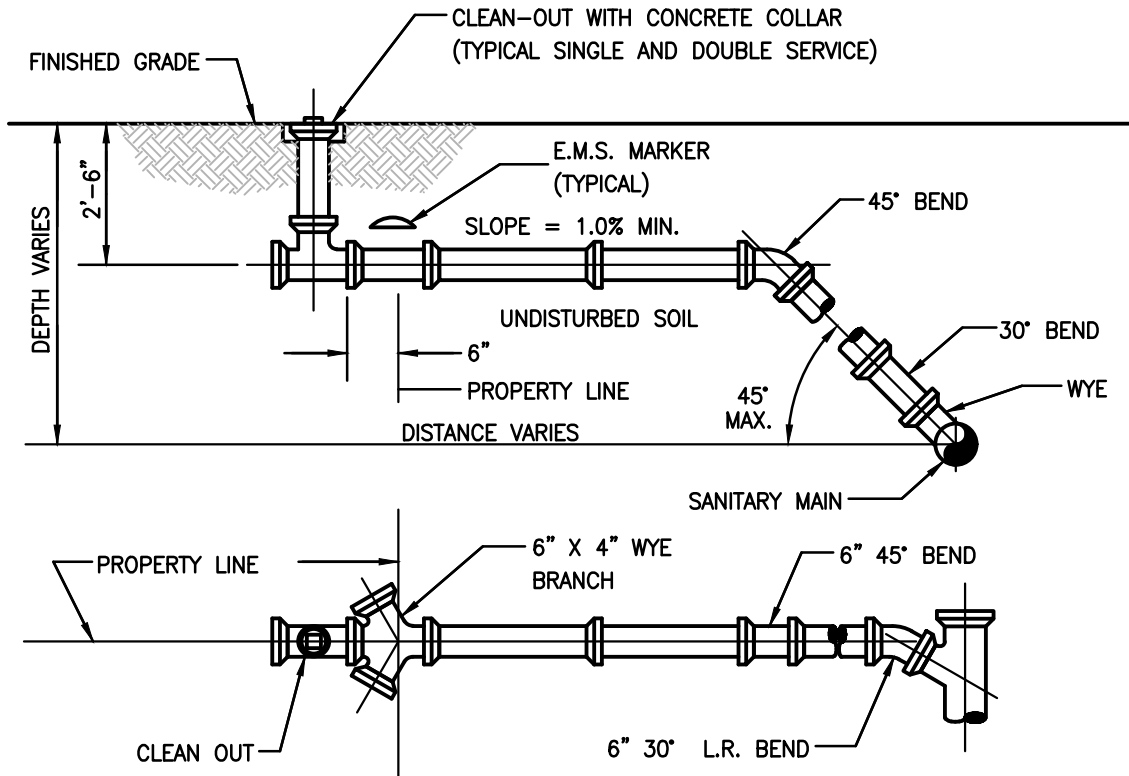
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**CITY OF DAHLONEGA STANDARD DETAIL S11  
SEWER LATERAL CONNECTION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





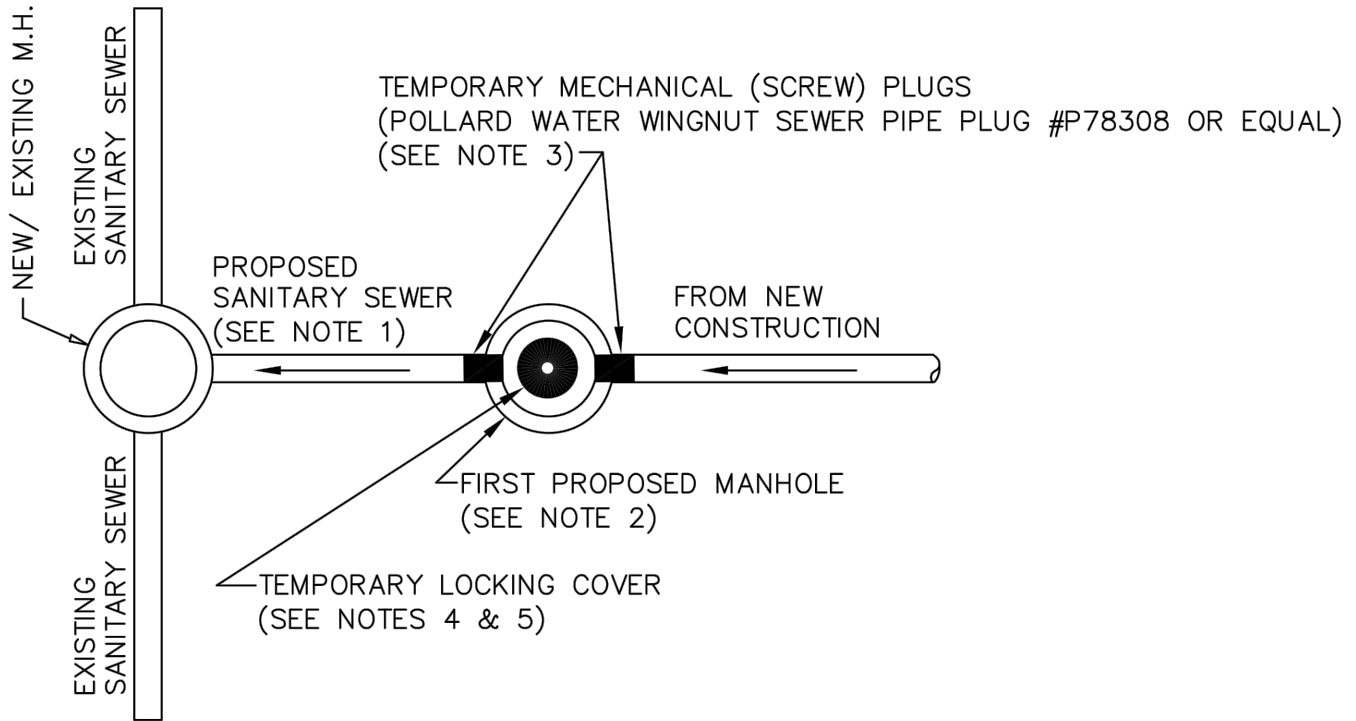
**NOTES:**

1. SERVICE LATERALS SHALL TERMINATE AT THE PROPERTY LINE AT A DEPTH OF THIRTY INCHES (30").
2. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2" X 2" TREATED WOOD STAKE AND AN E.M.S. SANITARY SEWER MARKER.
3. EACH SERVICE CONNECTION SHALL BE PLUGGED WATERTIGHT WITH AN APPROVED CAP OR PLUG.
4. CUT OFF BELL END WHEN USING FERNCO COUPLING FOR V.C.P. (FOR EXISTING SERVICES ONLY).
5. FOR P.V.C. INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPOSITE END WITH P.V.C. TO P.V.C. KNOCK ON SLEEVE.
6. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON PAVEMENT REPLACEMENT DETAIL.
7. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS FOR THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.

**CITY OF DAHLONEGA STANDARD DETAIL S12  
CLEAN-OUT AT R/W**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





NOTE:

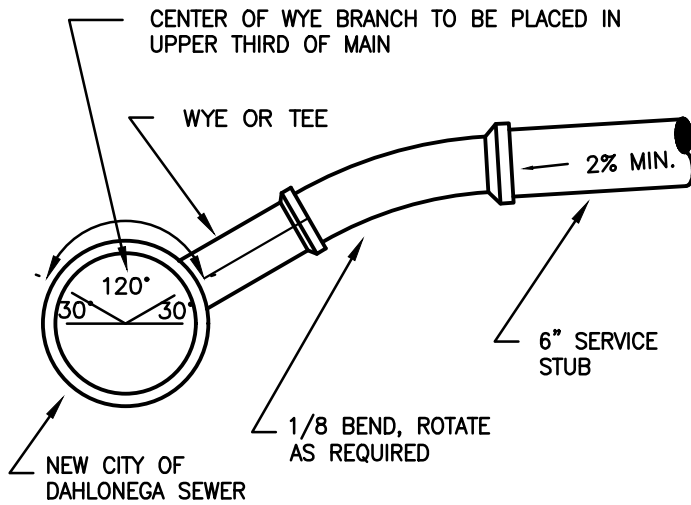
1. FIRST SECTION OF NEW SEWER LINE SHALL BE ISOLATED FROM THE REST OF THE PROPOSED SYSTEM.
2. THE FIRST MANHOLE OF THE PROPOSED SYSTEM SHALL BE USED TO FLUSH AND PUMP OUT THE PROPOSED SANITARY SEWER.
3. TEMPORARY MECHANICAL (SCREW) PLUGS TO BE INSTALLED AS PART OF NEW SEWER INSTALLATION. PLUGS TO BE TIED TO MANHOLE STEP WITH A CABLE AND PADLOCK TO PREVENT TAMPERING. PLUGS TO REMAIN IN PLACE UNTIL PASSING FINAL INSPECTION.
4. AFTER INSTALLATION OF NEW MANHOLE BY CONTRACTOR (INCLUDING INSTALLING TEMPORARY MECHANICAL PLUGS), CITY OF DAHLONEGA TO INSTALL LOCKING MANHOLE COVER. LOCKING MANHOLE COVER TO REMAIN IN PLACE UNTIL PASSING FINAL INSPECTION.
5. UPON PASSING FINAL INSPECTION, GCDWR WILL REMOVE LOCKING MANHOLE COVER AND INSTRUCT CONTRACTOR TO REMOVE TEMPORARY MECHANICAL PLUGS.

**CITY OF DAHLONEGA STANDARD DETAIL S13  
NEW SANITARY SEWER MAIN CONNECTION**

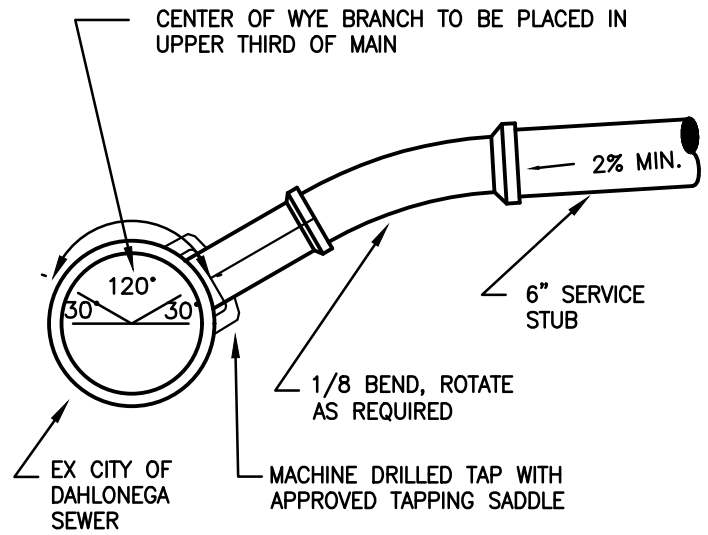
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DATE OF LAST REVISION: 03/22**



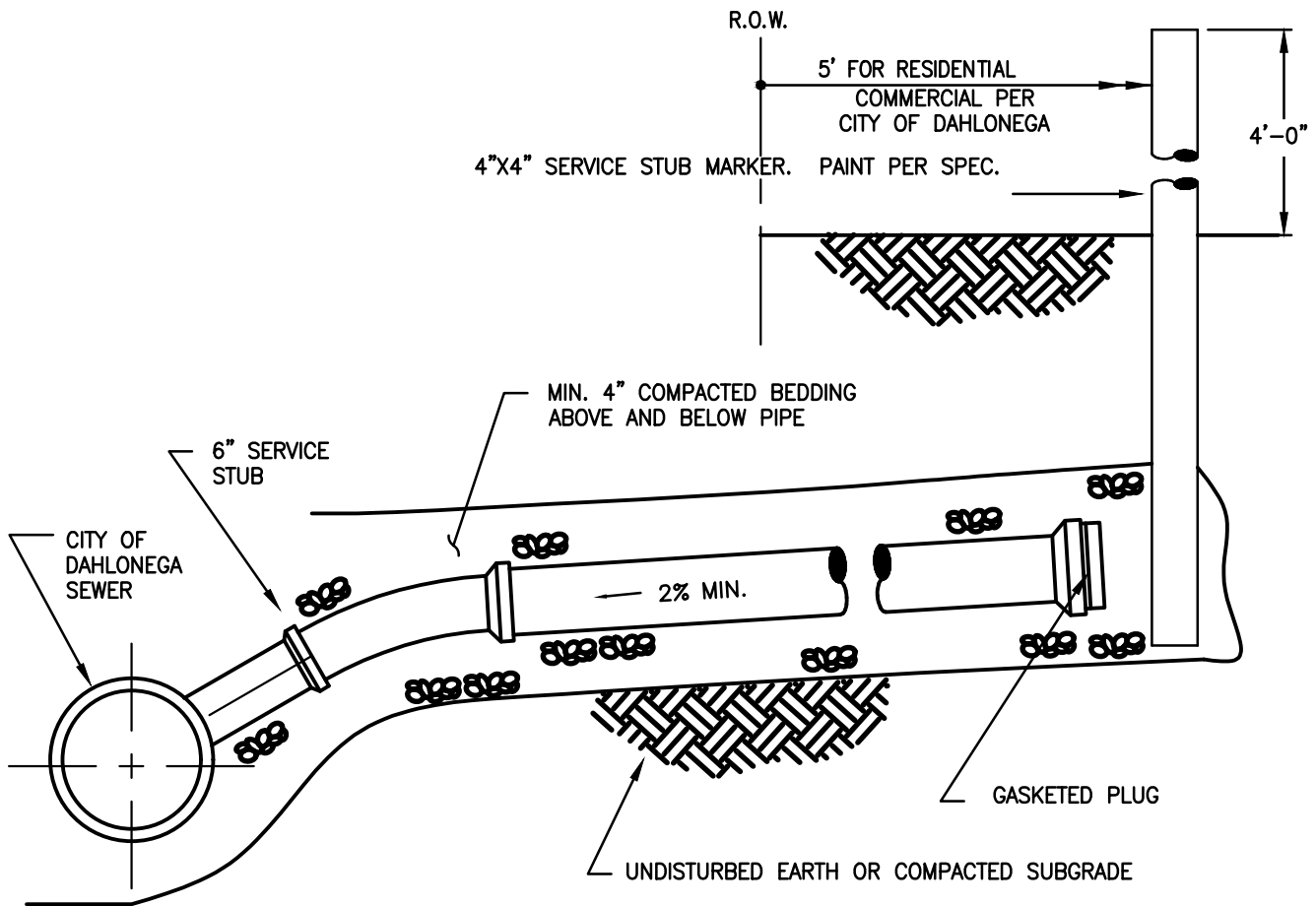
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6" SERVICE STUB ON NEW MAIN



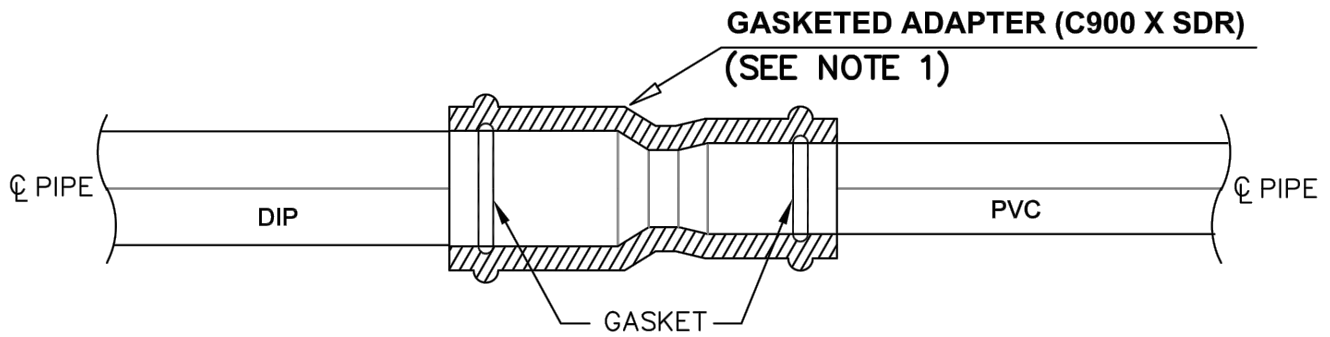
6" SERVICE STUB ON EXISTING MAIN



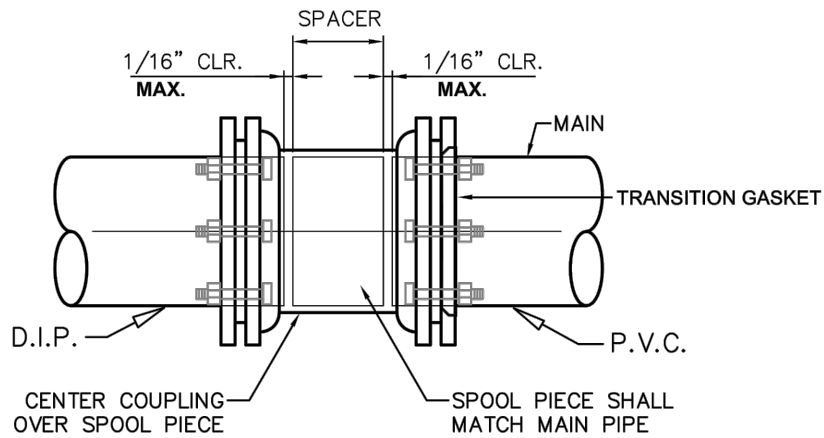
**CITY OF DAHLONEGA STANDARD DETAIL S14  
SEWER SERVICE STUB**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**OR**



**SOLID SLEEVE**

**NOTES:**

ONE OF THE FOLLOWING TRANSITION METHODS SHALL BE UTILIZED WHEN TRANSITIONING FROM DUCTILE IRON TO PVC PIPE:

1. GASKETED ADAPTER SHALL BE TYPE C900 X SDR (HARCO OR EQUAL), AND MEET FOLLOWING STANDARDS:

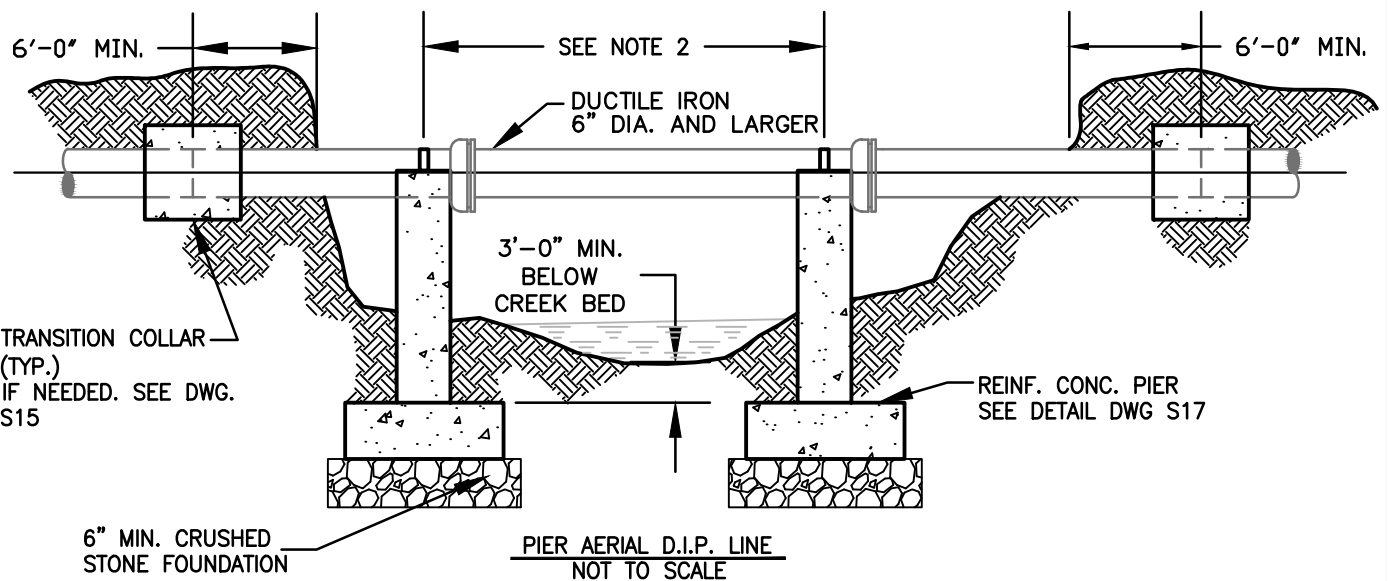
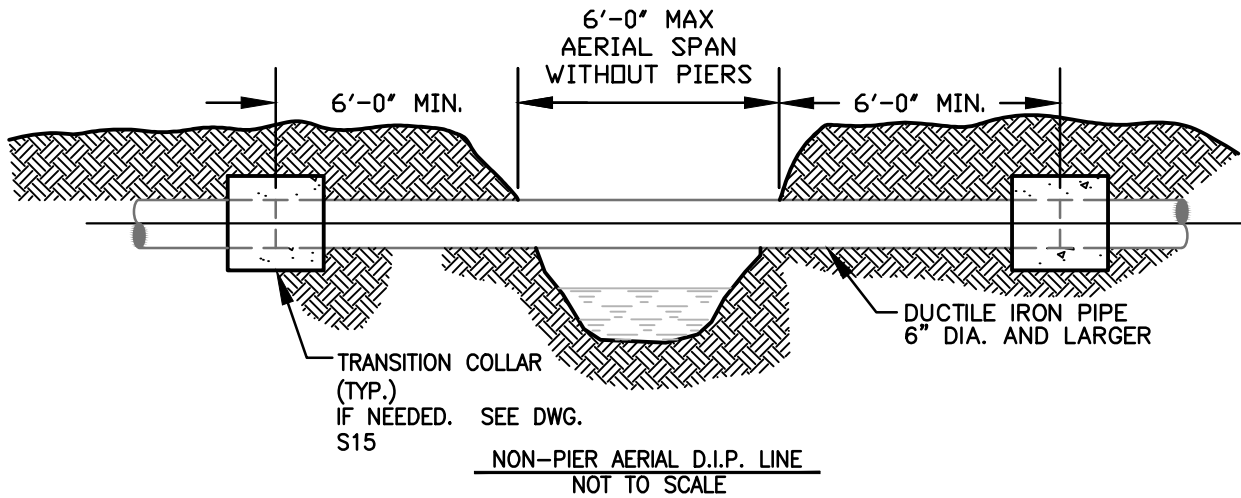
MATERIAL: ASTM 1784  
 JOINTS: ASTM D3212  
 GASKETS: F477  
 FITTINGS: D3034 AND F1336

2. SOLID SLEEVE ADAPTER SHALL BE STEEL AND PROPERLY COATED BEFORE BACKFILL.

**CITY OF DAHLONEGA STANDARD DETAIL S15  
 TRANSITION COLLAR**

**SCALE: NTS  
 DATE OF LAST REVISION: 03/22**





**NOTES:**

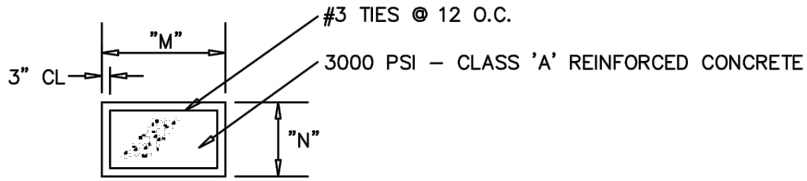
1. NO PIERS SHALL BE PLACED WITHIN NORMAL FLOW OF CREEK. FOOTINGS SHALL BE PLACED 3 FEET MINIMUM BELOW CREEK BED.
2. REINFORCED CONCRETE PIERS SHALL BE PLACED BEHIND BELL OF EACH JOINT OF DUCTILE IRON PIPE.
3. ALL PIER PLACEMENT SHALL BE APPROVED BY THE CITY.
4. IF PIER PLACEMENT FOR DUCTILE IRON PIPE CANNOT MEET THE ABOVE STIPULATIONS, STEEL PIPE SHALL BE USED.
5. ALL AERIAL CROSSINGS REQUIRE APPROVAL FROM THE CITY.

**CITY OF DAHLONEGA STANDARD DETAIL S16  
AERIAL DIP PIER CROSSING**

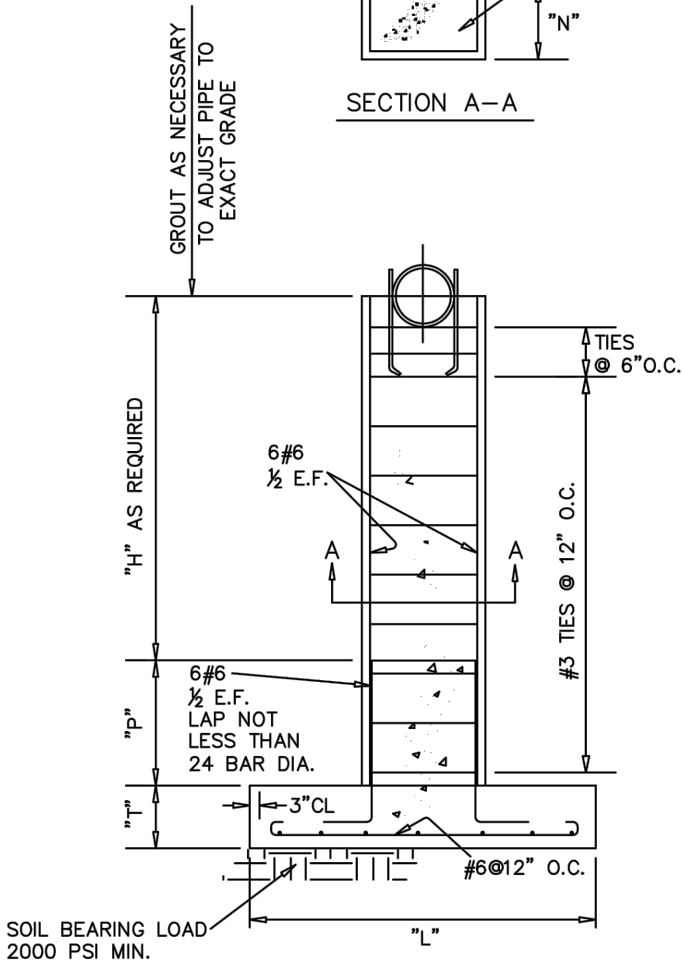
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DATE OF LAST REVISION: 03/22**



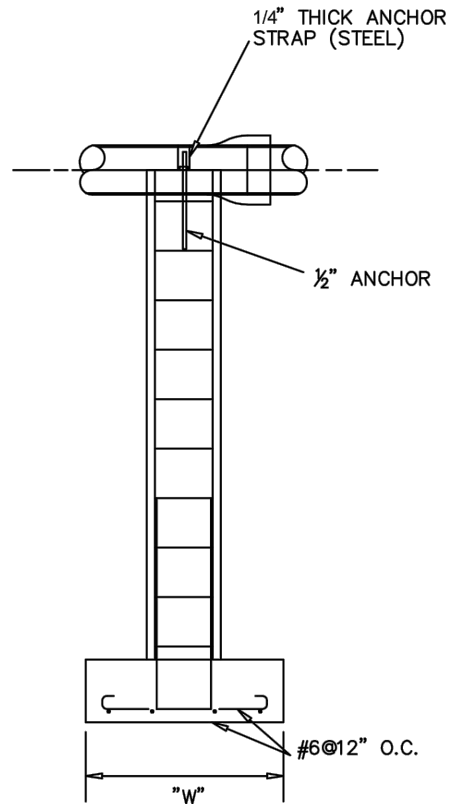
"H" =	0-5	5-10	10-15	15-20
"W" =	3	4	5	6
"L" =	4	5	7	10
"T" =	1	1	1.5	2
"N" =	1	1	1.5	1.5
"M" =	2	3	4	5
"P" =	2	3	4	5



SECTION A-A



FRONT ELEVATION



SIDE ELEVATION

NOTES:

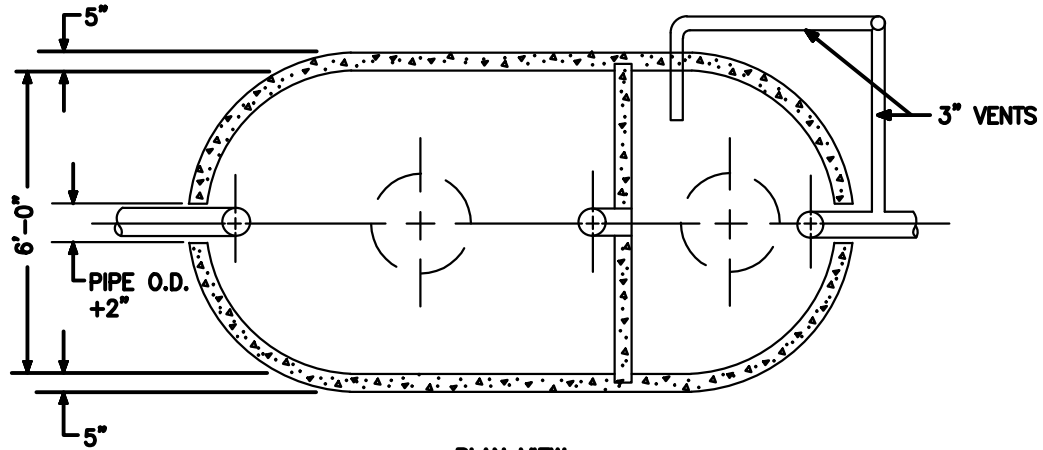
1. ABOVE DETAIL IS THE MINIMUM ACCEPTABLE. SITE CONDITIONS MAY DICTATE MORE STRINGENT REQUIREMENTS.
2. ALTERNATE DESIGNS MAY BE SUBMITTED.

**CITY OF DAHLONEGA STANDARD DETAIL S17  
CONCRETE PIER AND FOOTING**

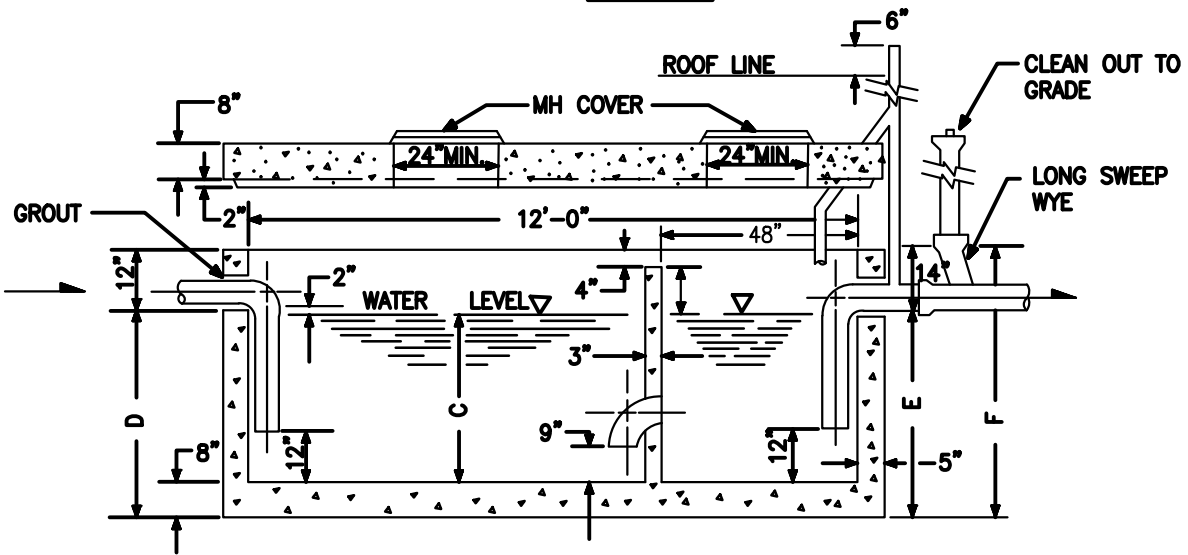
SCALE: NTS  
DATE OF LAST REVISION: 03/22







**PLAN VIEW**



**SECTION**

**NOTES:**

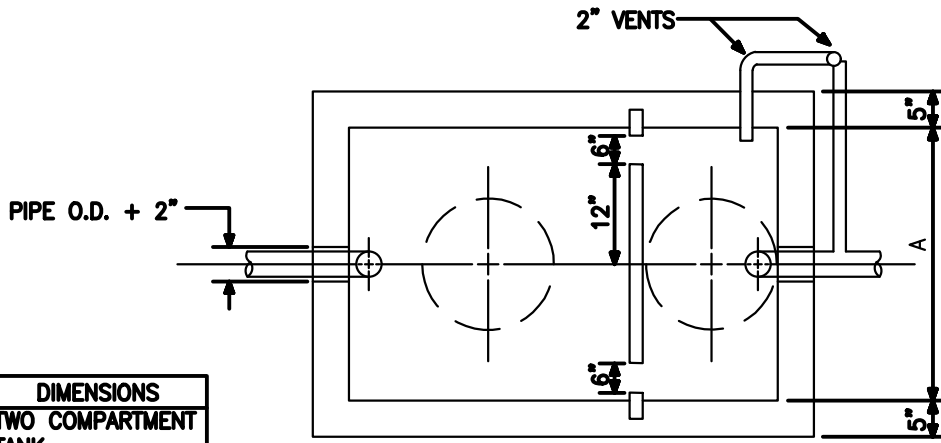
1. SECONDARY COMPARTMENT HAS VOLUME EQUAL TO 1/3 OF TOTAL CAPACITY.
2. PIPE AND FITTINGS SHALL BE CAST IRON MIN. 3" DIA.
3. WALLS AND BOTTOM REINFORCED THROUGHOUT WITH MIN. 2 X 16 6/10 REMESH
4. COVERS SHALL BE REINFORCED LONGITUDINALLY WITH NO. 6 REBAR ON 6" CENTERS, NO. 4 REBAR ON 6" CENTERS WIDTHWISE, AND NO. 8 REBAR DIAGONALLY AROUND ACCESS HOLES.
5. CLEAN OUT SHALL BE AN IRON BODY FERRULE WITH BRASS SCREW PLUG.
6. VENT PIPE (WHEN REQ'D) SHALL BE CAST IRON TO A POINT 6" ABOVE THE GROUND LEVEL.
7. MANHOLE RING AND COVER SHALL BE CITY STANDARD, H-20 RATED.
8. NO BOLT DOWN COVERS ALLOWED WITHOUT PERMISSION FROM THE CITY.
9. GREASE CAPACITY RATED FOR LARGE COMPARTMENT ONLY.
10. CHECK WITH SUPPLIER FOR EXACT DIMENSIONS.
11. GREASE INTERCEPTOR REQUIRED FOR RESTAURANTS, KITCHENS & CAFETERIAS.

Water Capacity (Approx. Gallons)	Grease Capacity (Approx. Cubic Ft.)	DIMENSIONS INCHES			
		C	D	E	F
1565	100	40	50	48	62
1800	121	46	56	54	68
2035	143	52	62	60	74
2505	186	64	74	72	86
2975	229	76	86	84	98
3210	250	82	92	90	104
3445	271	88	98	96	110

**CITY OF DAHLONEGA STANDARD DETAIL S18  
GREASE INTERCEPTOR**

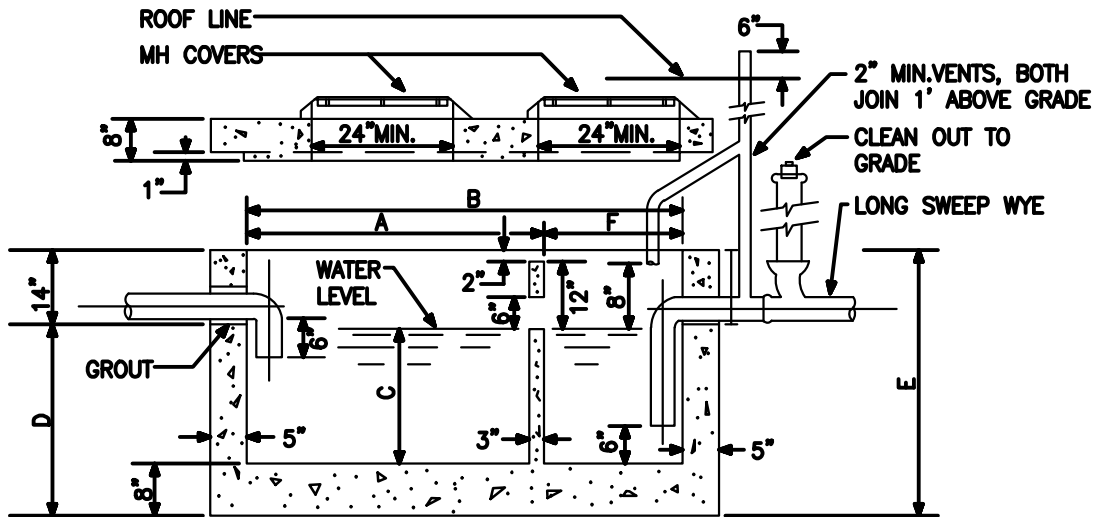
SCALE: NTS  
DATE OF LAST REVISION: 03/22





**PLAN VIEW**

WATER CAPACITY APPROX. GALLONS	DIMENSIONS					
	TWO COMPARTMENT TANK					
	INCHES					
	A	B	C	D	E	F
320	48	72	22	30	44	24
500	48	72	36	46	44	24
780	48	96	40	48	62	32
1060	72	102	34	42	56	34



**SECTION**

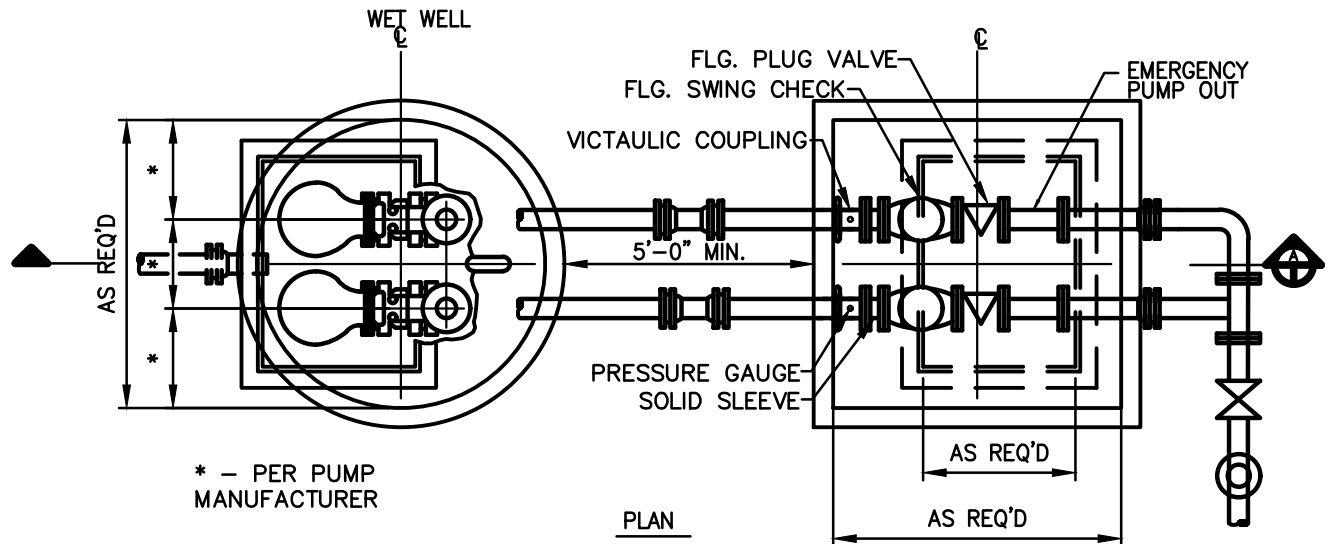
**NOTES:**

1. PIPE AND FITTINGS SHALL BE CAST OR DUCTILE IRON, MINIMUM 3" DIAMETER.
2. SMALL COMPARTMENT HAS 1/3 TOTAL CAPACITY.
3. WALLS AND BOTTOM REINFORCED THROUGHOUT WITH 2 x 6 6/10 REMESH.
4. COVERS SHALL BE REINFORCED LONGITUDINALLY WITH NO.6 REBAR ON 6" CENTERS, NO.4 REBAR ON 6" CENTERS WIDTHWISE, AND NO.8 REBAR DIAGONALLY AROUND ACCESS HOLES.
5. CLEAN OUT SHALL BE AN IRON BODY FERRULE WITH BRASS SCREW PLUG.
6. VENT PIPE SHALL BE DUCTILE IRON TO A POINT 6" ABOVE GROUND.
7. MANHOLE RING AND COVER SHALL BE CITY STANDARD.
8. CHECK WITH SUPPLIER FOR EXACT DIMENSIONS.
9. NO BOLT DOWN COVERS ALLOWED WITHOUT APPROVAL FROM THE CITY.
10. FOR CAPACITIES OTHER THAN SHOWN SEE THE CITY ENGINEER.

**CITY OF DAHLONEGA STANDARD DETAIL S19  
SAND AND OIL INTERCEPTOR**

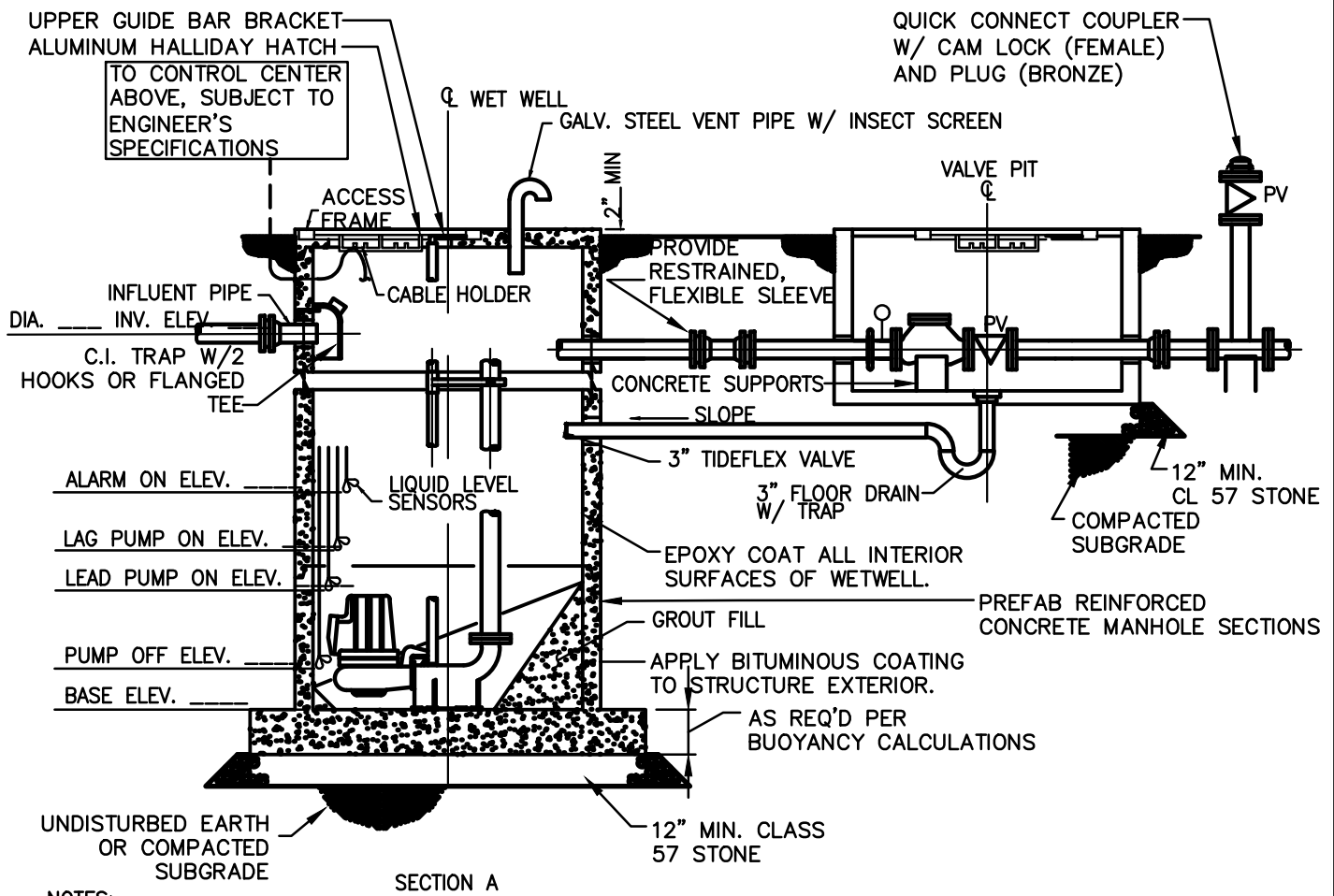
SCALE: NTS  
DATE OF LAST REVISION: 03/22





\* - PER PUMP MANUFACTURER

PLAN



SECTION A

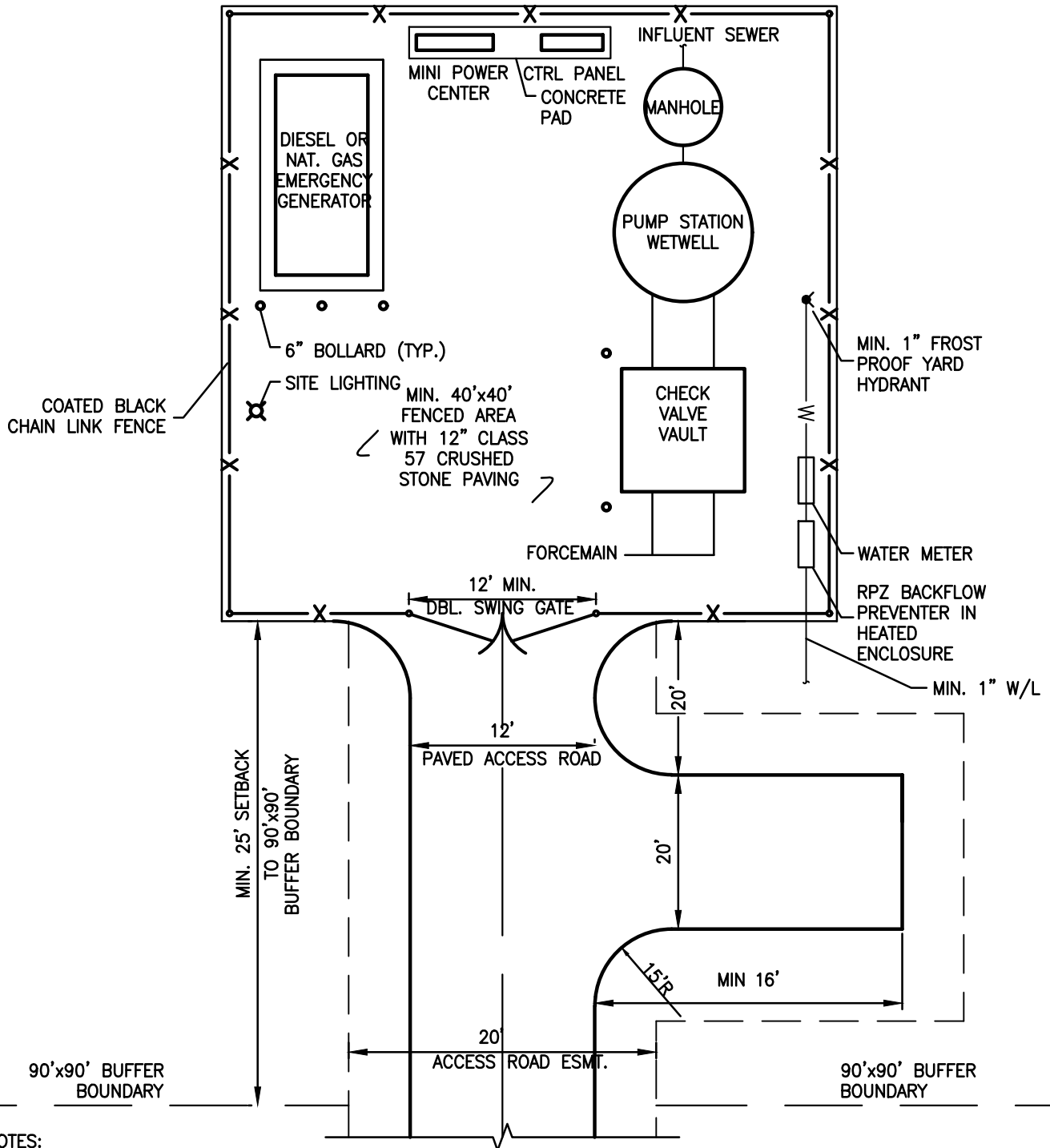
NOTES:

1. RESTRAIN ALL PIPE AND FITTINGS SHOWN THIS SHEET.
2. ALL EXPOSED PIPE & FITTINGS ARE FLANGED OR GROOVED.
3. ALL BURIED FITTINGS ARE RJ OR MJ WITH MEGALUGS.

**CITY OF DAHLONEGA STANDARD DETAIL S20  
SUBMERSIBLE SEWAGE PUMP STATION**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





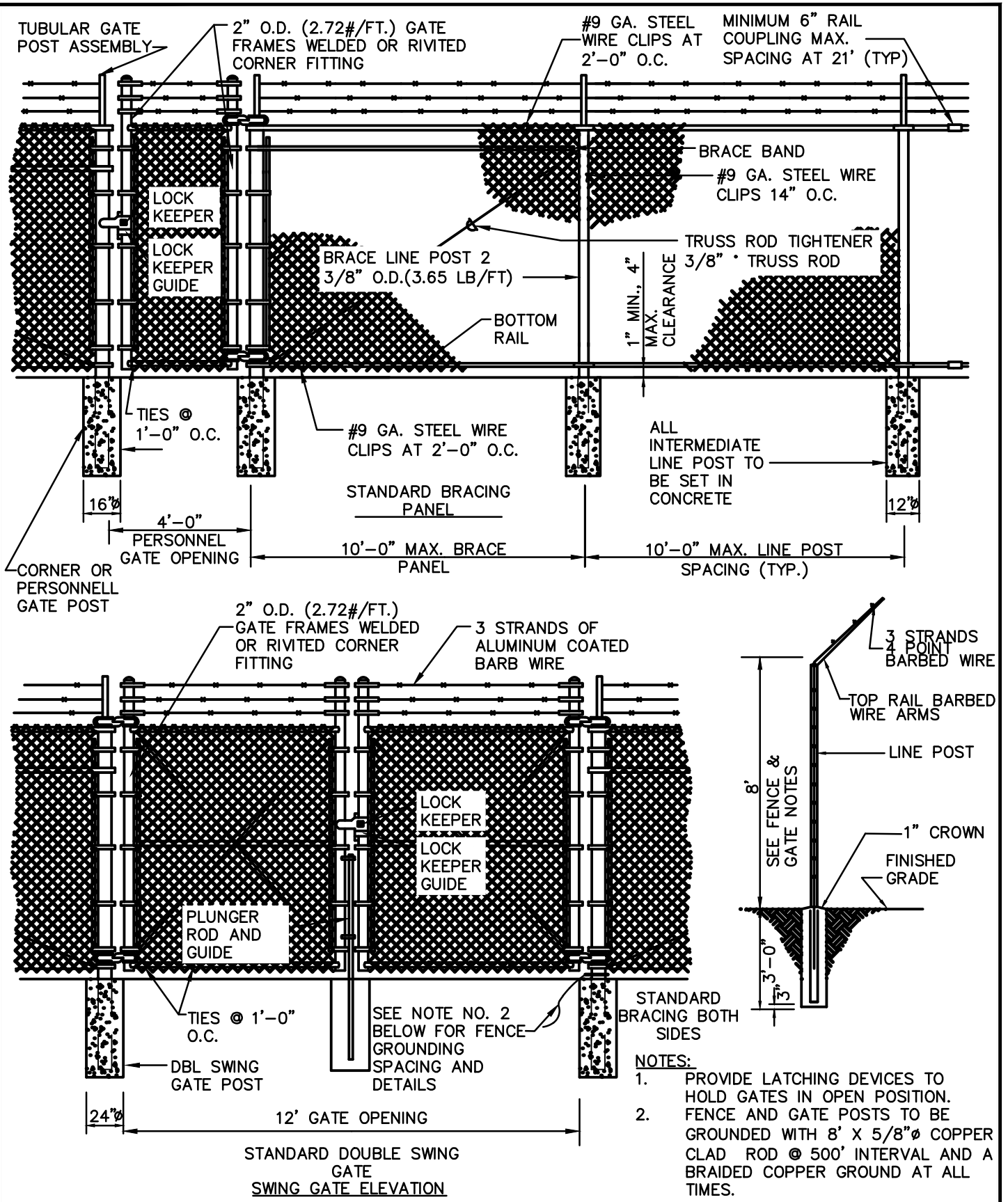
**NOTES:**

1. LAYOUT SHOWN IS FOR REFERENCE ONLY, DO NOT SCALE. DESIGN ENGINEER TO VERIFY FINAL LAYOUT PER SITE CONDITIONS.
2. REFERENCE DETAIL S20 FOR ADD'L.
3. PAVED ACCESS SHALL CONSIST OF 8" BASE COURSE, 3" BINDER COURSE AND 1.5" SURFACE COURSE.
4. DEVELOPER IS RESPONSIBLE FOR INSTALLING WATER TO PUMP STATION.

**CITY OF DAHLONEGA STANDARD DETAIL S21  
SUBMERSIBLE PUMP STATION SITE LAYOUT**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**

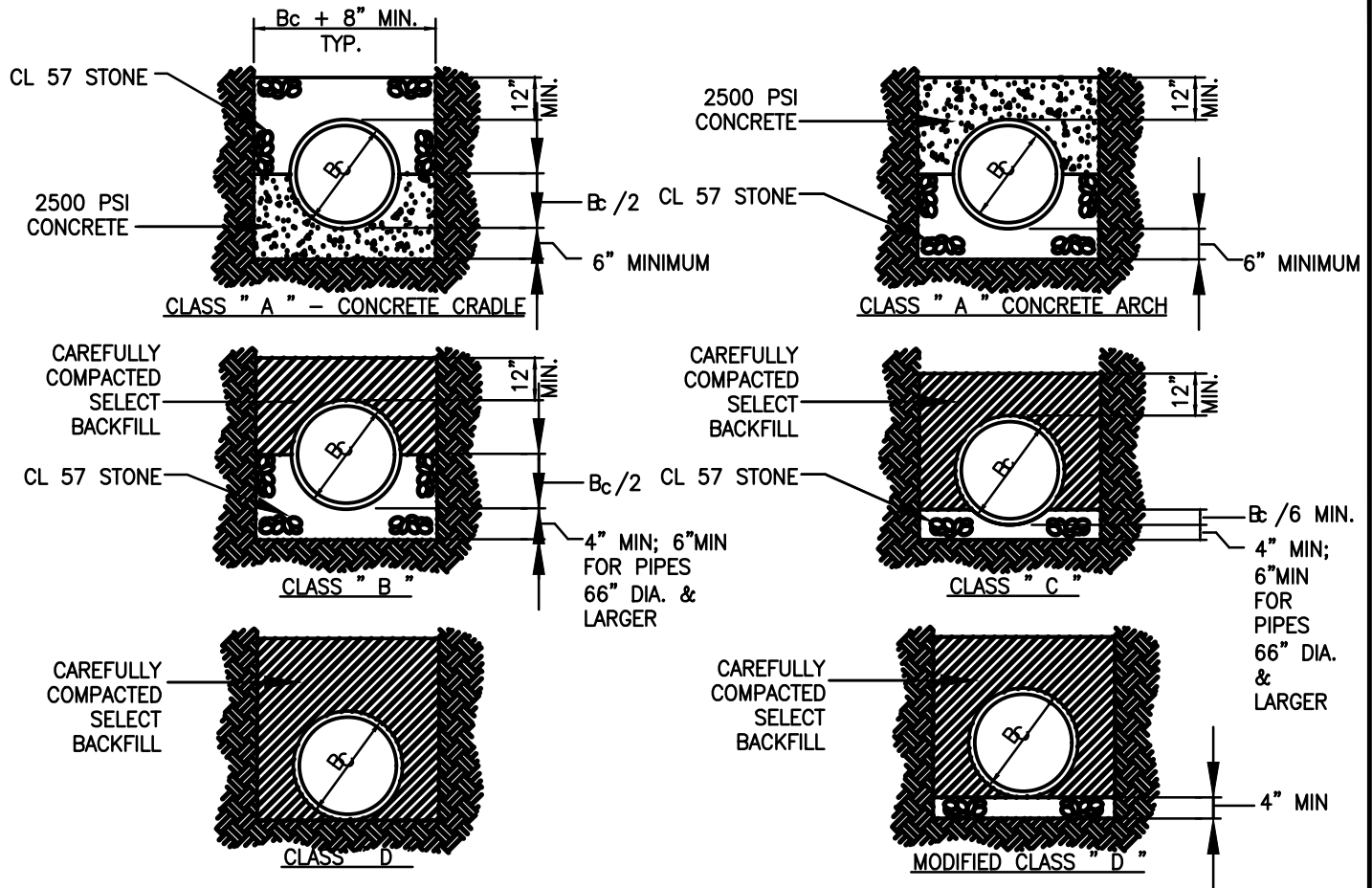




**CITY OF DAHLONEGA STANDARD DETAIL S22  
SITE FENCING**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





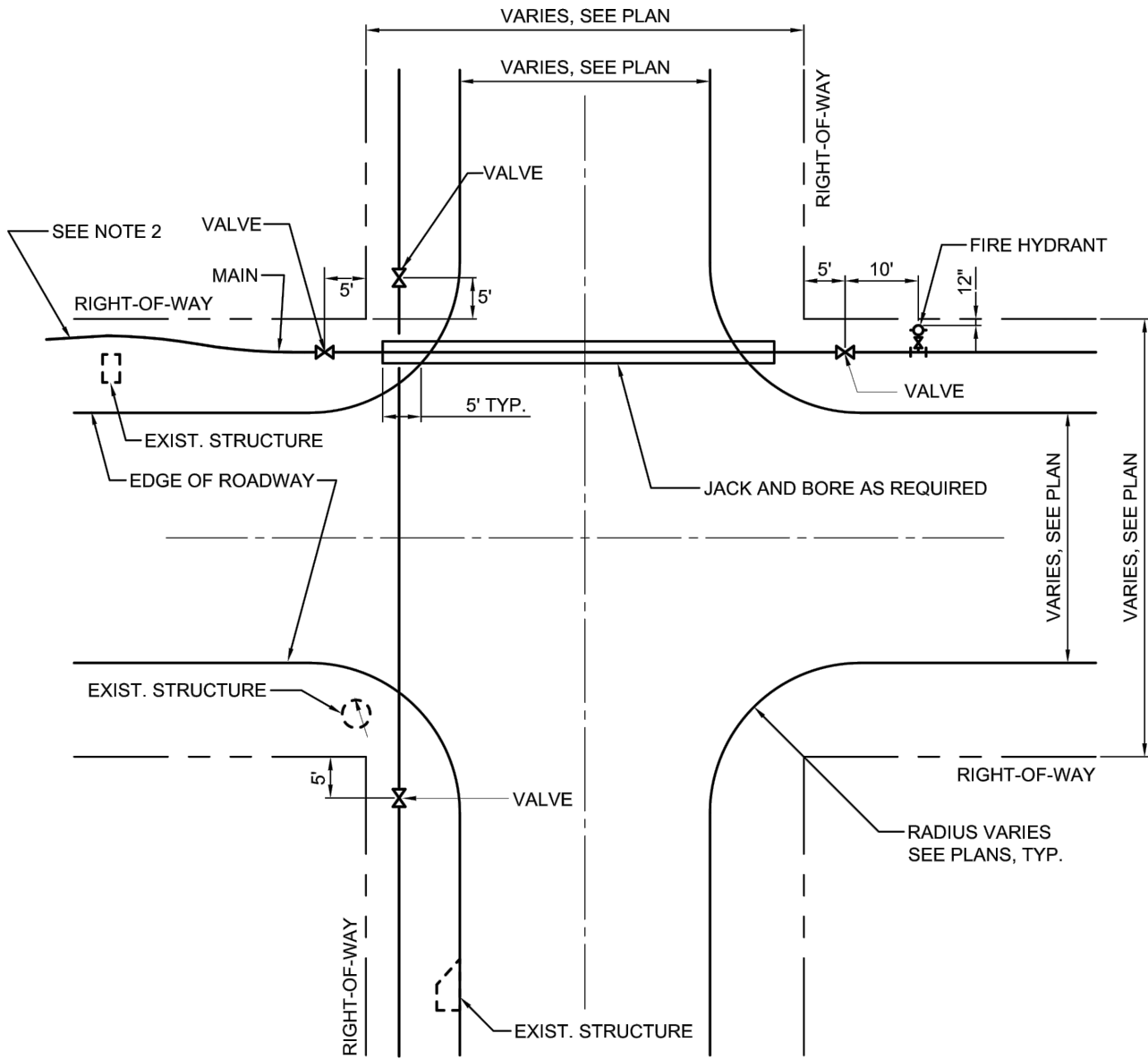
**NOTES:**

1. COMPACTION: BACKFILL SHALL BE BUILT UP IN LAYERS AND EACH LAYER SHALL BE THOROUGHLY COMPACTED BEFORE BEGINNING ANOTHER LAYER. LAYERS SHALL BE NO MORE THAN 6" IN DEPTH. PUDDLING WILL NOT BE PERMITTED, FROZEN OR WET MATERIAL SHALL NOT BE PLACED IN TRENCHES.
2. COMPACTION STANDARDS: ALL BACKFILL MATERIALS USED SHALL CONTAIN A SUFFICIENT AMOUNT OF MOISTURE FOR PROPER COMPACTION AND THESE MATERIALS SHALL BE COMPACTED AT NOT LESS THAN 95% OF THEIR OPTIMUM CLASSIFICATION AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D698.
3. COMPACTION TESTS: COMPACTION TESTS SHALL BE REQUIRED IN EXISTING OR PROPOSED STREETS, SIDEWALKS, DRIVES AND OTHER EXISTING OR PROPOSED PAVED AREAS AT VARYING DEPTHS AND AT INTERVALS AS DETERMINED BY THE CITY WITH A MINIMUM OF ONE TEST ON EACH JOB AND A MAXIMUM OF ONE REQUIRED TEST FOR EACH 400' OR LESS OF UTILITY MAIN CONSTRUCTION, UNLESS SOIL CONDITIONS OR CONSTRUCTION PRACTICES, IN THE OPINION OF THE CITY, WARRANT THE NEED FOR ADDITIONAL TESTS.
4. FOR EXCAVATION IN POOR SOIL OR ROCK: REMOVE UNSUITABLE MATERIAL WIDTH AND DEPTH DIRECTED BEFORE PIPE IS LAID. THE SUBGRADE SHALL BE BACKFILLED WITH AN APPROVED MATERIAL IN 6" LAYERS. EACH LAYER SHALL BE THOROUGHLY TAMPED TO 95% COMPACTION.
5. NO BOULDERS OR LOOSE ROCKS PERMITTED IN THE BACKFILL FROM BOTTOM OF PIPE TRENCH TO 2'-0" ABOVE PIPE.
6. FOR LOADING FACTORS LESS THAN 1.5 WHERE SUITABLE, UNDISTURBED SOIL IS PRESENT, USE CLASS "D" BEDDING. USE CLASS "C" BEDDING IF THE PIPE WILL BE SUBJECTED TO A LOADING FACTOR LESS THAN 1.5 AND IF OVEREXCAVATION OCCURS DUE TO ROCK AND/OR UNSUITABLE MATERIAL BEING ENCOUNTERED. USE CLASS "B" BEDDING FOR PIPES SUBJECTED TO A LOADING FACTOR GREATER THAN 1.5.

**CITY OF DAHLONEGA STANDARD DETAIL W1  
PIPE BEDDING DETAILS**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**PLAN**

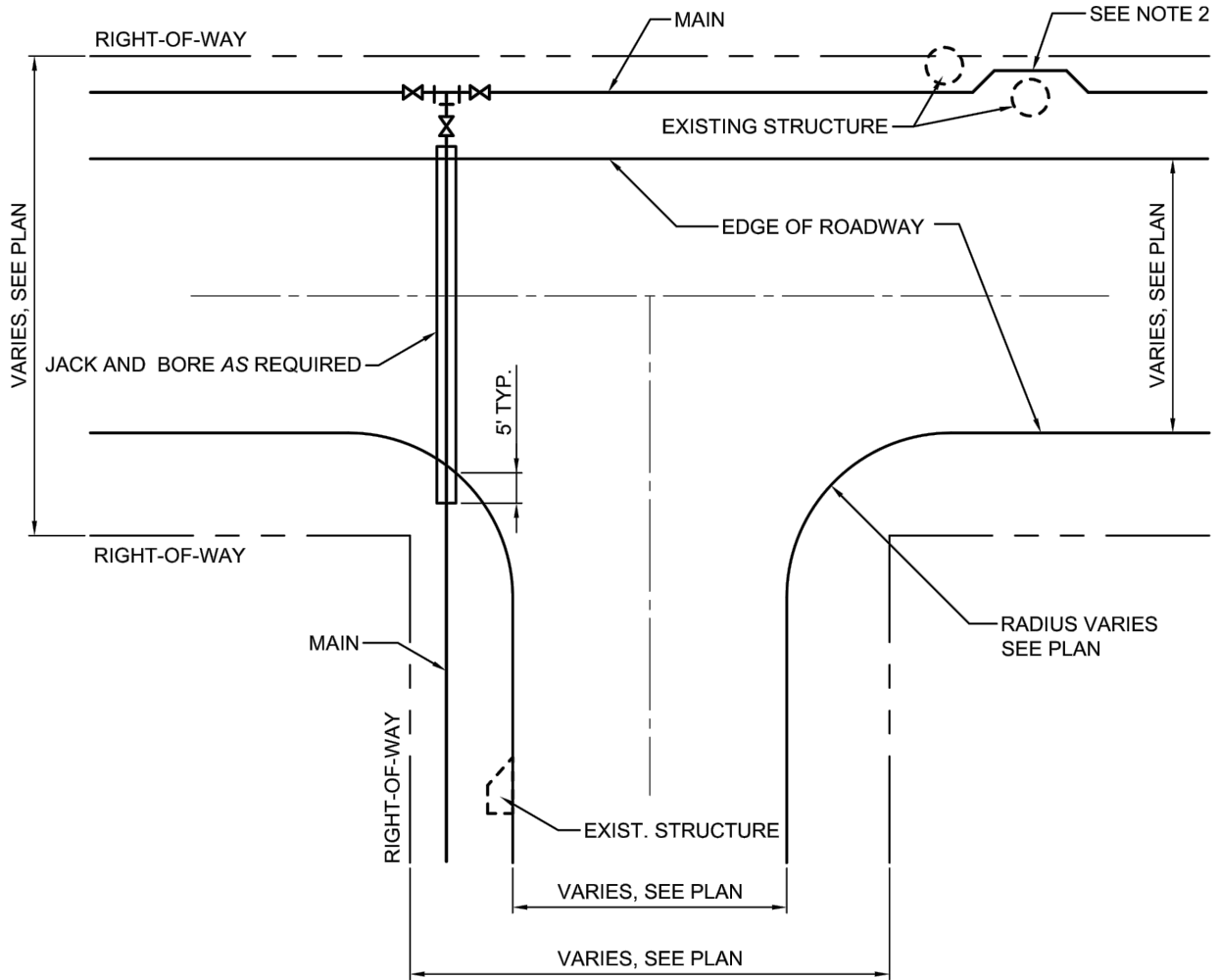
**NOTE:**

1. DEPTH OF COVER OVER WATER MAINS SHALL BE 4'. (SEE DETAIL G2).
2. WHEN GOING AROUND STRUCTURES, ROUTE WATER MAIN AROUND STRUCTURES BY PIPE JOINT DEFLECTION, AND WHERE NECESSARY, INSTALL 45° BENDS OR LESS.
3. VALVES SHALL BE MARKED IN THE CURB WITH A SAW CUT "V" AND PAINT.

**CITY OF DAHLONEGA STANDARD DETAIL W2  
TYPICAL WATER MAIN AT INTERSECTION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**PLAN**

**NOTE:**

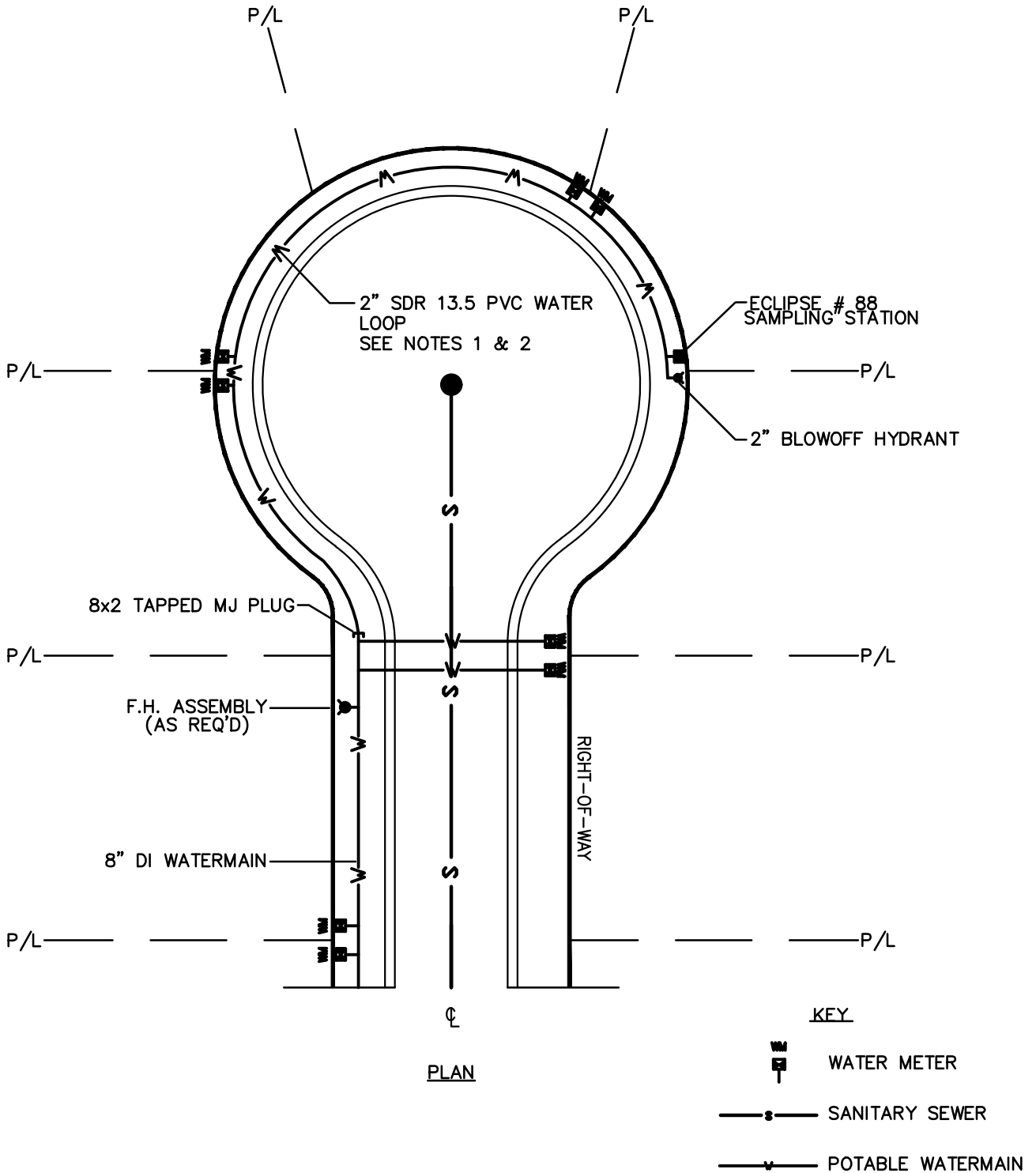
1. DEPTH OF COVER OVER WATER MAINS SHALL BE 4'. (SEE DETAIL G2).
2. WHEN GOING AROUND STRUCTURES, ROUTE WATER MAIN AROUND STRUCTURES BY PIPE DEFLECTION, AND WHERE NECESSARY, INSTALL 45° OR LESS BENDS.

**CITY OF DAHLONEGA STANDARD DETAIL W3  
TYPICAL BRANCH CONNECTION AT INTERSECTION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**







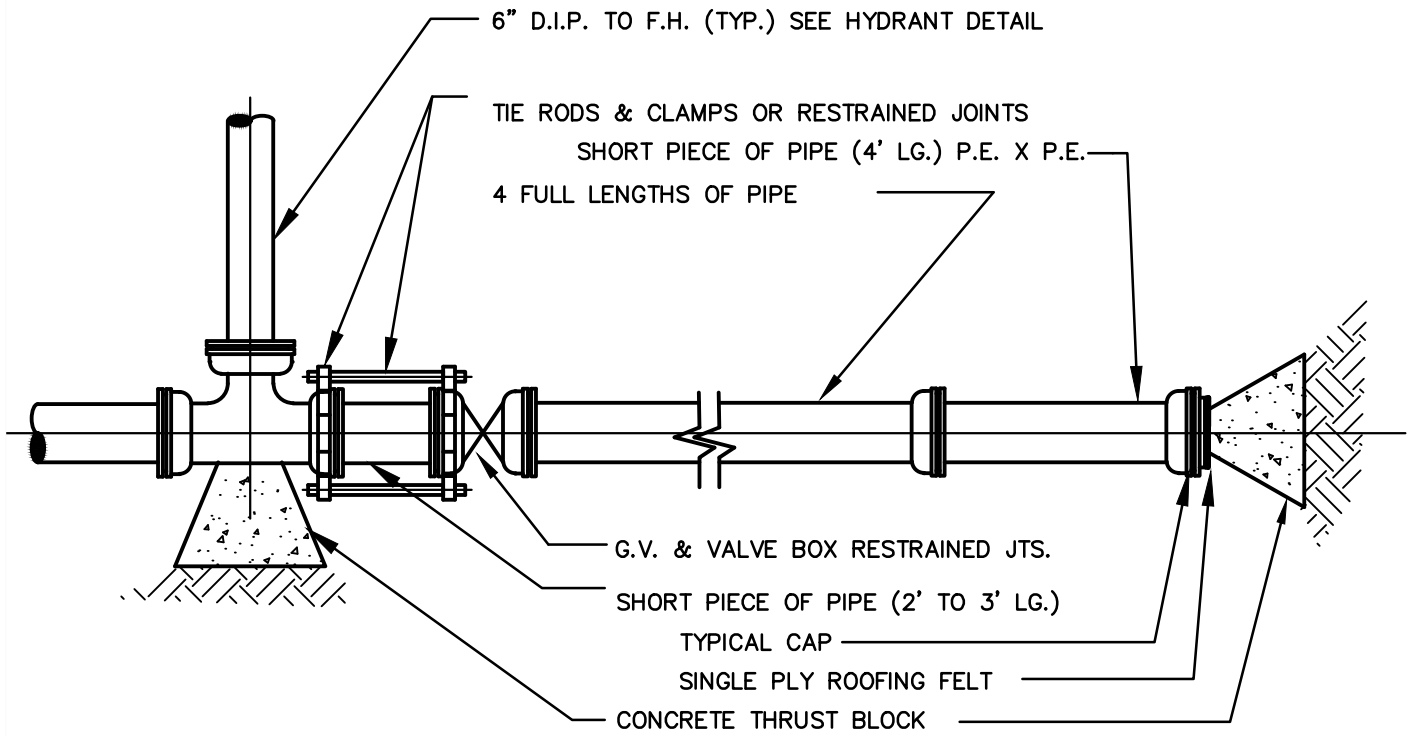
**NOTES:**

1. 2" PVC PIPE TO BE NSF APPROVED FOR POTABLE WATER, ASTM-D 2241 SDR 13.5.
2. 2" PVC FITTINGS TO BE RUBBER GASKET TYPE, RESTRAINED AS REQ'D. SOLVENT WELD FITTINGS ARE NOT ACCEPTABLE.
3. LOT TAPS SHALL OCCUR BEFORE WATER SAMPLER.
4. THIS DETAIL IS NOT APPLICABLE WHERE LOOPING OR FUTURE CONTINUATION OF MAIN IS REQUIRED.

**CITY OF DAHLONEGA STANDARD DETAIL W4  
WATERLINE LOCATION IN CUL DE SAC**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**

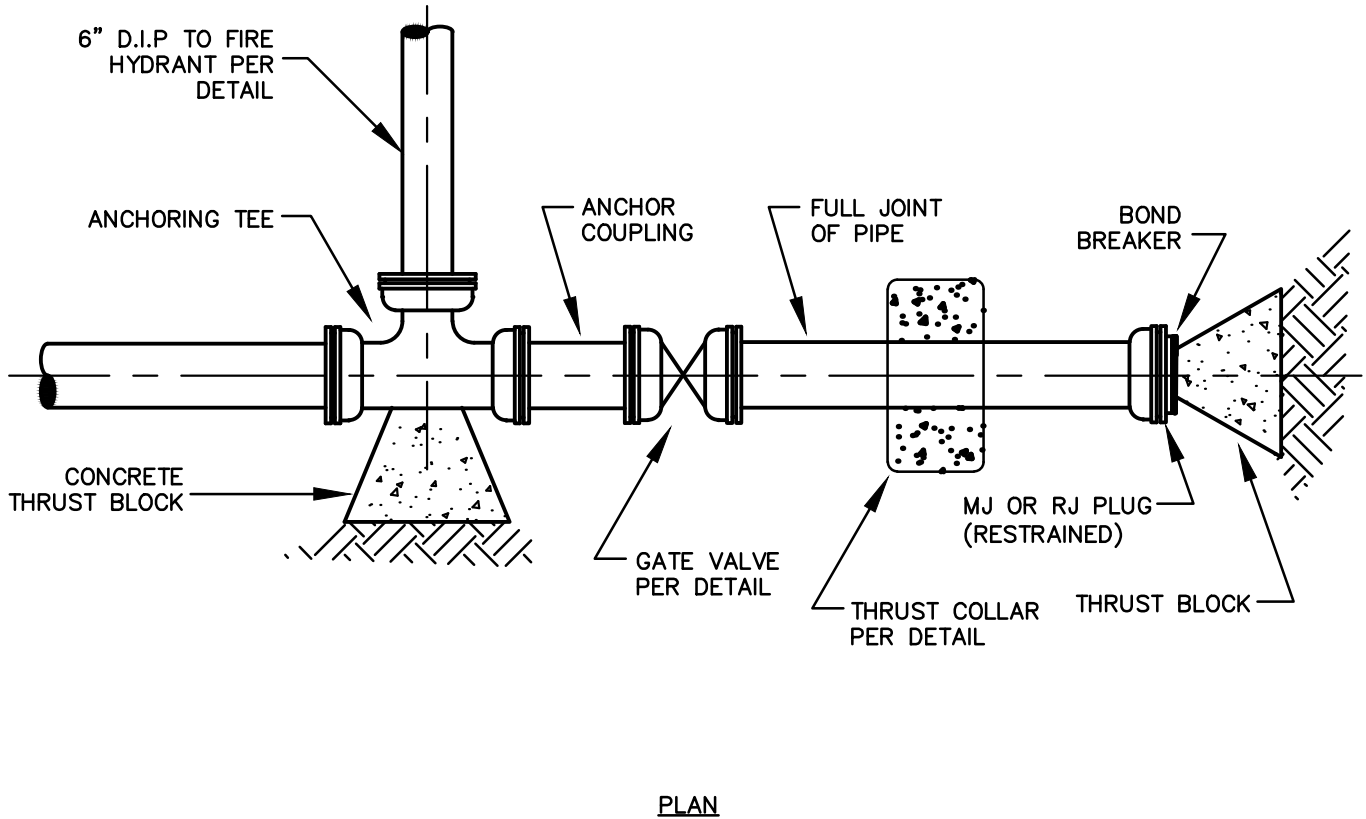




**CITY OF DAHLONEGA STANDARD DETAIL W5  
TYPICAL DEAD END STREET TERMINATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





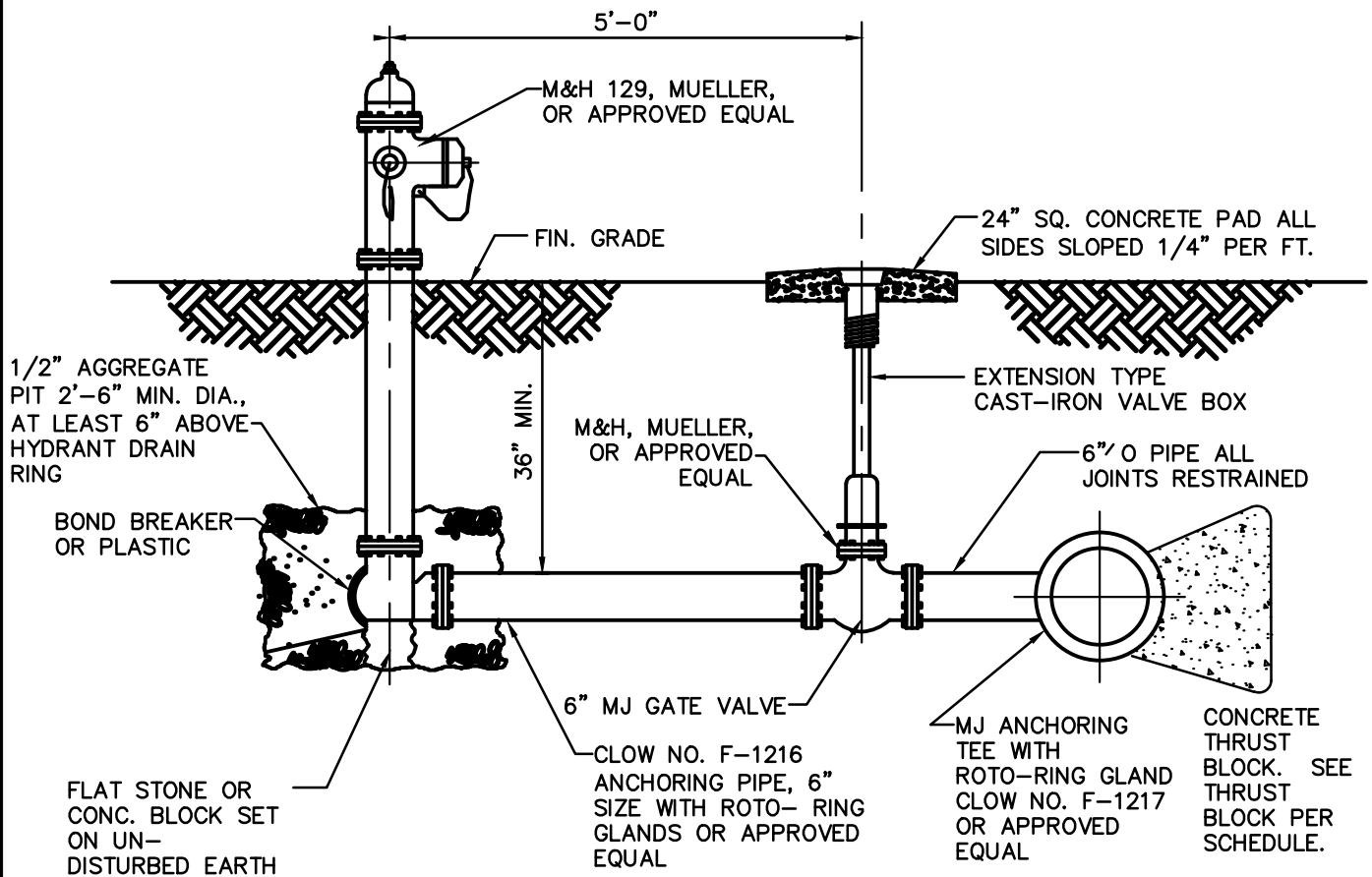
NOTES:

1. RESTRAIN ALL PIPE & FITTINGS SHOWN THIS SHEET.
2. WRAP END OF LINE PIPE BELL IN POLYETHYLENE PRIOR TO POURING END OF LINE THRUST BLOCK.

**CITY OF DAHLONEGA STANDARD DETAIL W6  
STUB & PLUG FOR FUTURE CONNECTION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





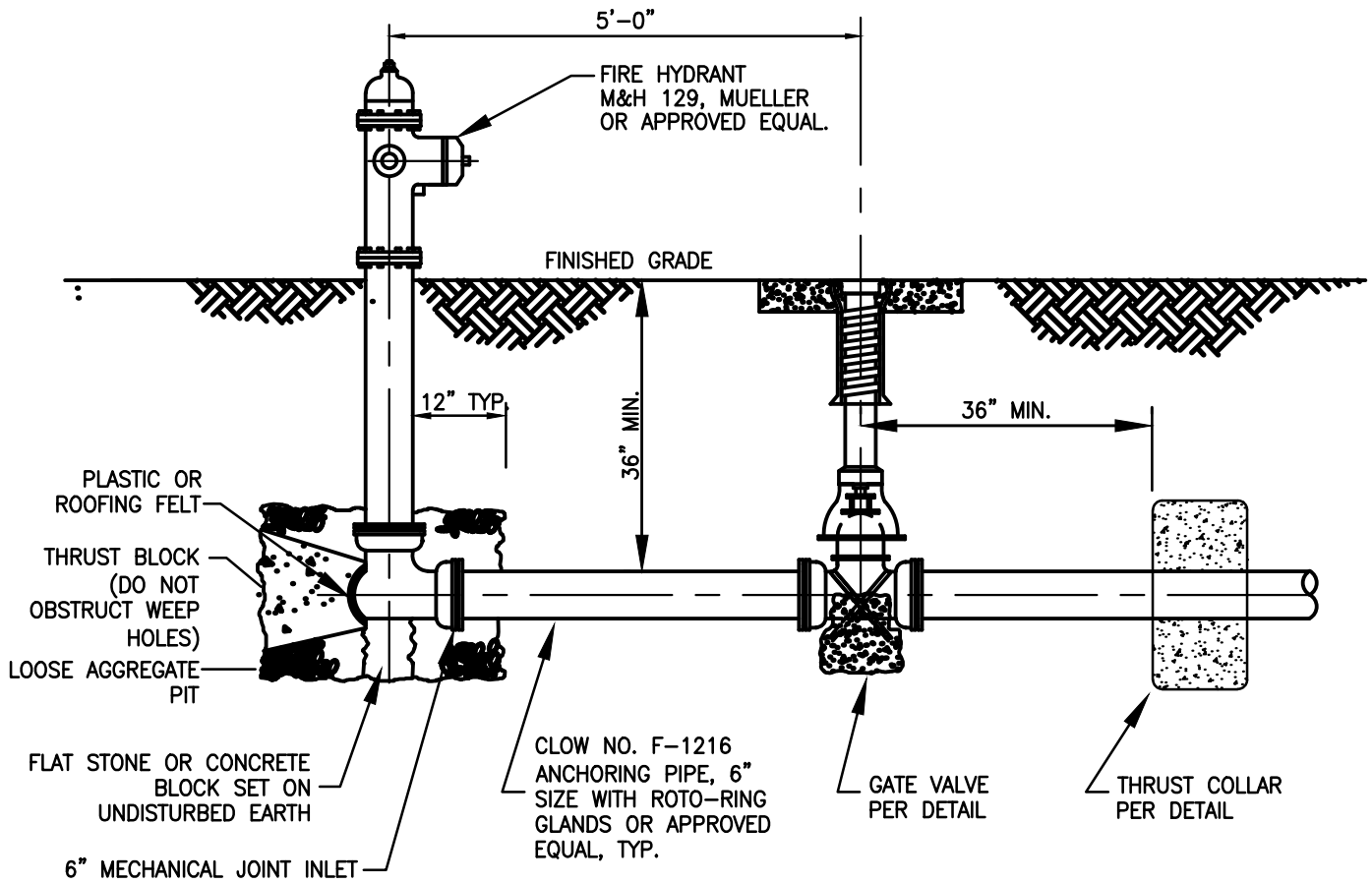
**NOTE:**

1. ANY ALTERNATIVE OF THIS METHOD WILL NEED APPROVAL BY THE CITY PRIOR TO CONSTRUCTION
2. STEEL RODS USED FOR RESTRAINT WHEN HYDRANT IS FAR FROM THE VALVE WILL BE INSTALLED IN SPECIAL CASES AND BY APPROVAL ONLY.
3. RESTRAINING MECHANISMS FOR PUSH-ON OR MECHANICAL JOINTS WILL BE USED INSTEAD OF CONCRETE THRUST BLOCKING (AS APPROVED BY THE CITY). RESTRAINING MECHANISMS INCLUDE ANCHOR COUPLING, MEGALUG UNIVERSAL RESTRAINT, OR EQUAL.
  - A) THE BOWL OF EACH HYDRANT SHALL BE ANCHORED FROM MAIN TO AUX. VALVE THEN VALVE TO HYDRANT.
  - B) ALL FITTINGS SHALL BE PROVIDED WITH SUITABLE RESTRAINED JOINTS.

**CITY OF DAHLONEGA STANDARD DETAIL W7  
TYPICAL FIRE HYDRANT ASSEMBLY**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





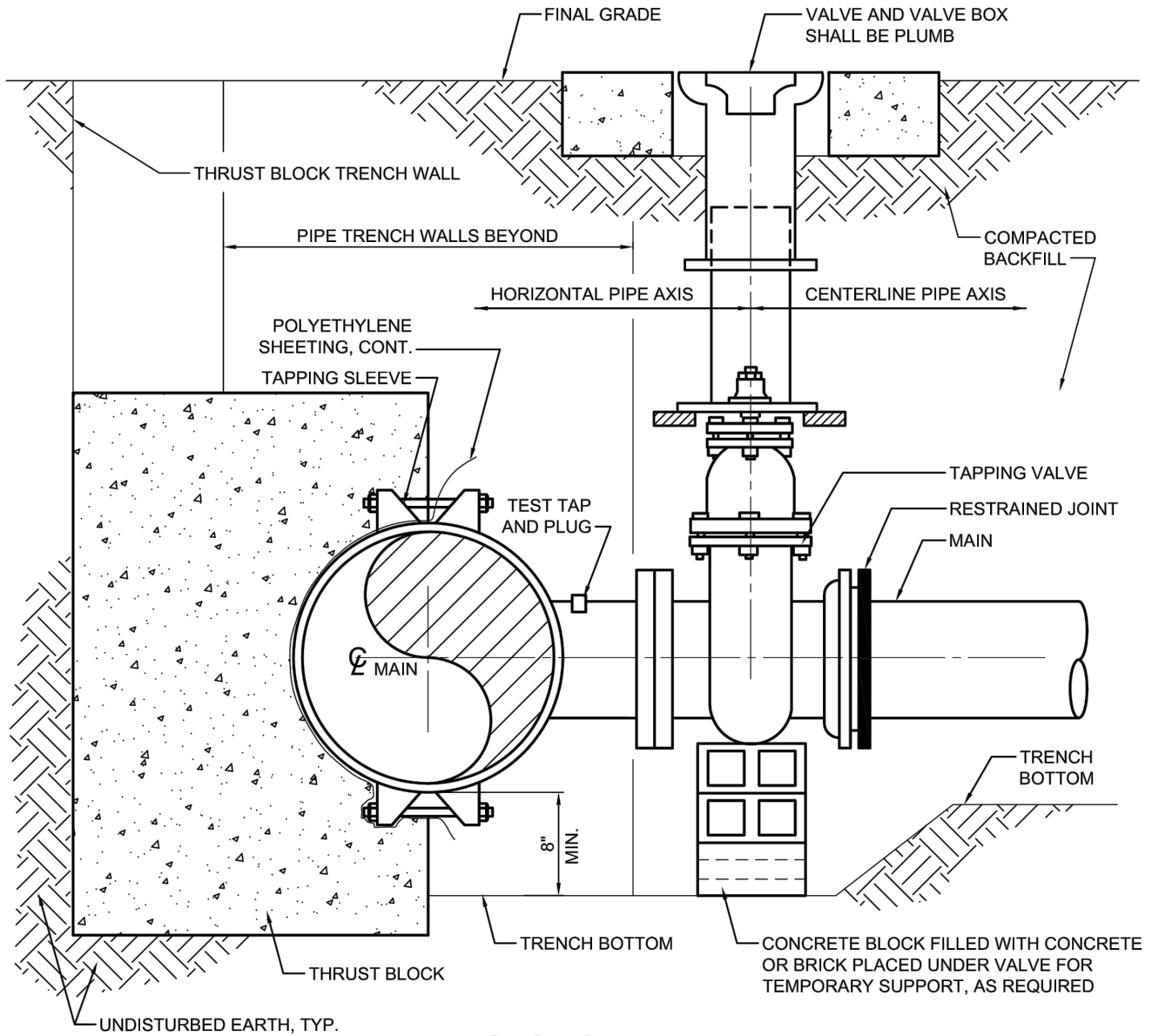
**NOTES:**

1. RESTRAIN ALL PIPE & FITTINGS SHOWN THIS SHEET.

**CITY OF DAHLONEGA STANDARD DETAIL W8  
DEAD END FIRE HYDRANT ASSEMBLY**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**SECTION**

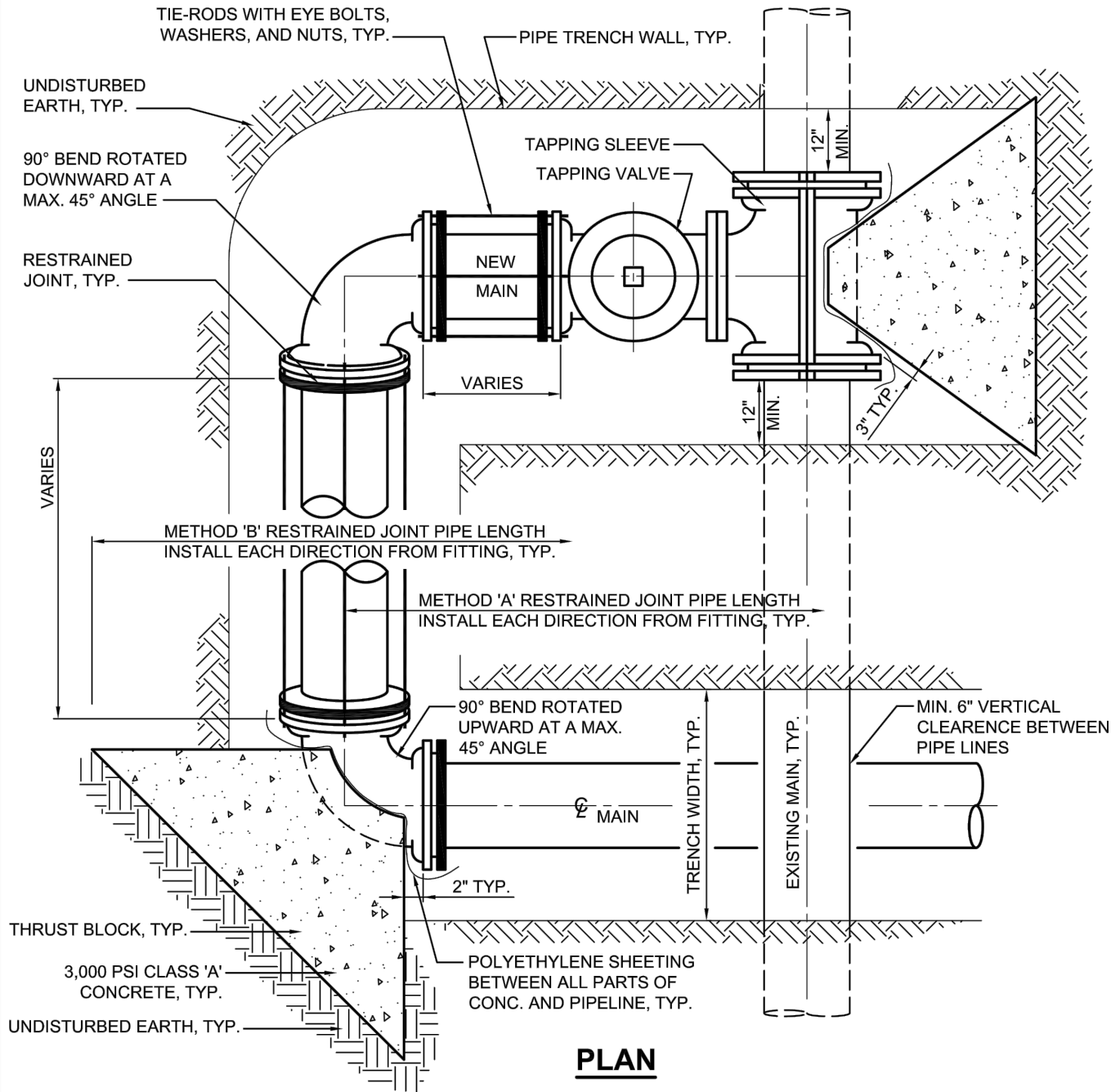
**NOTES:**

1. TEMPORARILY SUPPORT TAPPING SLEEVE AND VALVE PRIOR TO HYDROSTATIC TESTING AND UPON ACCEPTANCE OF TEST THEN CONCRETE MAY BE INSTALLED AS SHOWN.
2. REFER TO TYPICAL HORIZONTAL THRUST BLOCK DRAWING G7 FOR ADDITIONAL DETAILS.
3. REFER TO TYPICAL VALVE BOX INSTALLATION DRAWING W19 FOR ADDITIONAL DETAILS.

**CITY OF DAHLONEGA STANDARD DETAIL W9  
TYPICAL TAPPING SLEEVE AND VALVE INSTALLATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**PLAN**

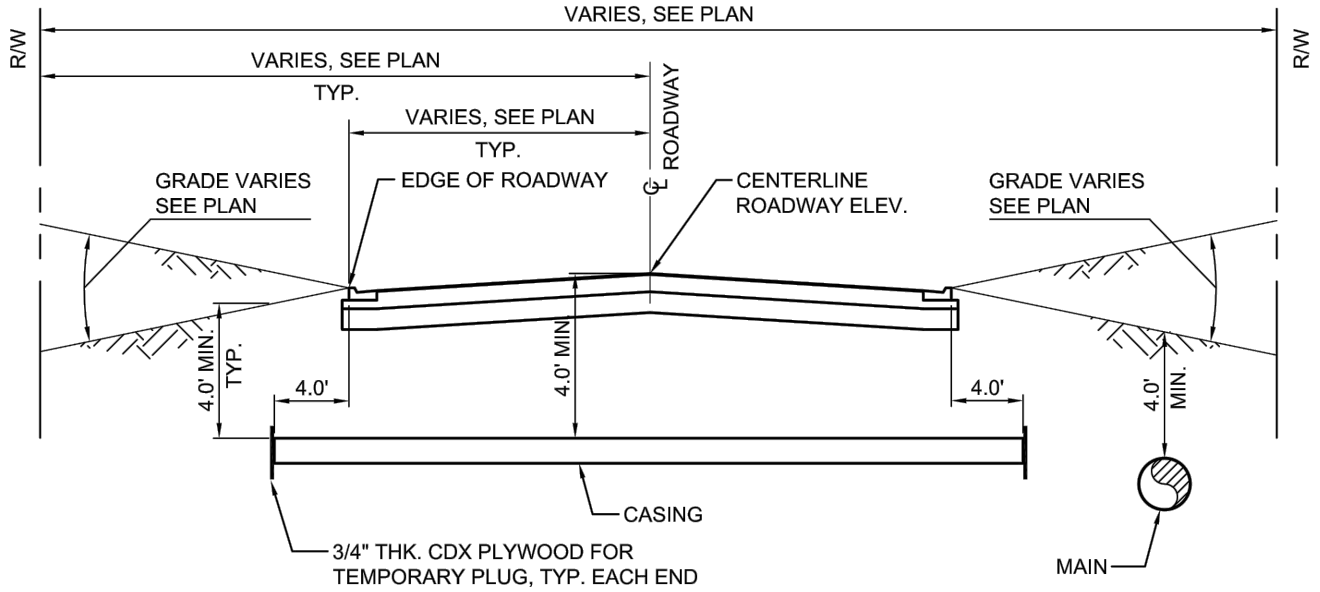
**NOTES:**

1. REFER TO TYPICAL HORIZONTAL THRUST BLOCK DRAWINGS G7 AND G8 FOR ADDITIONAL DETAILS.
2. REFER TO TYPICAL TAPPING SLEEVE AND VALVE INSTALLATION DRAWING W9 FOR ADDITIONAL DETAILS.
3. RESTRAINED JOINT PIPE MAY BE USED IN LIEU OF THRUST BLOCKING AND TIE-RODS INDICATED, AS APPLICABLE.
4. RESTRAINED JOINT METHOD A: RESTRAINT JOINT PIPE AND FITTINGS.
5. RESTRAINED JOINT METHOD B: ONE (1) OF THE FOLLOWING DUAL (2) INDEPENDENT RESTRAINTS:
  - A. MEGA-LUGS PLUS THRUST BLOCKING.
  - B. MEGA-LUGS PLUS RODDING.

**CITY OF DAHLONEGA STANDARD DETAIL W10  
TYPICAL BACK TAP INSTALLATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**PROFILE**

LONG SERVICE LATERAL (*INCHES)	3/4	1	1 1/2	2	2 1/2
CASING DIAMETER (*INCHES)	1 1/2	1 1/2	2	3	3

\* NOMINAL SIZE

**NOTES:**

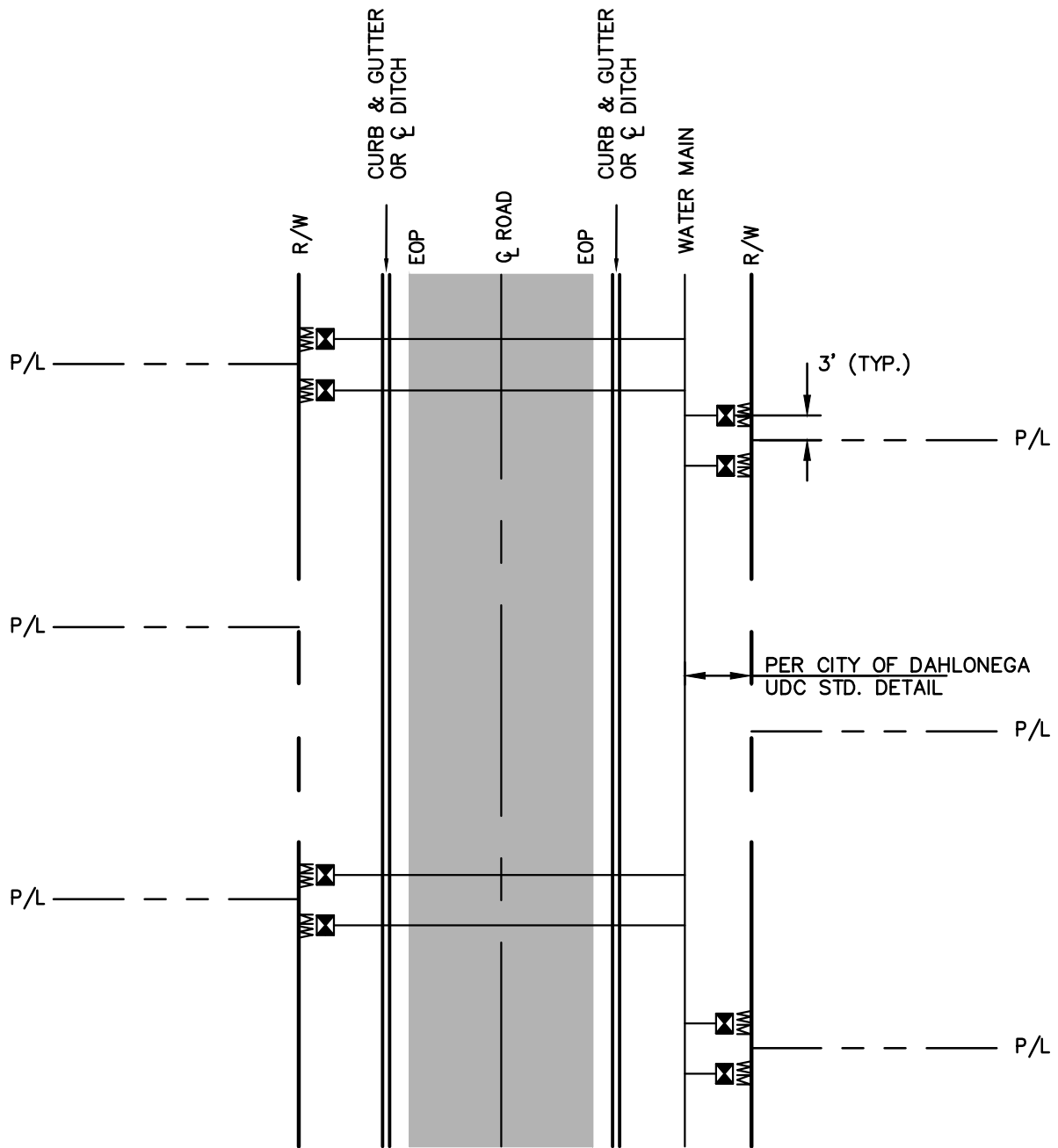
- CASING SHALL BE INSTALLED AT CENTER OF EACH LONG SIDE LOT, UNLESS OTHERWISE DIRECTED BY THE CITY.

**CITY OF DAHLONEGA STANDARD DETAIL W11  
TYPICAL SERVICE LINE CASING INSTALLATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**







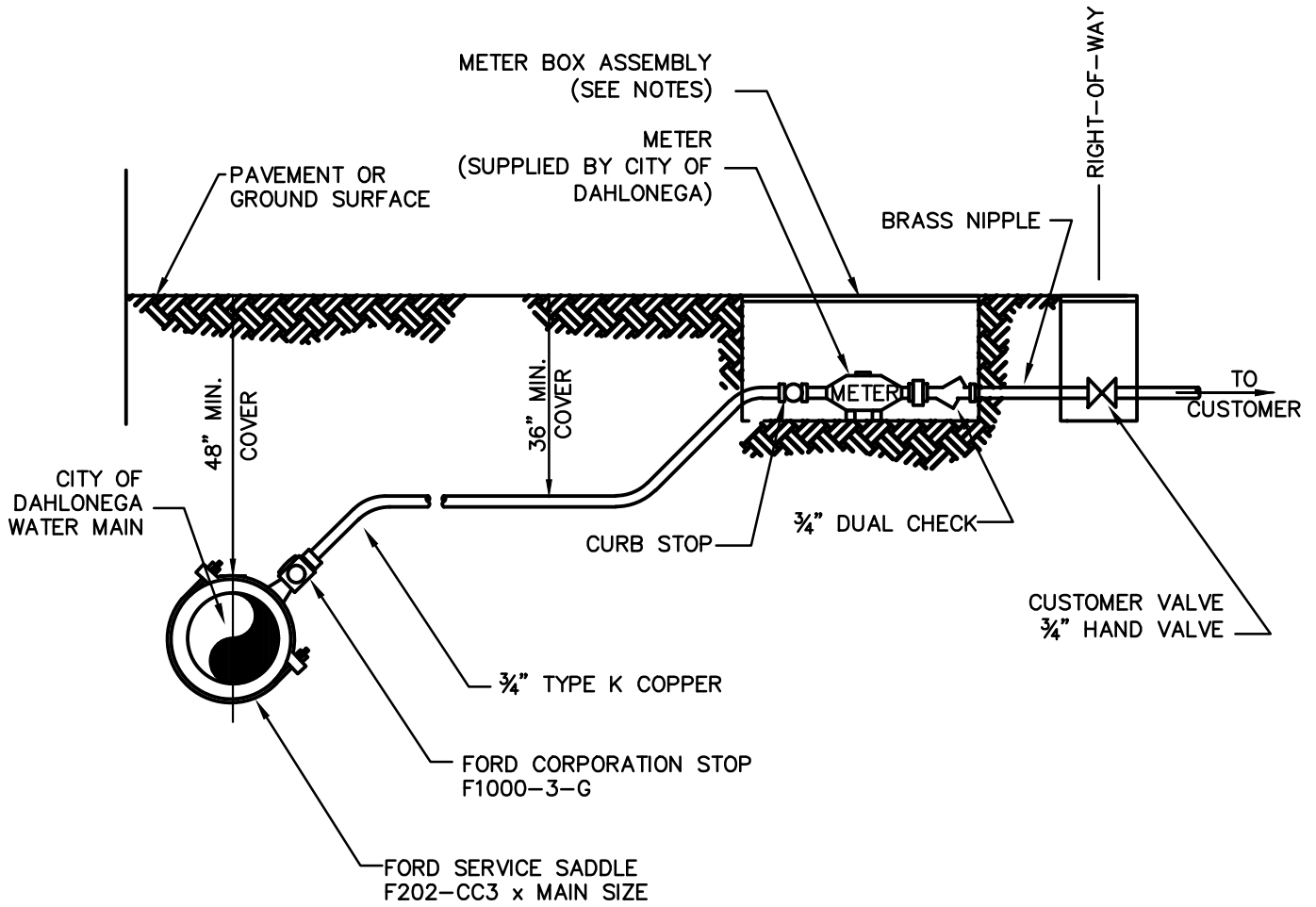
**NOTE:**

1. USE CONTINUOUS PIECE OF COPPER TUBING FROM WATER MAIN TO EACH WATER METER CONNECTION. NO SPLICES OR JOINTS UNDER ROADWAY ALLOWED IN COPPER TUBING.
2. BACKFLOW PREVENTER IS REQUIRED FOR ALL METERS.
3. DEVELOPER IS RESPONSIBLE FOR ALL COMPONENTS EXCEPT METER FOR WATER METERS GREATER THAN 1".
4. DEVELOPER IS RESPONSIBLE FOR ALL WORK INCLUDING TAPS.
5. ALL TAPS MUST BE WET TAPS UNLESS APPROVED OTHERWISE BY THE CITY.

**CITY OF DAHLONEGA STANDARD DETAIL W12  
TYPICAL METER PLACEMENT**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





**NOTES:**

1. DRILL 1½" HOLE IN CENTER OF METER BOX LID FOR TOUCH READ.
2. METER BOX ASSEMBLY (FORD) INCLUDES:
  - A. FORD INLET (3/4"CTS GRIP JOINT)
  - B. FORD YOKEBOX (YLYVP241-233-T-G)
  - C. FORD OUTLET (3/4" FIP)
3. FORD YOKEBOX CONSTRUCTION:
  - A. MATERIAL:  
CAST GRAY IRON,  
ASTM A48-92, CLASS 25
  - B. FINISH:  
PAINTED BLACK ASPHALT

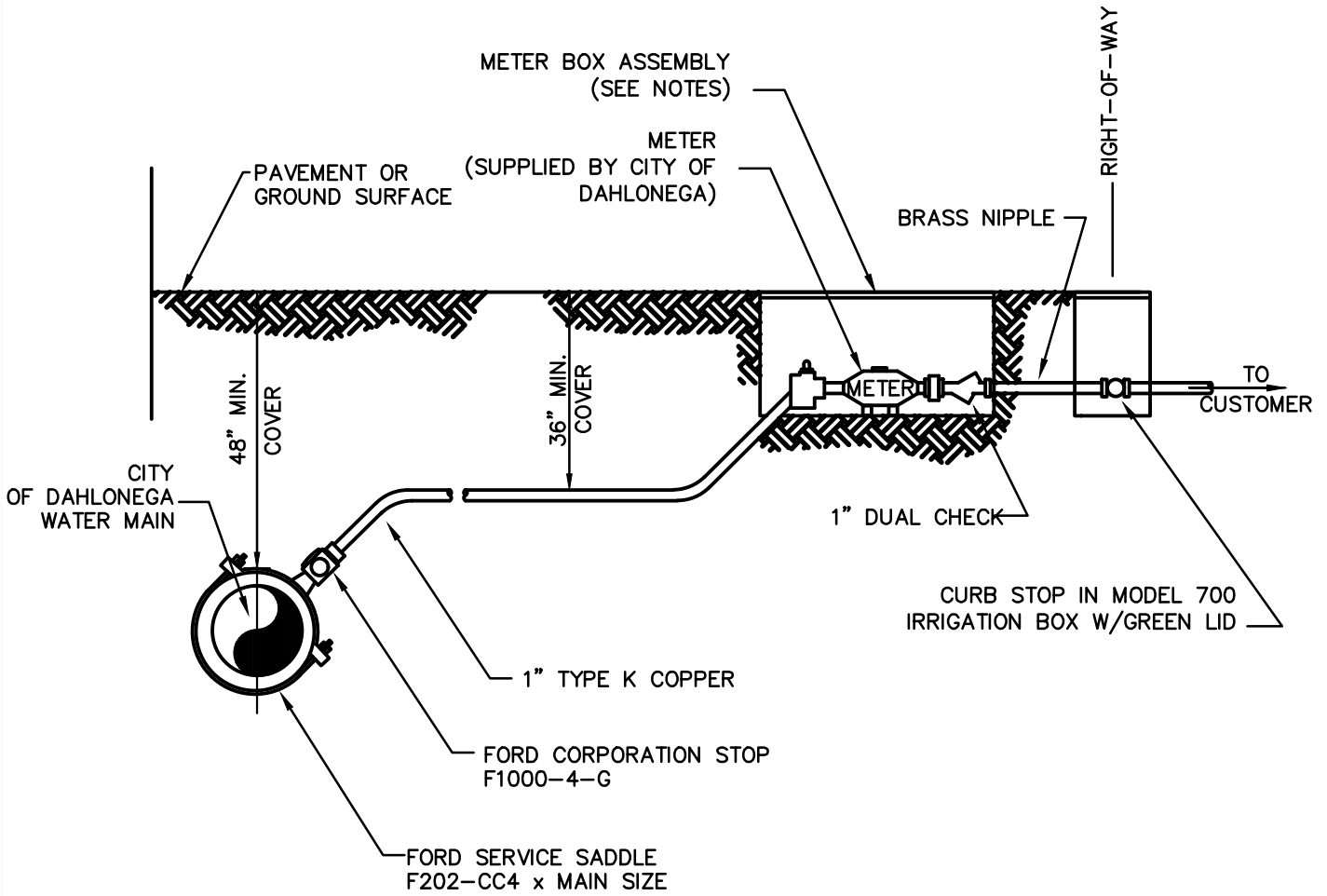
**CITY OF DAHLONEGA STANDARD DETAIL W13**

**¾" RESIDENTIAL METER DETAIL**

**SCALE: NTS**

**DATE OF LAST REVISION: 03/22**





**NOTES:**

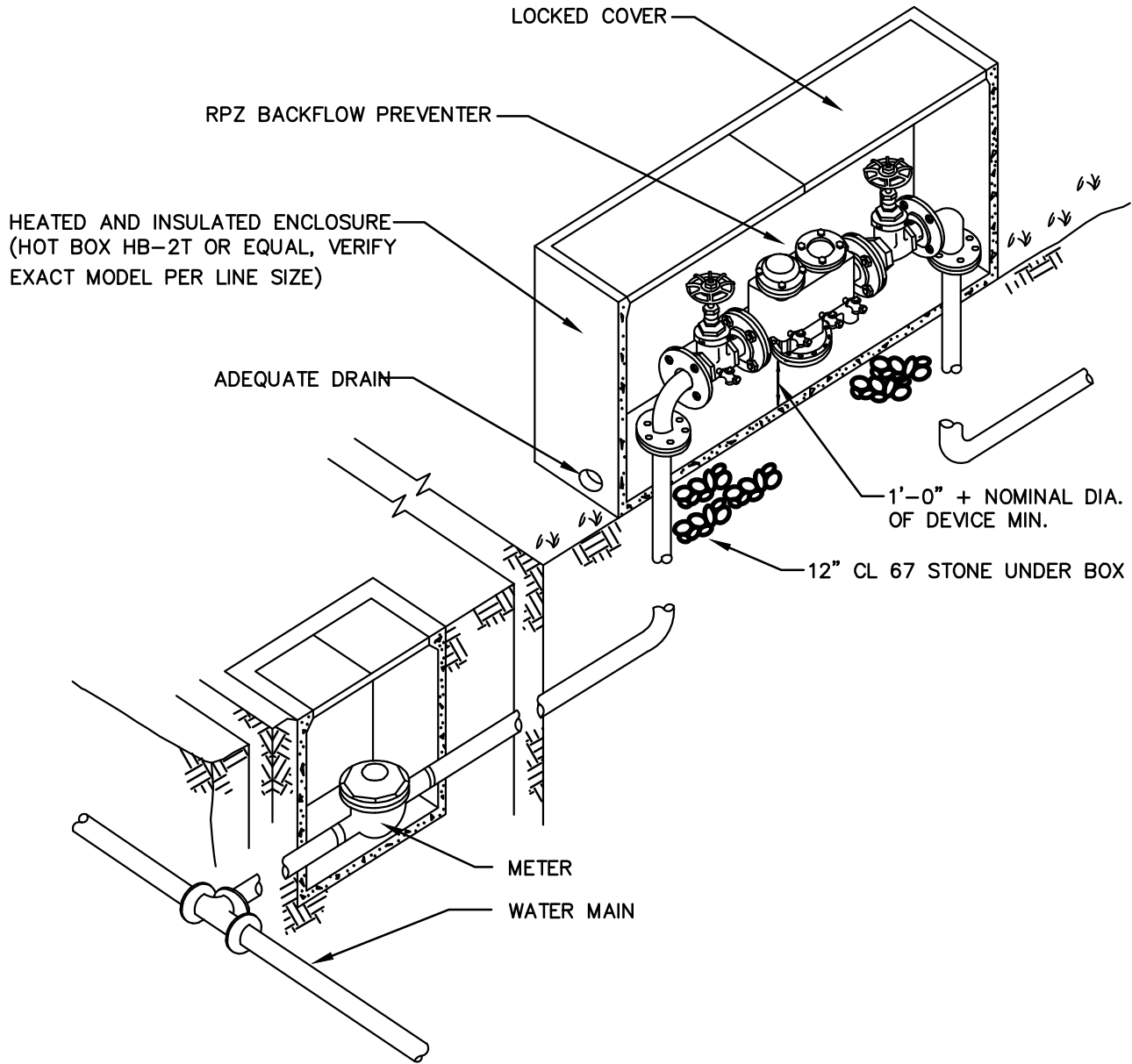
1. DRILL 1½" HOLE IN CENTER OF METER BOX LID FOR TOUCH READ.
2. METER BOX ASSEMBLY (FORD) INCLUDES:
  - A. FORD INLET (1"CTS GRIP JOINT)
  - B. FORD YOKEBOX (YLYVP241-243-T-G)
  - C. FORD OUTLET (1" FIP)
3. FORD YOKEBOX CONSTRUCTION:
  - A. MATERIAL:  
CAST GRAY IRON,  
ASTM A48-92, CLASS 25
  - B. FINISH:  
PAINTED BLACK ASPHALT

**CITY OF DAHLONEGA STANDARD DETAIL W14  
1" METER DETAIL**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**



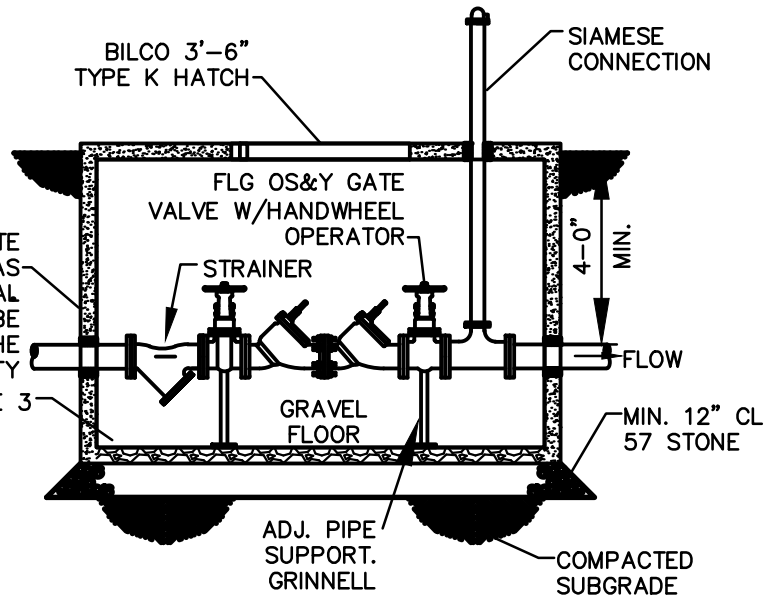
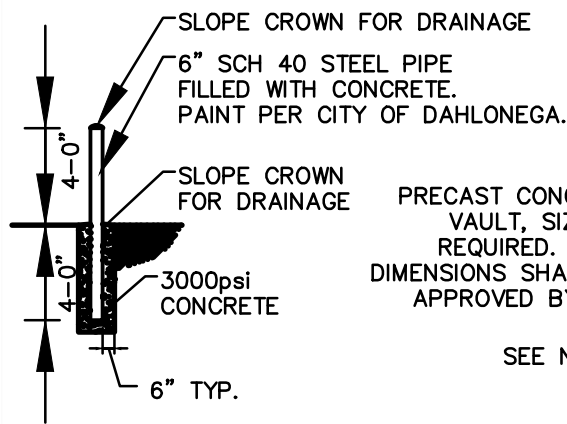
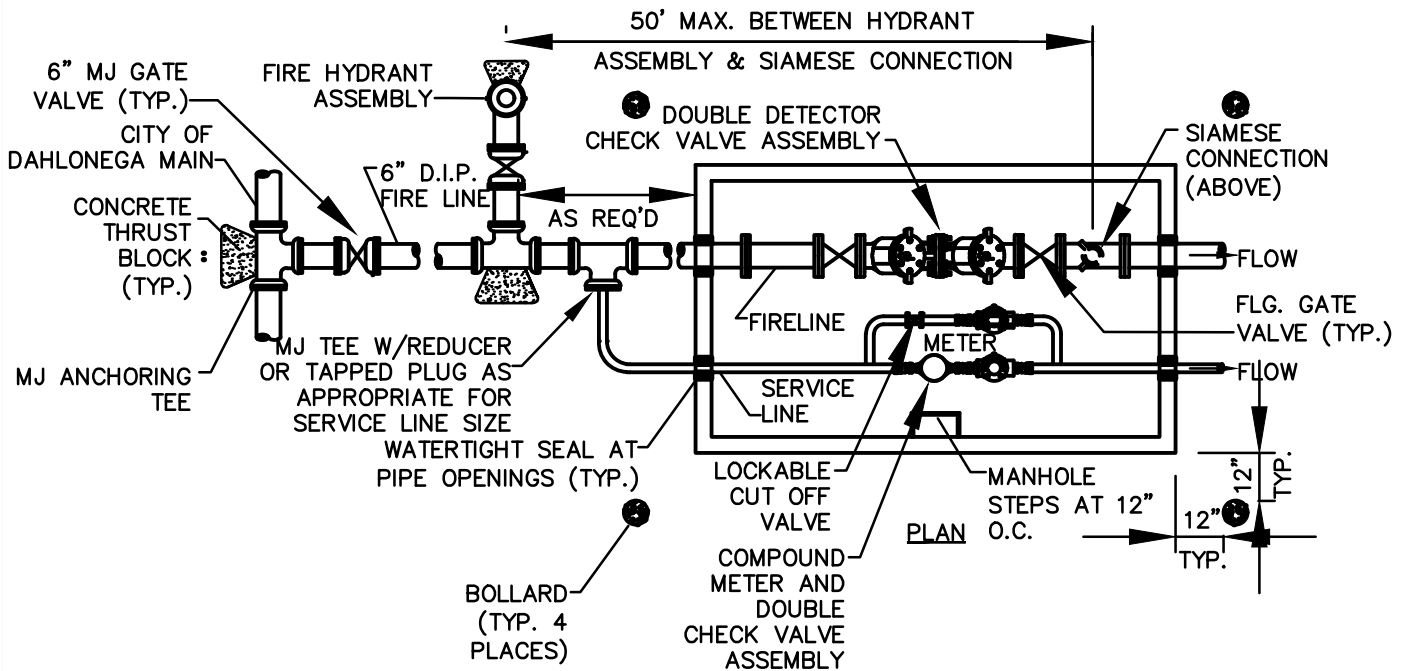
R:\2047-0001 Dahlonega-Standards & Specifications\3 ENGINEERING\Drawings\W15 - RPZ Backflow Preventer Detail.DWG Fri, 03/17/23 3:11 PM



**CITY OF DAHLONEGA STANDARD DETAIL W15  
RPZ BACKFLOW PREVENTER**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





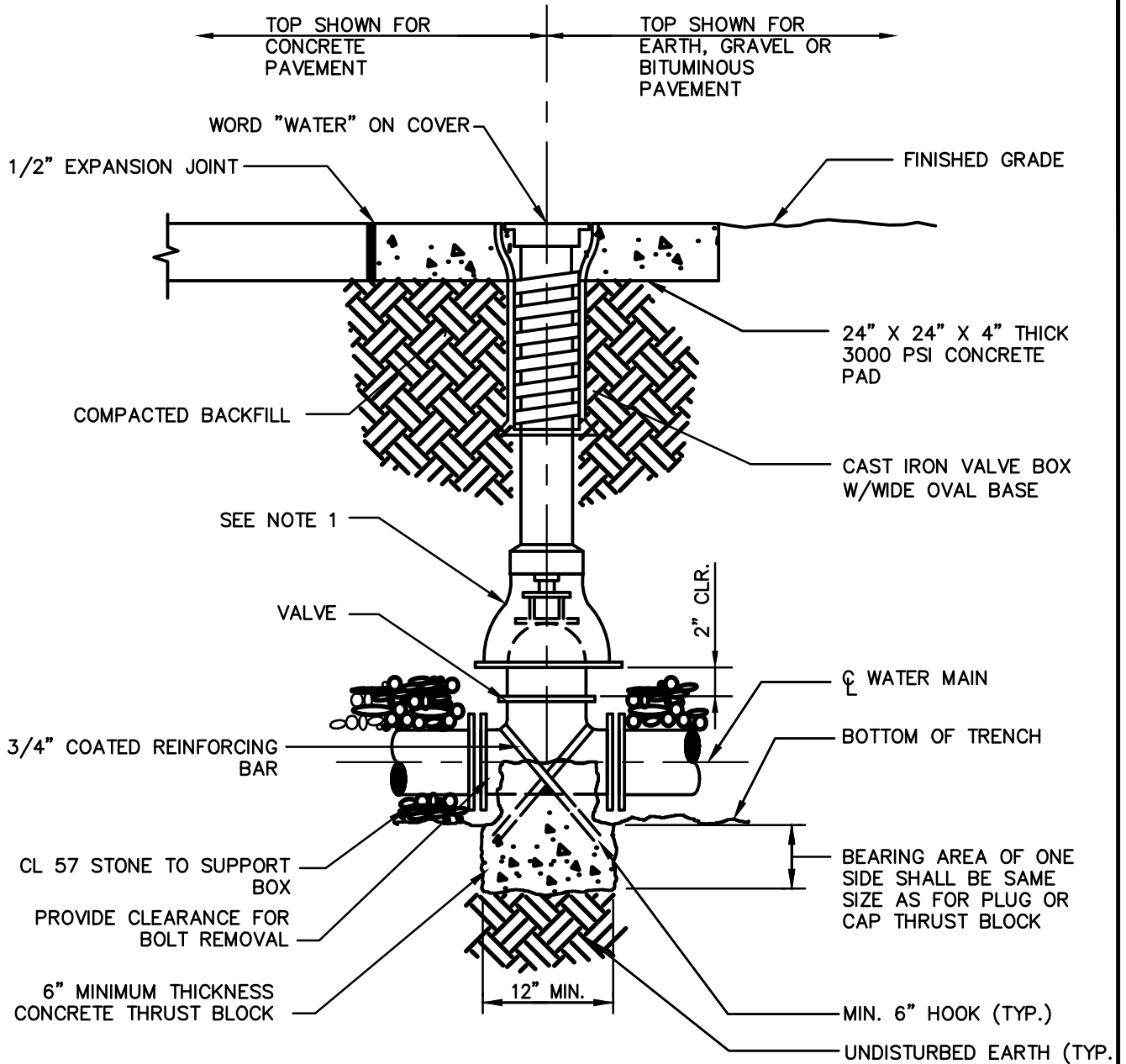
**NOTES:**

1. RESTRAIN ALL PIPE & FITTINGS SHOWN THIS SHEET.
  2. EXPOSED PIPE AND FITTINGS TO BE FLANGED DUCTILE IRON.
  3. SLOPE FLOOR @ 2% TO 4" FLOORDRAIN AND INSTALL 4" PIPE TO NEAREST STORMDRAIN.
- OR
- PROVIDE CONCRETE SUMP IN FLOOR AND FLOAT OPERATED SUMP PUMP, PIPE TO NEAREST STORMDRAIN W/ 2" DRAIN PIPE.
  4. FIRE METER AND SERVICE METER CAN BE PLACED IN SAME VAULT.

**CITY OF DAHLONEGA STANDARD DETAIL W16  
DOUBLE CHECK VAULT**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





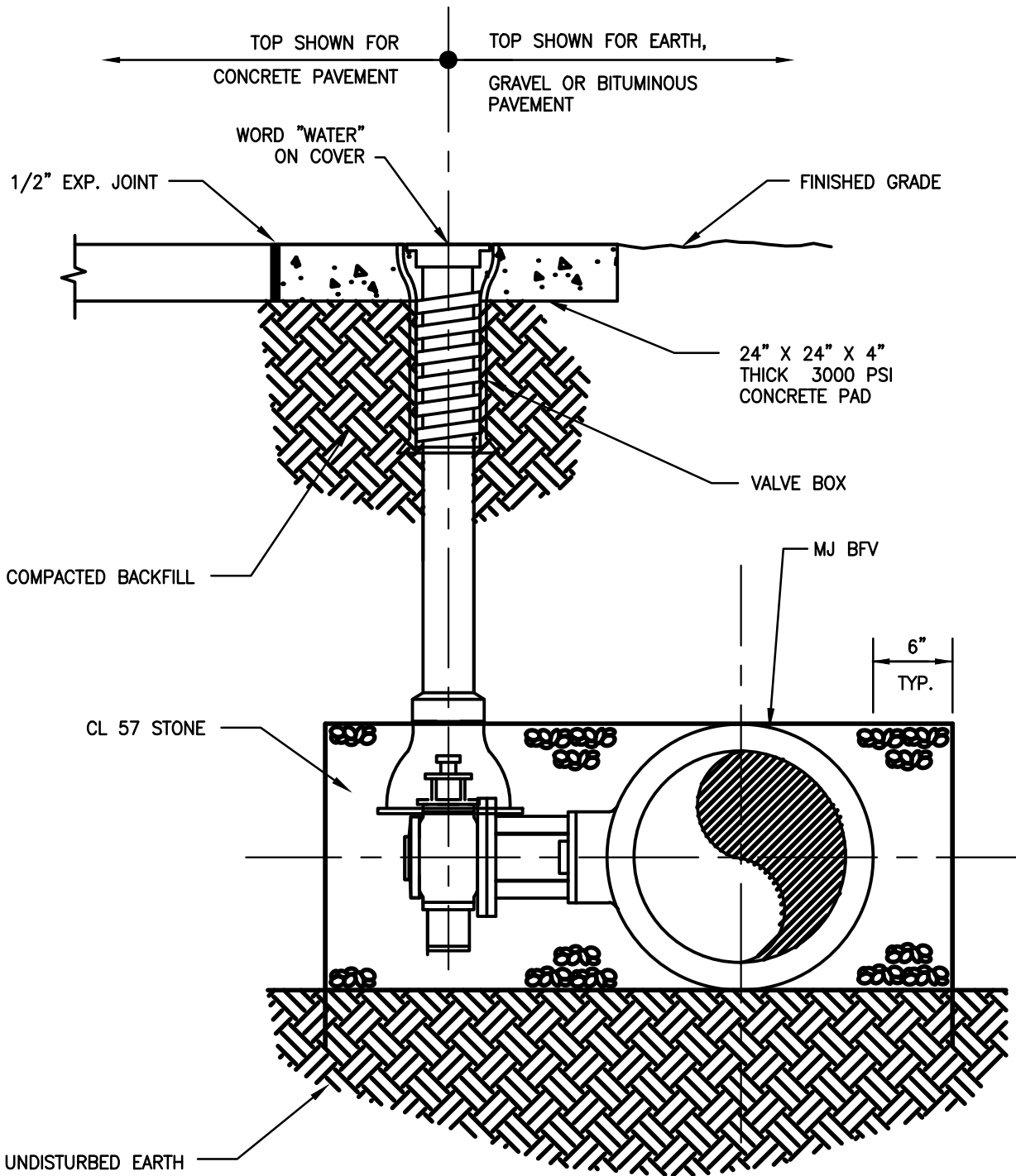
**NOTES**

1. MAINTAIN CLEARANCE SUCH THAT VALVE BOX BASE DOES NOT BEAR DIRECTLY ON VALVE BONNET.
2. PROVIDE CONCRETE VALVE MARKER AT ALL VALVES NOT IN PAVEMENT.

**CITY OF DAHLONEGA STANDARD DETAIL W17  
BURIED GATE VALVE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**NOTES:**

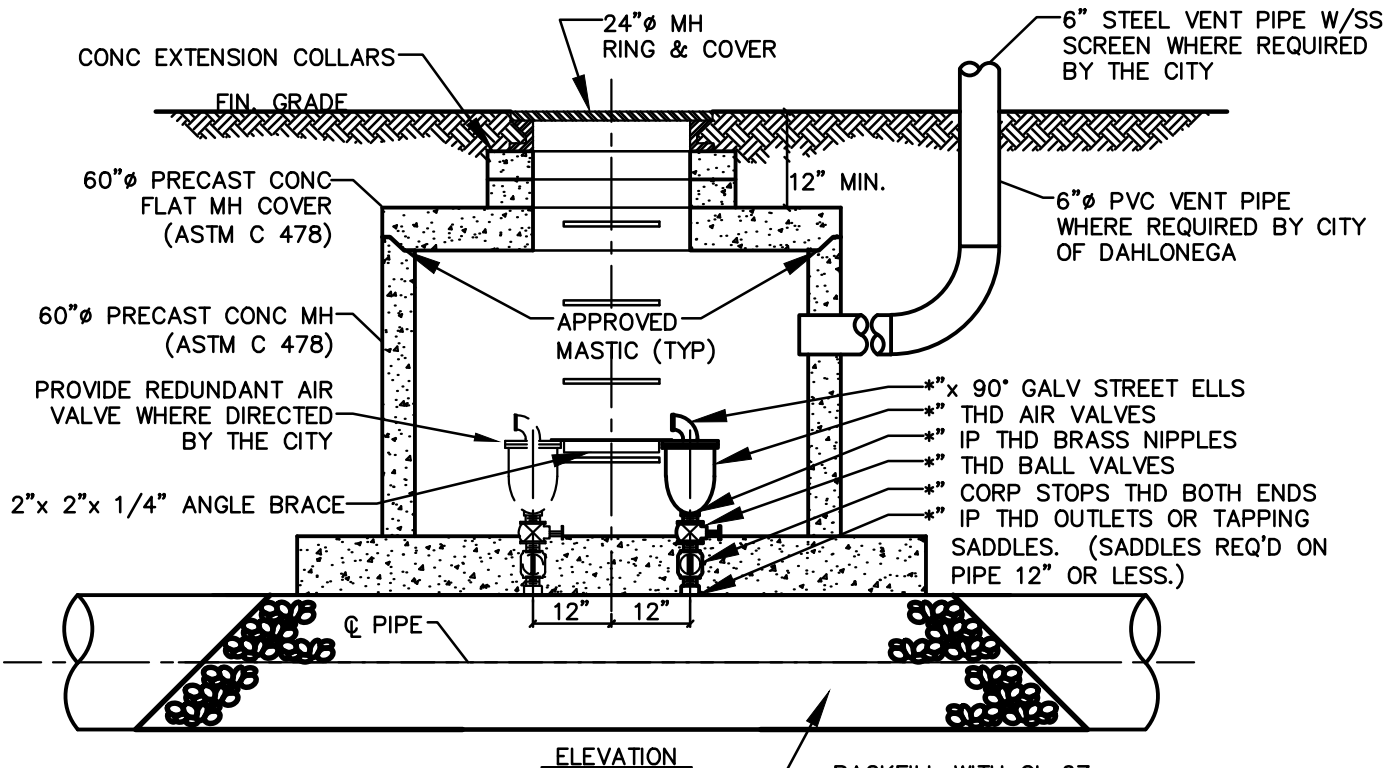
1. PROVIDE CONCRETE VALVE MARKER AT ALL VALVES NOT IN PAVEMENT.

**CITY OF DAHLONEGA STANDARD DETAIL W18  
BURIED BUTTERFLY VALVE**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**



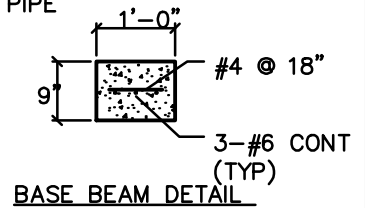
R:\2047-0001 Dahlonega-Standards & Specifications\3 ENGINEERING\Drawings\W19 - Air Release Valve Manhole.DWG Fri, 03/17/23 3:11 PM



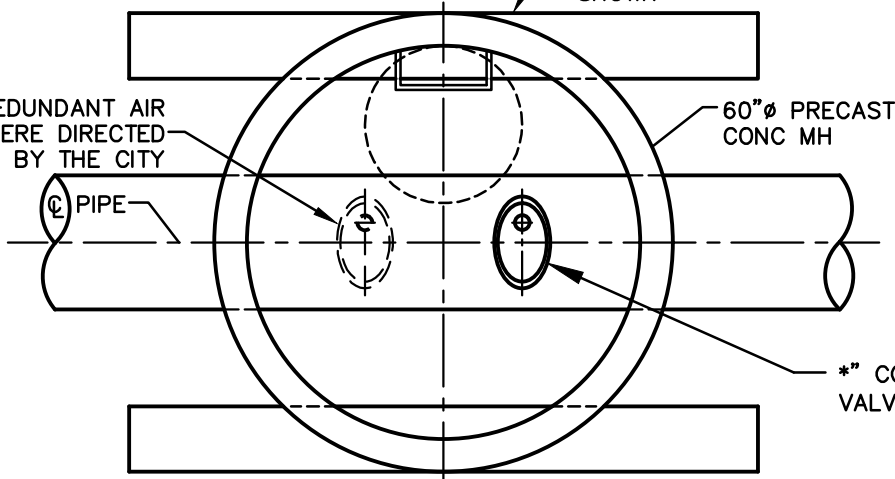
\* - SEE NOTE 1

BACKFILL WITH CL 67 STONE TO TOP OF PIPE

CONC MH BASE BEAMS  
9"x 1'-0"x 8'-0" REINF  
WITH BAR STEEL AS  
SHOWN



PROVIDE REDUNDANT AIR VALVE WHERE DIRECTED BY THE CITY



**NOTES:**

1. USE 1" AIR VALVE ASSEMBLIES FOR PIPE ≤ 12", USE 2" AIR VALVE ASSEMBLY ON PIPE > 12".
2. THE DISTANCE BETWEEN RUNGS, CLEATS, AND STEPS SHALL NOT EXCEED 12 INCHES AND SHALL BE UNIFORM THROUGHOUT THE LENGTH OF THE LADDER.
3. LADDER RUNGS ARE REQUIRED IN PRECAST CONC MH.

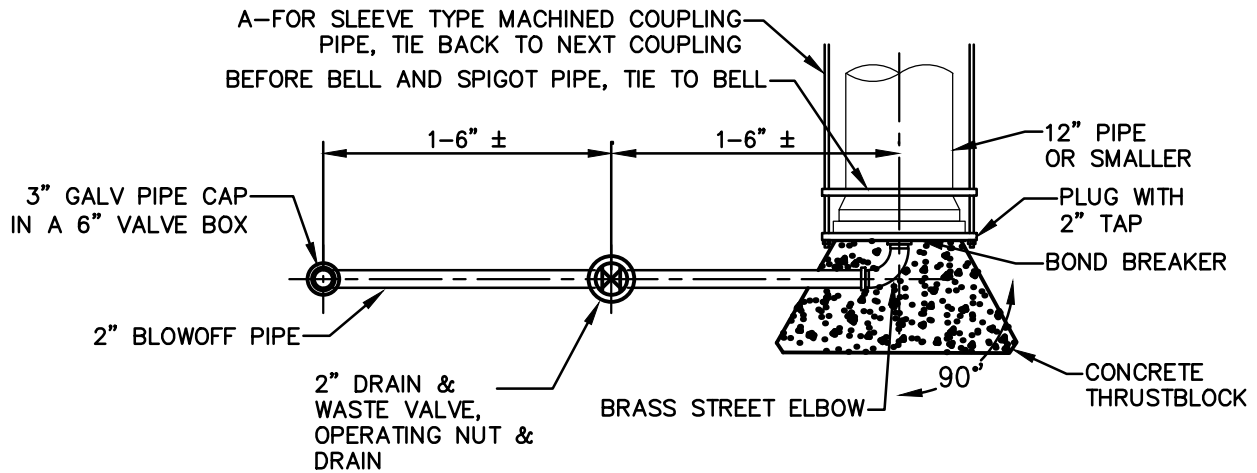
**CITY OF DAHLONEGA STANDARD DETAIL W19  
AIR RELEASE VALVE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22

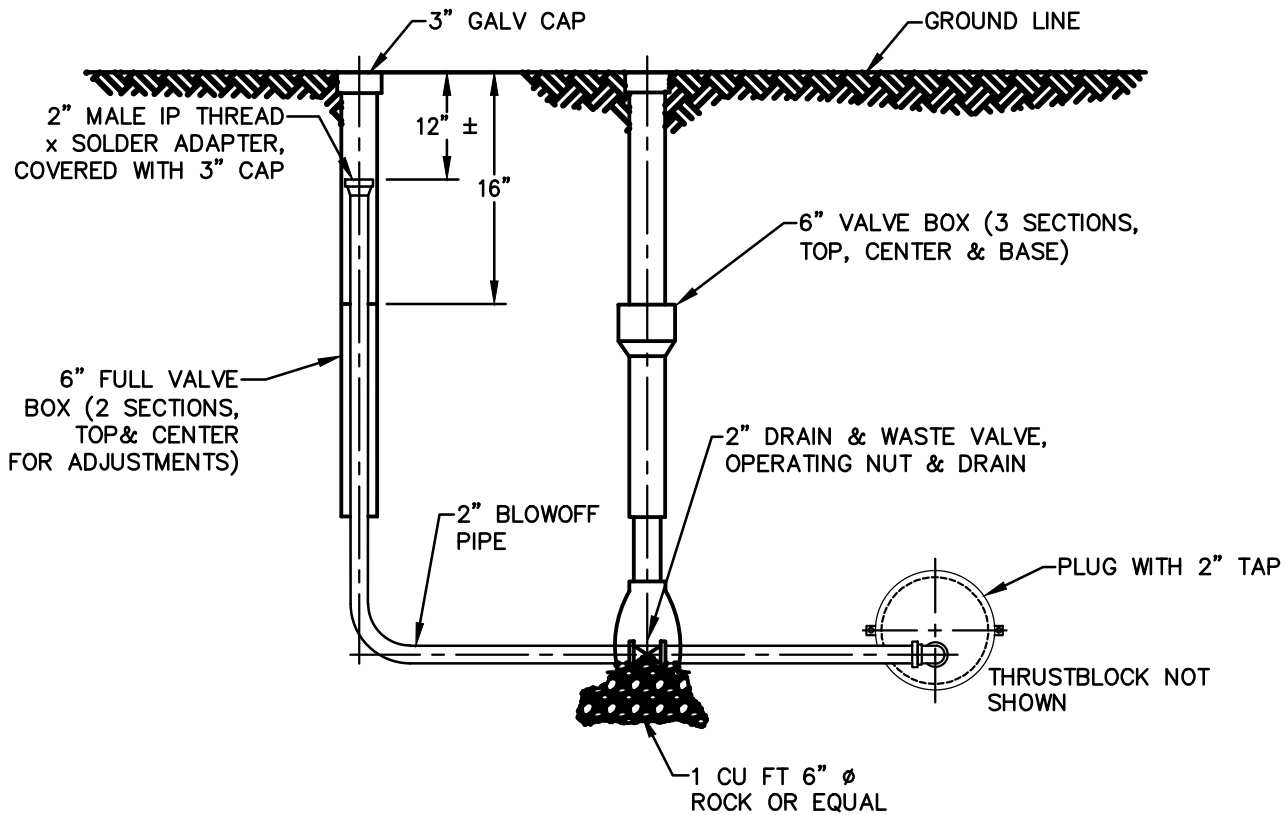




NOTE:  
1. PLUG SHALL BE MECHANICALLY RESTRICTED.



PLAN



ELEVATION

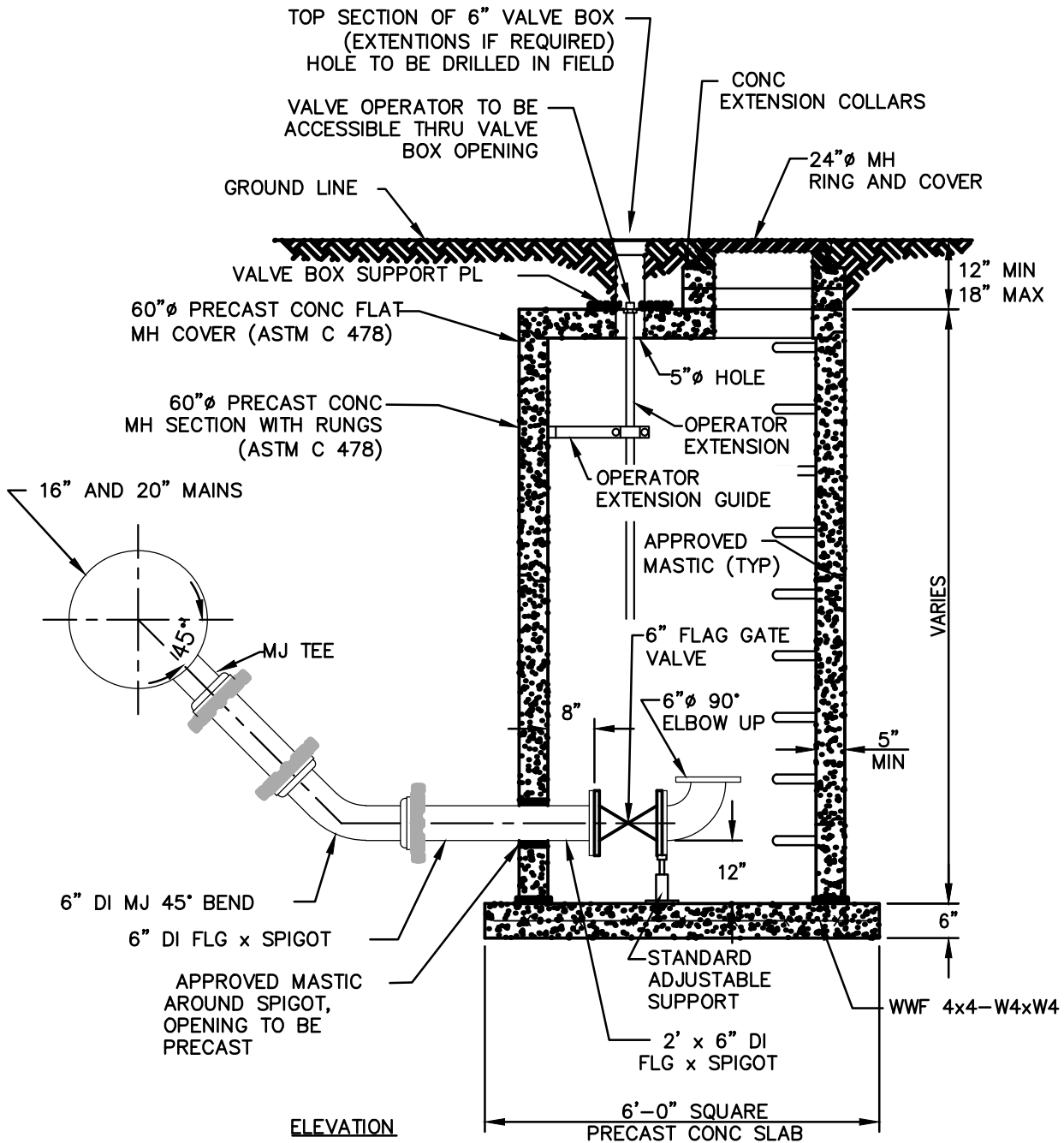
NOTE:

1. BLOWOFF PIPE TO BE TYPE K SOFT COPPER OR BRASS.

**CITY OF DAHLONEGA STANDARD DETAIL W20  
BLOWOFF INSTALLATION FOR 12" AND SMALLER PIPE**

SCALE: NTS  
DATE OF LAST REVISION: 03/22





**NOTE:**

1. THIS INSTALLATION MAY BE REPLACED BY A FIRE HYDRANT WHERE APPROVED BY CITY OF DAHLONEGA FOR 16" AND 20" MAINS.

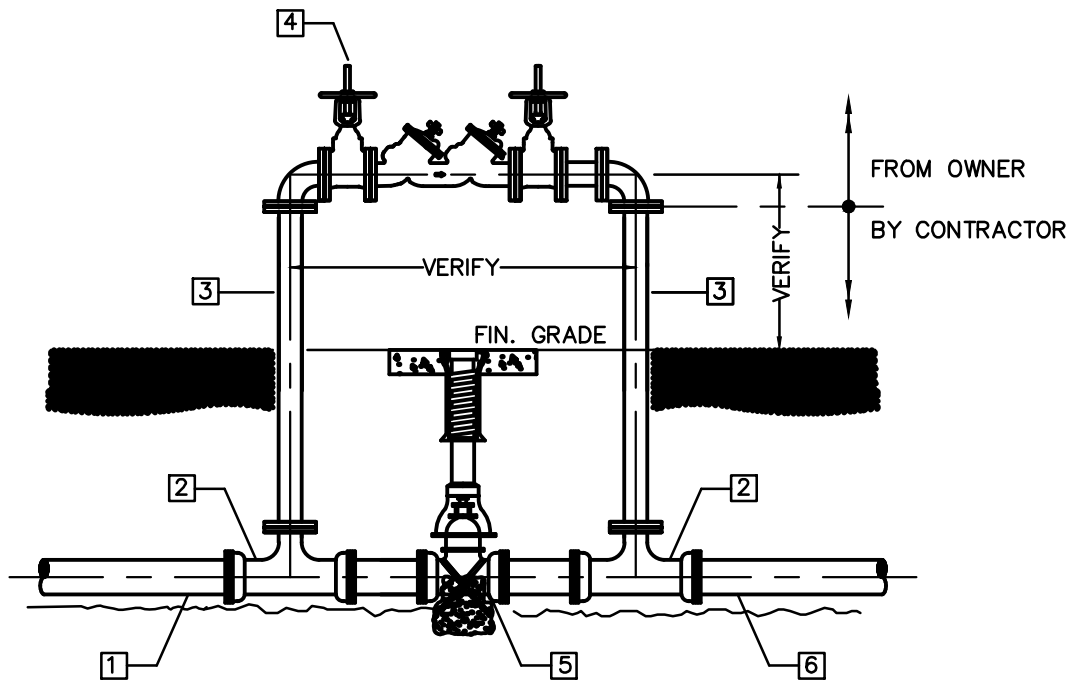
**CITY OF DAHLONEGA STANDARD DETAIL W21  
 TRANSMISSION MAIN BLOWOFF INSTALLATION**

**SCALE: NTS  
 DATE OF LAST REVISION: 03/22**



**COMPONENTS**

- 1 EXISTING CITY OF DAHLOENGA MAIN
- 2 MJ x FLG TEE (LINE x 4")
- 3 4" FLG. D.I. PIPE
- 4 4" BACKFLOW PREVENTION ASSEMBLY (FROM CITY OF DAHLONEGA)
- 5 MJ GATE VALVE
- 6 NEW MAIN

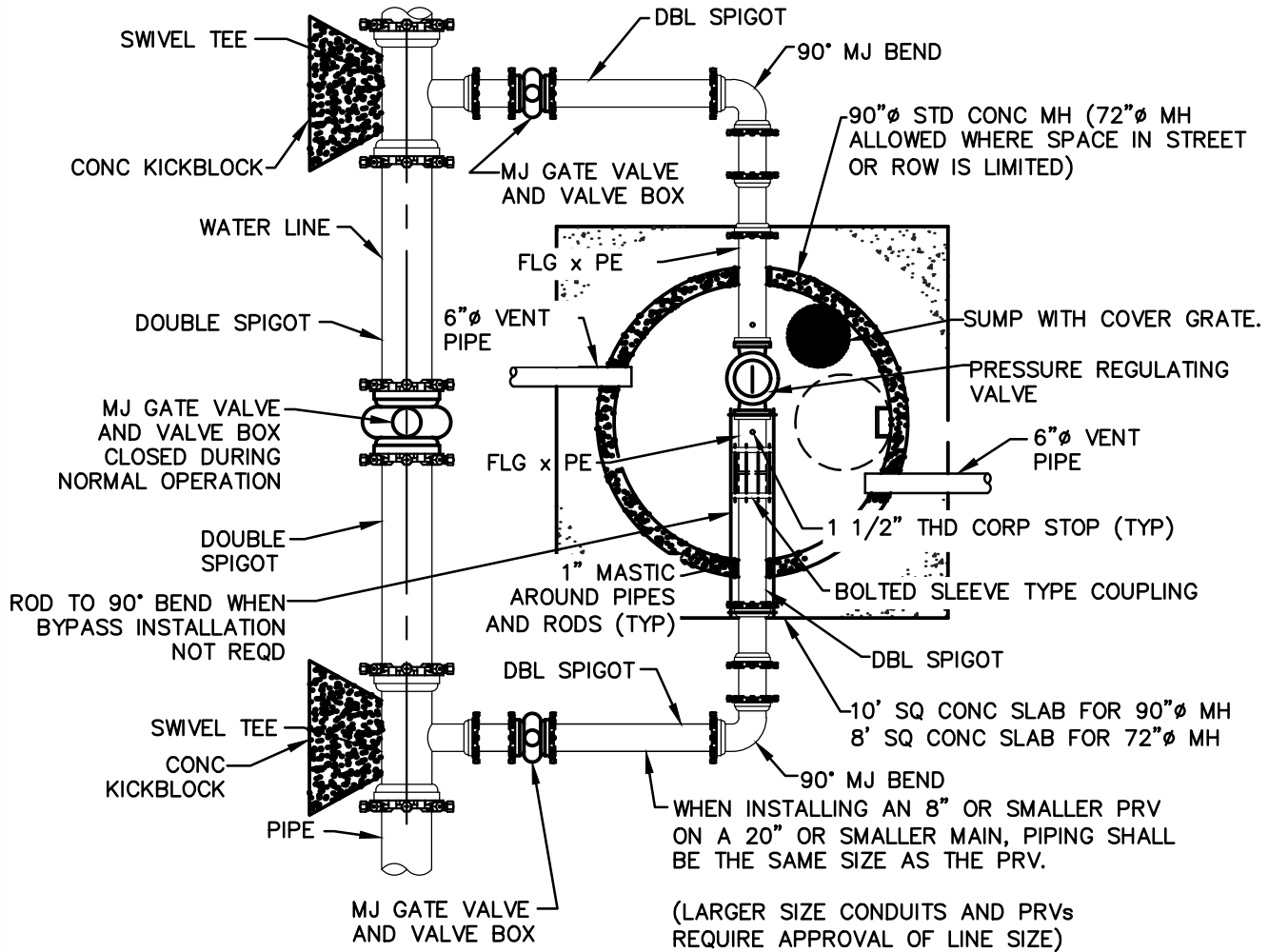


1. RESTRAIN ALL PIPE AND FITTINGS SHOWN THIS SHEET. BLIND FLANGE BRANCH OF LINE TEES WHEN TESTING IS COMPLETE.
2. DO NOT SCALE THIS DRAWING.
3. FOR TRENCHES CUT THROUGH ROCK, TAMPED BACKFILL SHALL BE USED FOR AT LEAST 6" UNDER AND AROUND THE PIPE AND FOR AT LEAST 2 FT ABOVE THE PIPE.
4. PIPING SHALL BE FLUSHED THOROUGHLY.
5. THIS DETAIL IS REQUIRED FOR ALL NEW PIPELINES WHICH HAVE NOT PASSED BAC-T TESTING WHEN CONNECTING TO CITY OF DAHLONEGA WATERLINES.
6. THE TRENCH SHALL BE BACKFILLED BETWEEN JOINTS BEFORE TESTING TO PREVENT MOVEMENT OF PIPE.
7. ALL WORK SHALL BE TESTED HYDROSTATICALLY AT NOT LESS THAN 200 PSI FOR A PERIOD OF NOT LESS THAN 2 HRS OR AS REQ'D BY PROJECT SPECIFICATIONS.
8. ALL NECESSARY THRUST BLOCKS AND/OR CONC. COLLARS SHALL BE POURED IN ORDER TO PROPERLY SECURE ALL WORK FROM MOVEMENT.

**CITY OF DAHLONEGA STANDARD DETAIL W22  
FILL VALVE ASSEMBLY**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**





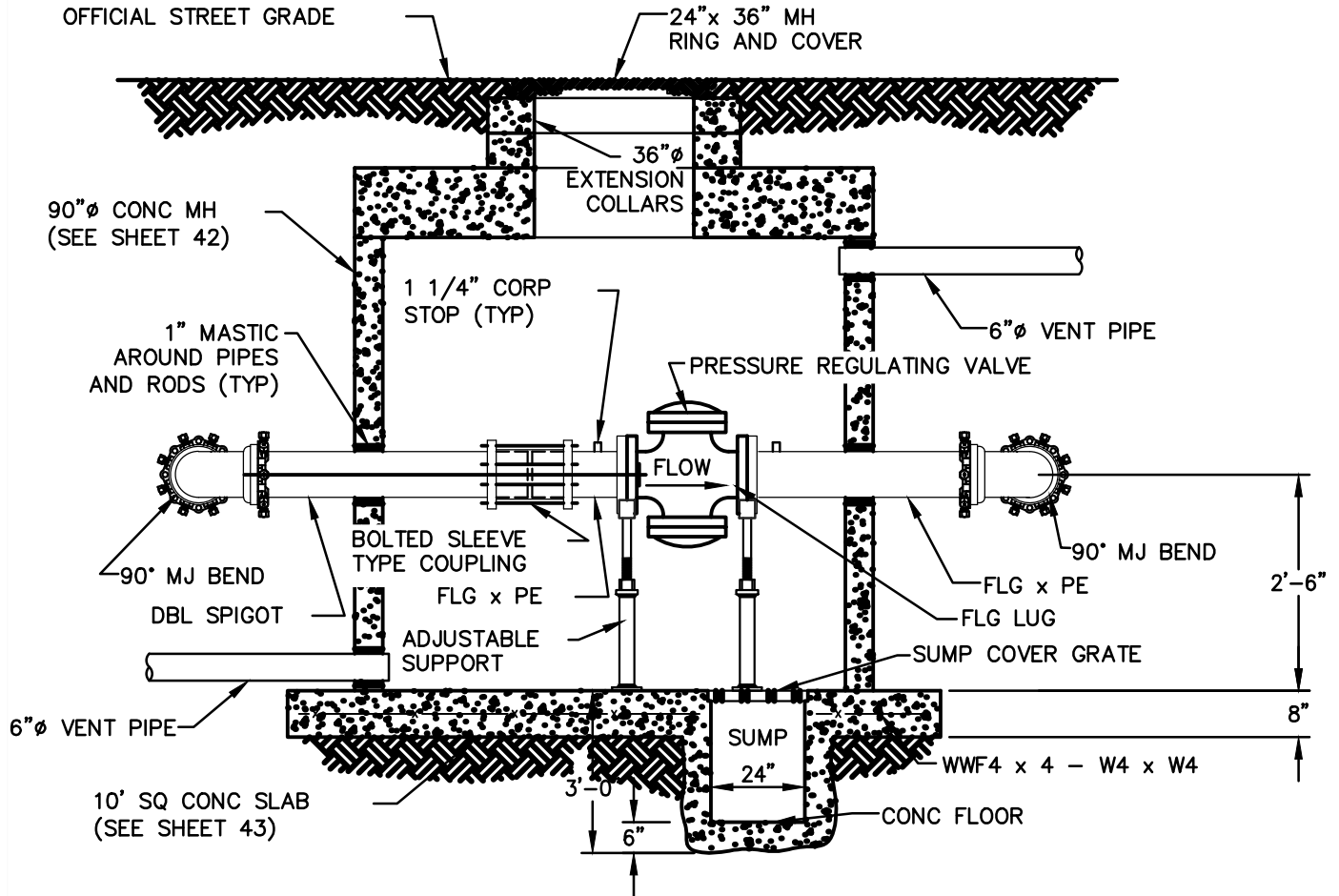
NOTES:

1. A RECTANGULAR VAULT IS REQD WHERE TELEMETRY OR ELECTRICAL EQUIPMENT IS ANTICIPATED INSIDE THE VAULT.
2. ACCESS STAIRS WITH DOOR OUTSIDE OF PAVEMENT MAY BE REQD ON STREETS WITH HEAVY TRAFFIC.
3. FOR CROSS SECTION VIEW, SEE CITY OF DAHLONEGA STANDARD DETAIL W25.
4. DO NOT PLACE SUMP DIRECTLY UNDER MH.
5. THIS MH IS SUITABLE FOR CHECK VALVE INSTALLATIONS.
6. PIPING FOR PRV AND CHECK VALVE INSTALLATIONS SHALL BE DI.
7. LADDER RUNGS ARE REQD IN PRE-CAST MH. THE DISTANCE BETWEEN RUNGS, CLEATS, AND STEPS SHALL NOT EXCEED 12" AND SHALL BE UNIFORM THROUGHOUT THE LENGTH OF THE LADDER.

**CITY OF DAHLONEGA STANDARD DETAIL W23  
PRESSURE REGULATING VALVE MANHOLE TYPICAL PLAN**

SCALE: NTS  
DATE OF LAST REVISION: 03/22



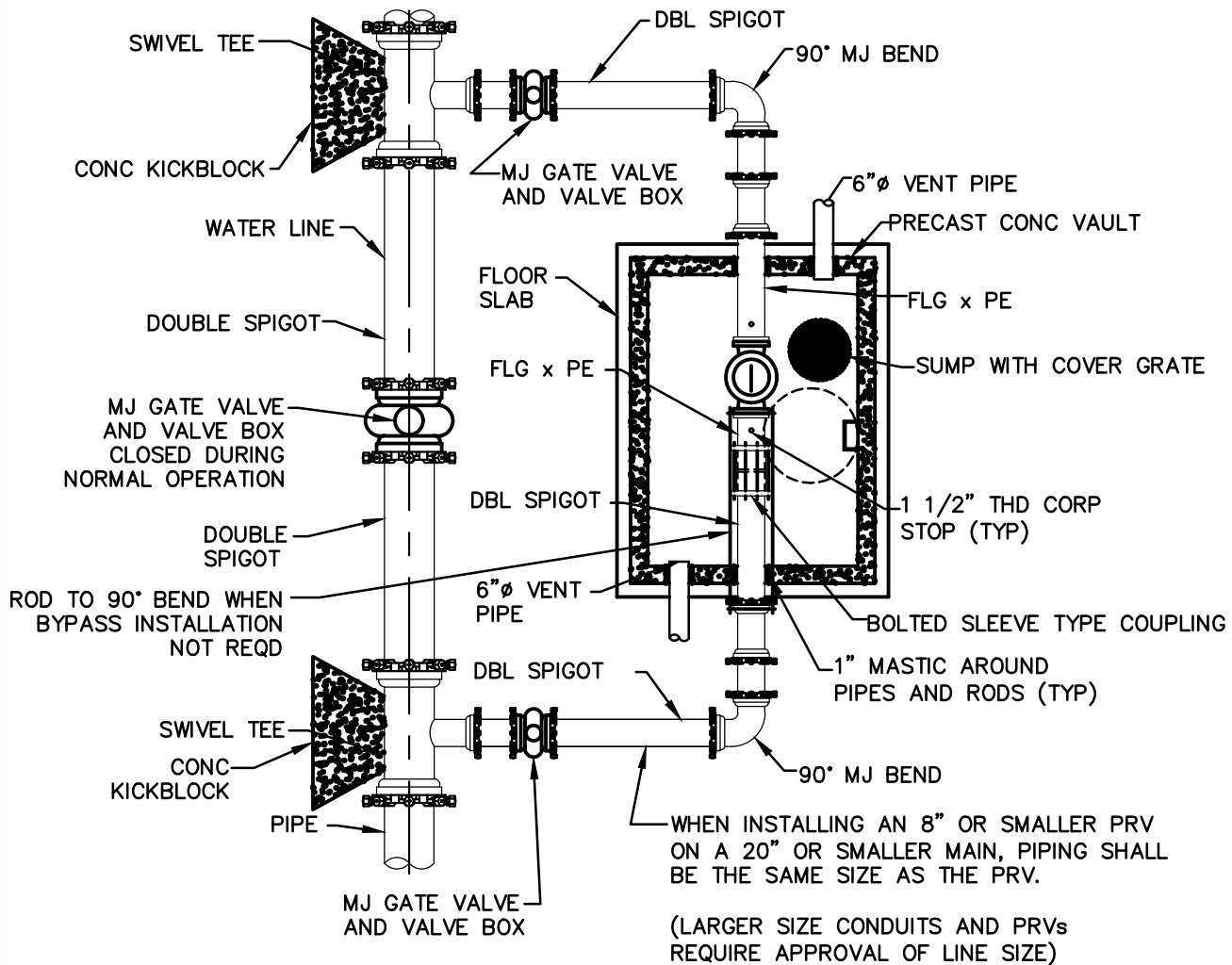


NOTE:  
SEE CITY OF DAHLONEGA STANDARD DETAIL W24  
FOR PLAN VIEW AND ADDITIONAL NOTES.

**CITY OF DAHLONEGA STANDARD DETAIL W24  
PRESSURE REGULATING VALVE MANHOLE CROSS SECTION**

SCALE: NTS  
DATE OF LAST REVISION: 03/22



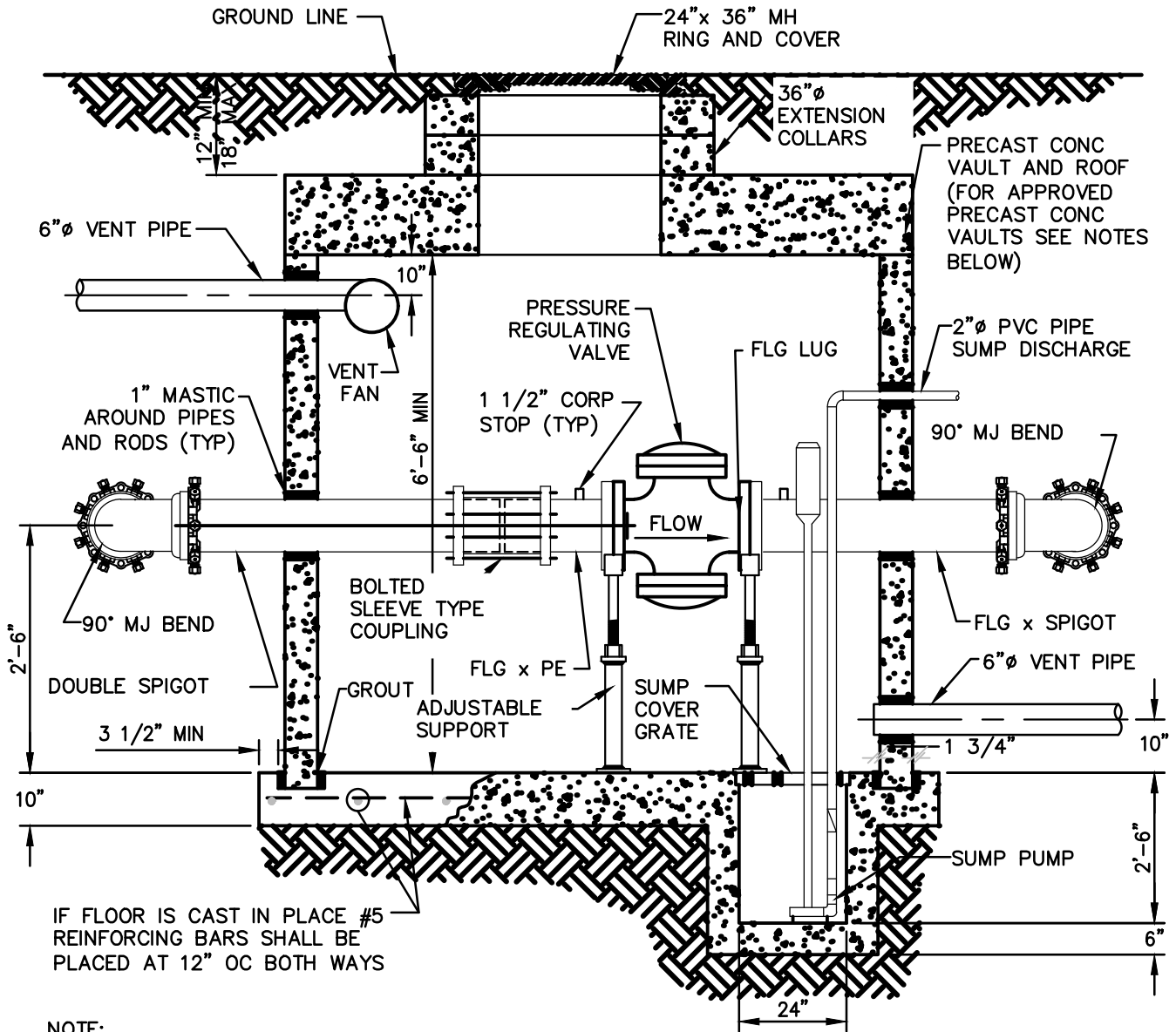


NOTES:

1. A RECTANGULAR VAULT IS REQD WHERE TELEMETRY OR ELECTRICAL EQUIPMENT IS ANTICIPATED INSIDE THE VAULT.
2. ACCESS STAIRS WITH DOOR OUTSIDE OF PAVEMENT MAY BE REQD ON STREETS WITH HEAVY TRAFFIC. FOR CROSS SECTION VIEW, SEE CITY OF DAHLONEGA STANDARD DETAIL W27.
3. DO NOT PLACE SUMP DIRECTLY UNDER MH.
4. THIS MH IS SUITABLE FOR CHECK VALVE INSTALLATIONS.
5. PIPING FOR PRV AND CHECK VALVE INSTALLATIONS SHALL BE DI.
6. LADDER RUNGS ARE REQD IN PRE-CAST MH. THE DISTANCE BETWEEN RUNGS, CLEATS, AND STEPS SHALL NOT
7. EXCEED 12" AND SHALL BE UNIFORM THROUGHOUT THE LENGTH OF THE LADDER.

**CITY OF DAHLONEGA STANDARD DETAIL W25**  
**PRESSURE REGULATING VALVE RECTANGULAR VAULT**  
**INSTALLATION TYPICAL PLAN**  
 SCALE: NTS  
 DATE OF LAST REVISION: 03/22



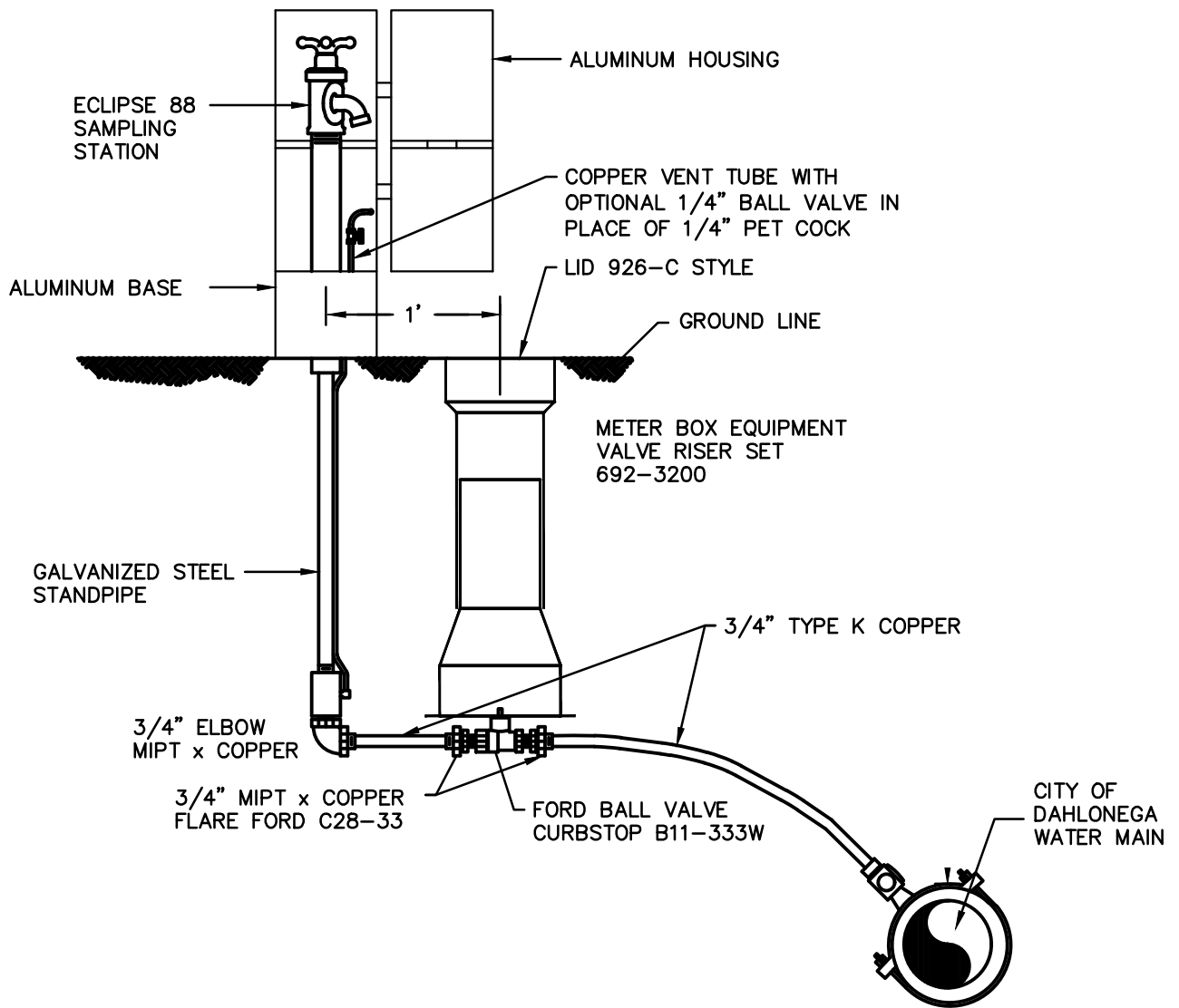


NOTE:

- APPROVED PRECAST CONC VAULTS:  
AMCOR CONC INC- 10'x 10'x 7' 7080M, 7080-12.  
ADAMS CITY MFG 12', 6'x 8'-6", 7'x 12'-6"
- SEE CITY OF DAHLONEGA STANDARD DETAIL W26 FOR PLAN VIEW AND ADDITIONAL NOTES.

**CITY OF DAHLONEGA STANDARD DETAIL W26**  
**PRESSURE REGULATING VALVE RECTANGULAR VAULT**  
**INSTALLATION CROSS SECTION**  
 SCALE: NTS  
 DATE OF LAST REVISION: 03/22





**NOTES:**

1. SAMPLING STATIONS SHALL BE 4' BURY, WITH A 3/4" FIP INLET, AND A (3/4" HOSE OR UNTHREADED) NOZZLE.
2. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NONREMOVABLE, ALUMINUM-CAST HOUSING.
3. WHEN OPENED, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL BRASS WATERWAY.
4. ALL WORKING PARTS WILL ALSO BE OF BRASS AND BE REMOVABLE FROM ABOVE GROUND WITH NO DIGGING. EXTERIOR PIPING SHALL BE GALVANIZED STEEL (BRASS PIPE ALSO AVAILABLE).
5. ECLIPSE NO. 88 SAMPLING STATION SHALL BE MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO 63102.

**CITY OF DAHLONEGA STANDARD DETAIL W27  
ECLIPSE #88 WATER SAMPLING STATION**

**SCALE: NTS  
DATE OF LAST REVISION: 03/22**

