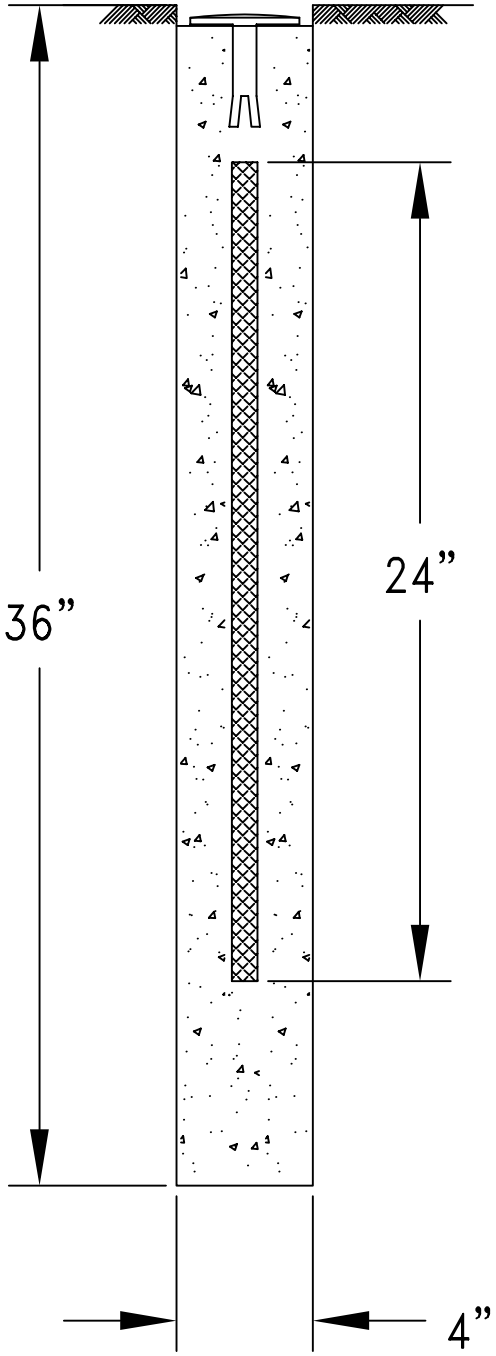
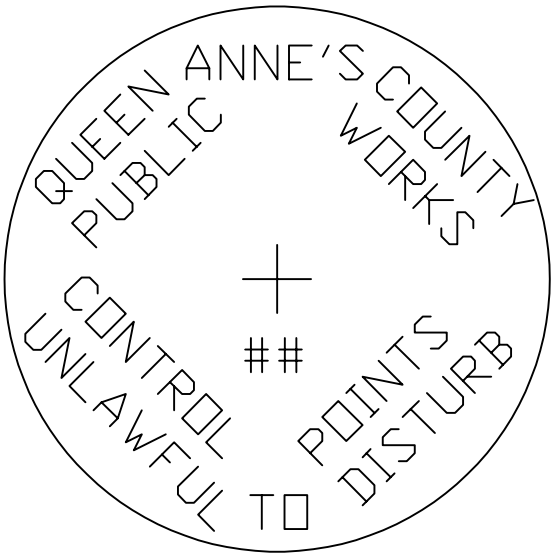
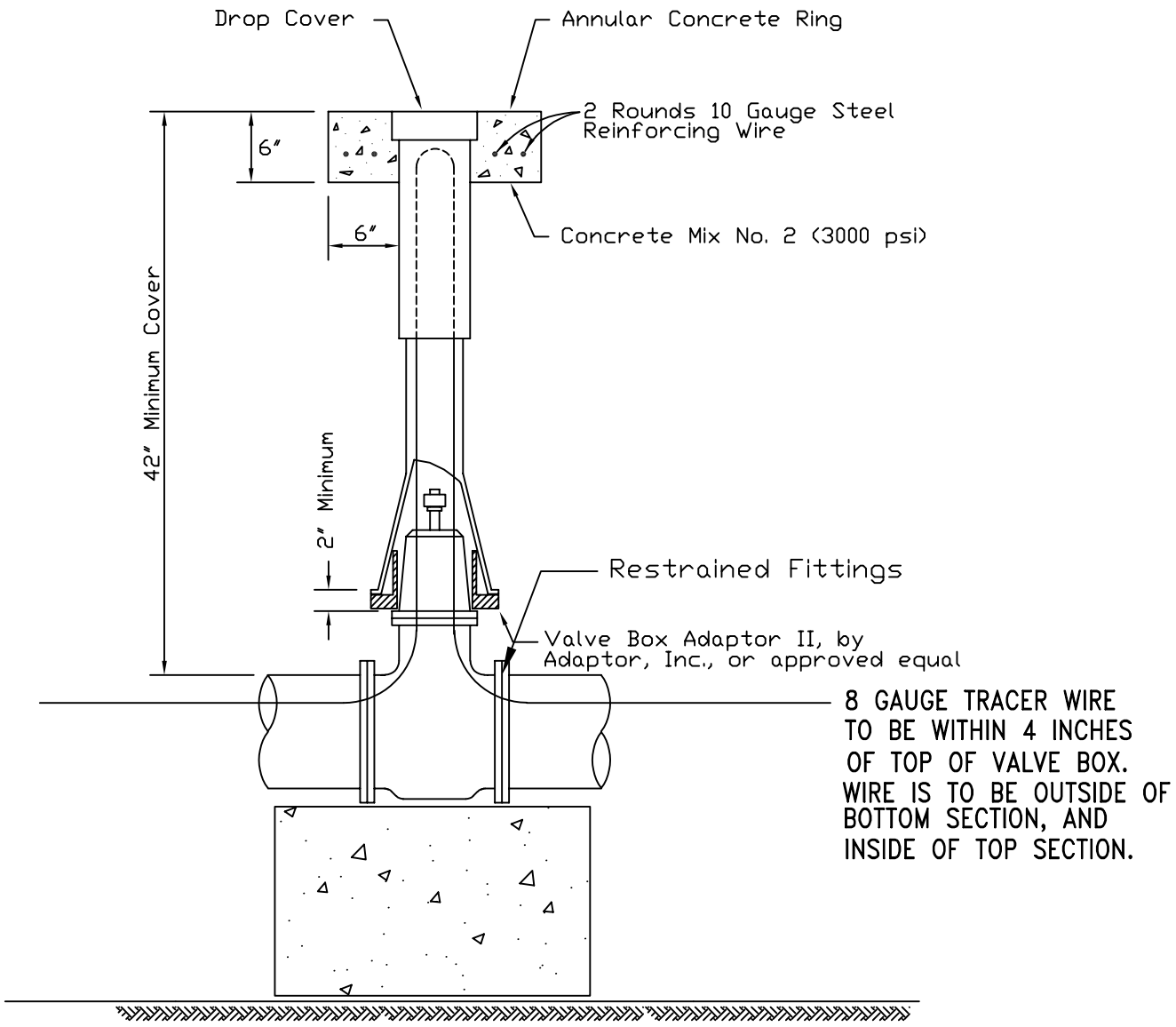




NOTES

1. Disks will be provided by County.
2. Disk must be established by registered Professional Land Surveyor.
3. Tie sheets shall be provided for each monument showing Maryland State Plane Grid northing and easting in feet (NAD 83) and elevation in feet (NAVD 88).
4. In subdivisions, monuments should constitute some of the subdivision's property lines control points.
5. Install disks at, or 1 inch below, grade.
6. Embed a 2-foot length of 5/8 inch rebar in concrete under disk.

DATE 1-02	REVISION	Sanitary District Detail
SCALE NTS		
DRAWN BY CADD		Benchmark
APPROVED BY AQ		
FILE DT-GN-BENCHMARK		



NOTES:

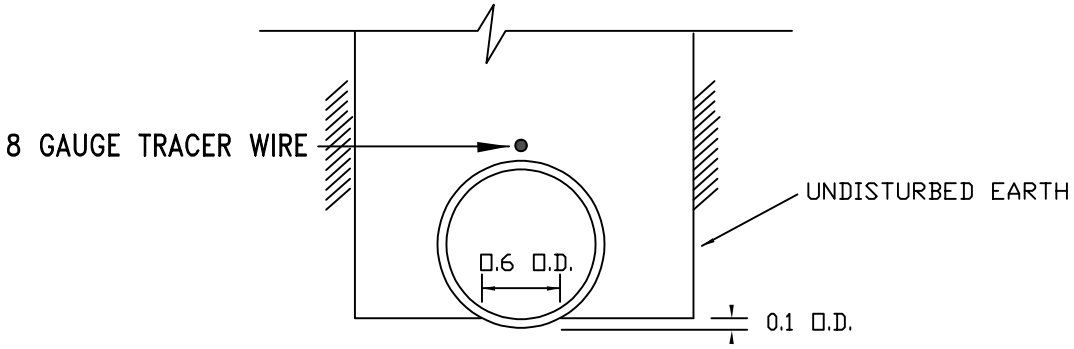
1. USE 8" BY 8" BY 16" SOLID CONCRETE BLOCK AS THRUST BLOCK.
2. ALL THRUST BLOCKS TO BE CARRIED TO UNDISTURBED EARTH.
3. VALVE BOXES TO BE TWO PIECE AND TO HAVE AN ADJUSTMENT RANGE OF AT LEAST 12 INCHES.
4. OPERATING NUT TO BE 2 INCH SQUARE WITH STAINLESS STEEL BOLT.
5. VALVE TO BE RESILIENT WEDGE SEAT AND EPOXY COATED.
6. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.

QUEEN ANNE'S COUNTY 1706

DATE	1-98	REVISION
SCALE	NTS	9-29-99
DRAWN BY	AQ	12-9-05
APPROVED BY	CADD	5-25-11
FILE	dt-gn-vbox	01-11-24

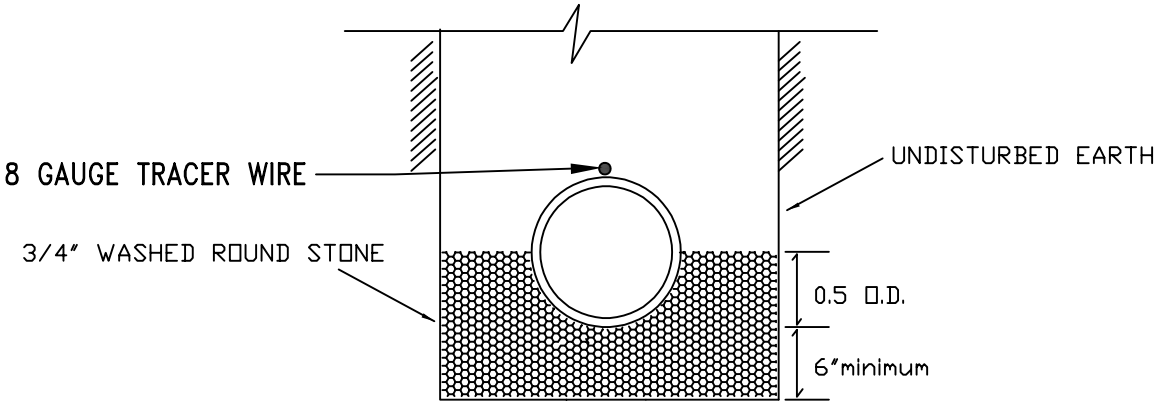
Sanitary District Detail

Division Valve Box
WATER & SEWER



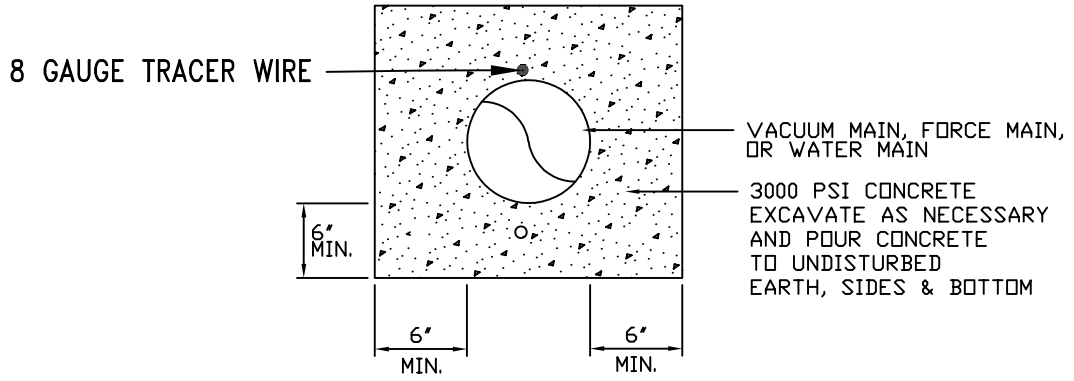
TYPE 1 BEDDING

(TYPICAL OF PRESSURE MAINS)



TYPE 3 BEDDING

(TYPICAL OF VACUUM & GRAVITY SEWER)

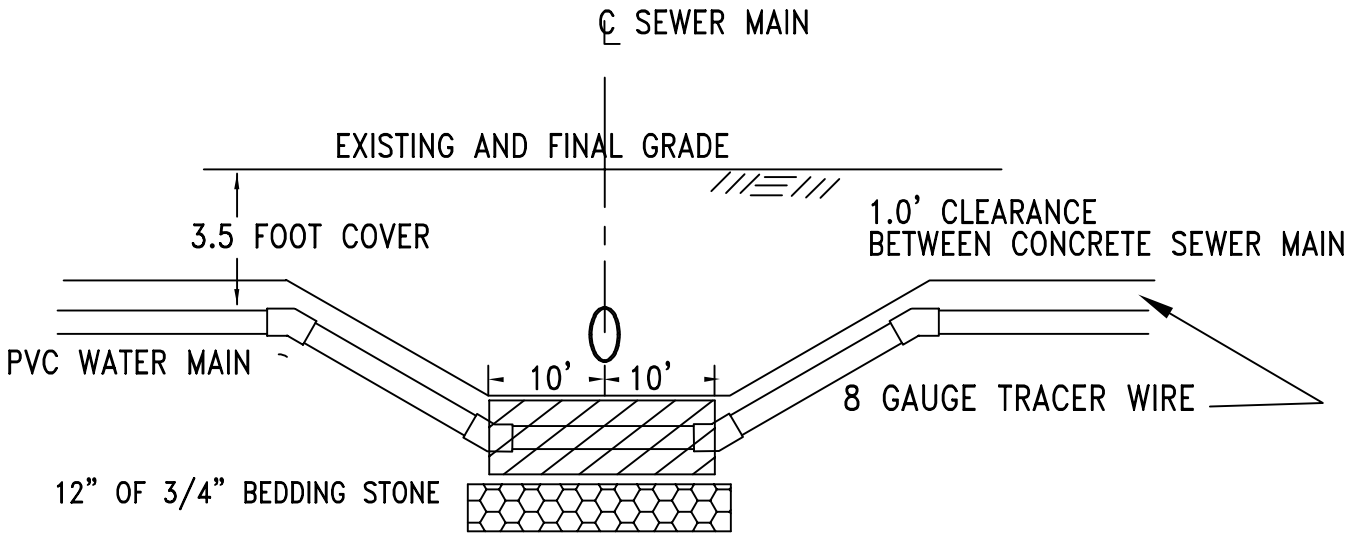


CONCRETE ENCASEMENT

NOTE: 1. WHEN ENCASING PVC PIPE, ENCASED LENGTH TO BE COVERED WITH POLYETHYLENE FILM FIRST.
2. WHEN ENCASING, ALL EXPOSED SIDES TO BE SUPPORTED WITH WOODED FORMS WHEN BACKFILLING.
3. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE COPPER.

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-27-05	
DRAWN BY AQ	01/11/24	Pipe Bedding and Concrete Encasement
APPROVED BY CADD		
FILE dt-gn-bed		



NOTES:

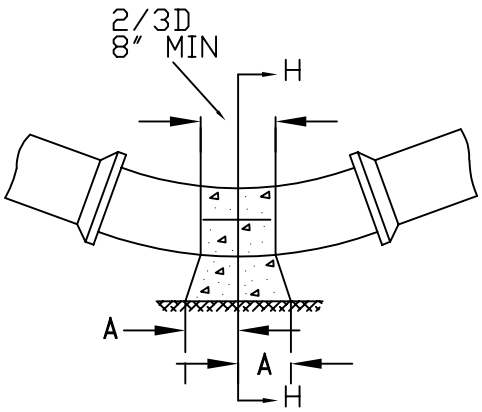
1. NO ENCASEMENT IS NECESSARY IF SEWER MAIN IS VACUUM BUT 1 FOOT SEPERATION MUST BE MAINTAINED.
2. THE FOUR PIPE JOINTS SHOWN MUST BE MECHANICALLY RESTRAINED.
3. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.

QUEEN ANNE'S COUNTY 1706

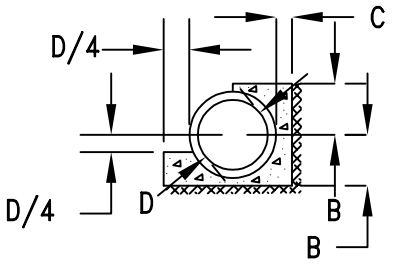
DATE	1-98	REVISION
SCALE	NTS	12-13-05
DRAWN BY	AQ	04-09-19
APPROVED BY	CADD	01-11-24
FILE	dt-wtr-conflict	

Sanitary District Detail

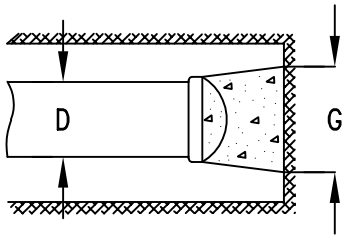
Water
Sewer Conflict Deflection



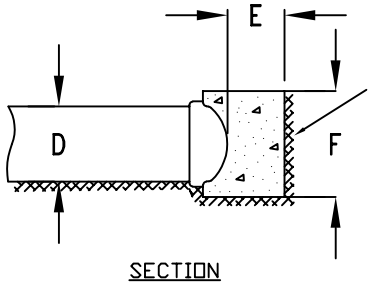
PLAN



SECTION H-H
HORIZONTAL BENDS



PLAN



SECTION

BUTTRESS FOR HORIZONTAL BENDS

Bend		SIZE 6"	8"	10"	12"	16"	20"	24"	30"	36"
1/64	A						1'-8"	2'-0"	2'-6"	3'-0"
	B						10"	1'-0"	1'-3"	1'-6"
	C						10"	1'-0"	1'-1"	1'-2"
1/32	A	6"	8"	10"	1'-0"	1'-4"	1'-8"	2'-0"	2'-6"	3'-0"
	B	7"	8"	9"	10"	1'-0"	1'-2"	1'-4"	1'-7"	1'-11"
	C	7"	7"	8"	8"	9"	10"	1'-0"	1'-1"	1'-2"
1/16	A	9"	1'-0"	1'-6"	1'-9"	2'-3"	3'-0"	3'-6"	4'-2"	5'-4"
	B	7"	8"	9"	10"	1'-0"	1'-2"	1'-4"	1'-7"	2'-0"
	C	8"	9"	10"	11"	1'-2"	1'-4"	1'-6"	1'-9"	2'-0"
1/8	A	3"	8"	2'-1"	2'-6"	3'-4"	4'-2"	5'-0"	6'-3"	7'-6"
	B	7"	8"	9"	11"	1'-3"	1'-6"	1'-8"	2'-0"	2'-6"
	C	8"	9"	10"	11"	1'-2"	1'-4"	1'-9"	2'-3"	2'-8"

BUTTRESS FOR CAPS

	6"	8"	10"	12"	16"	20"	24"	30"	36"
D	6"	8"	10"	12"	16"	20"	24"	30"	36"
E	6"	8"	6"	10"	1'-0"	1'-4"	1'-8"	2'-0"	2'-0"
F	11"	1'-2"	1'-6"	1'-9"	2'-4"	2'-11"	3'-6"	4'-4"	5'-3"
G	1'-3"	1'-8"	2'-1"	2'-6"	3'-4"	4'-2"	5'-0"	6'-3"	7'-6"

NOTES:

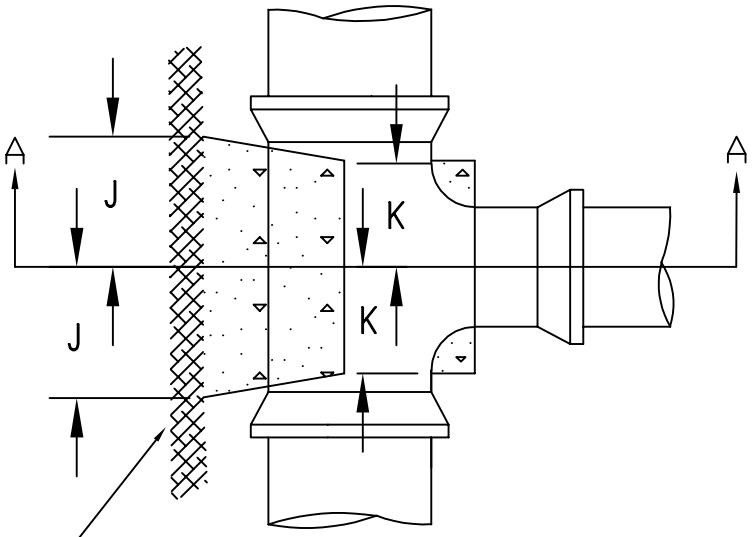
1. All concrete to be 3000 p.s.i.
2. Buttress dimensions shown are minimum. Dimensions are based upon soil bearing pressure of 3000 p.s.i. and static water pressure of 150 p.s.i. Where pressure exceeds 150 p.s.i. or where soil bearing pressure is less than 3000 p.s.i., special buttress design is required.
3. All exposed sides to be supported with wooden forms when backfilling.

QUEEN ANNE'S COUNTY 1706

DATE	1-98	REVISION
SCALE	NTS	
DRAWN BY	CADD	
APPROVED BY	AQ	
FILE	DT-GN-BUT1	

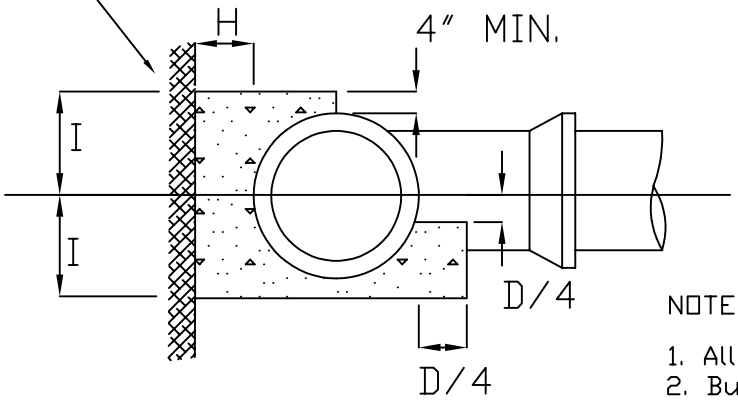
Sanitary District Detail

Buttress Caps & Horizontal Bends



Carry concrete to undisturbed earth

PLAN



SECTION A - A

NOTES

1. All concrete to be 3000 p.s.i. (mix no. 1)
2. Buttress dimensions shown are minimum Dimemsions are based on soil bearing pressure of 3000 p.s.f. and static water pressure of 150 p.s.i. Where pressure exceeds 150 p.s.i. or where soil bearing pressure is less than 3000 p.s.f. special buttress design is required.
3. All exposed sides to be supported with wooden forms when backfilling.

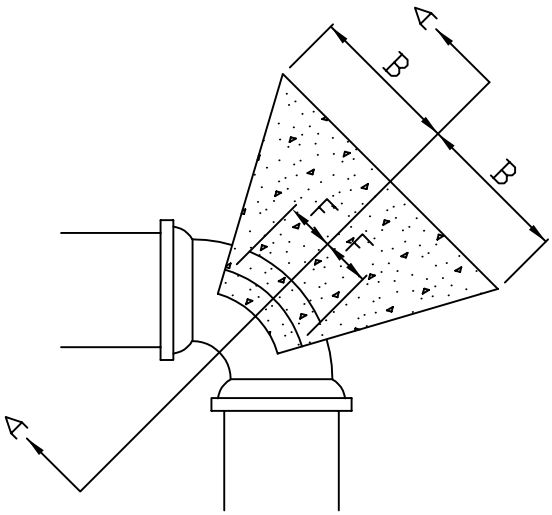
SIZE OF BRANCH									
D	6"	8"	10"	12"	16"	20"	24"	30"	36"
H	8"	9"	10"	1'-0"	1'-2"	1'-4"	1'-6"	1'-9"	2'-0"
I	8"	10"	1'-0"	1'-3"	1'-8"	2'-1"	2'-6"	3'-1"	3'-9"
J	7"	9"	1'-0"	1'-2"	1'-6"	1'-11"	2'-4"	2'-10"	3'-5"
K	6"	8"	8"	8"	10"	1'-2"	1'-4"	1'-6"	1'-10"

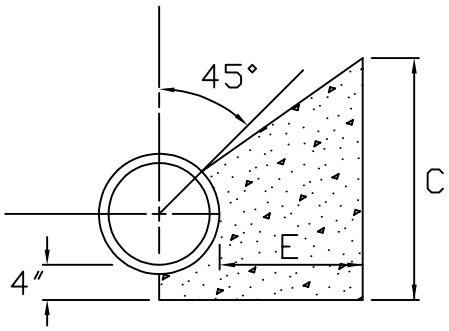
QUEEN ANNE'S COUNTY 1706

DATE	1-98	REVISION
SCALE	NTS	
DRAWN BY	CADD	
APPROVED BY	AQ	
FILE	dt-gn-but2	

Sanitary District Detail

Buttress Tees





SECTION A–A

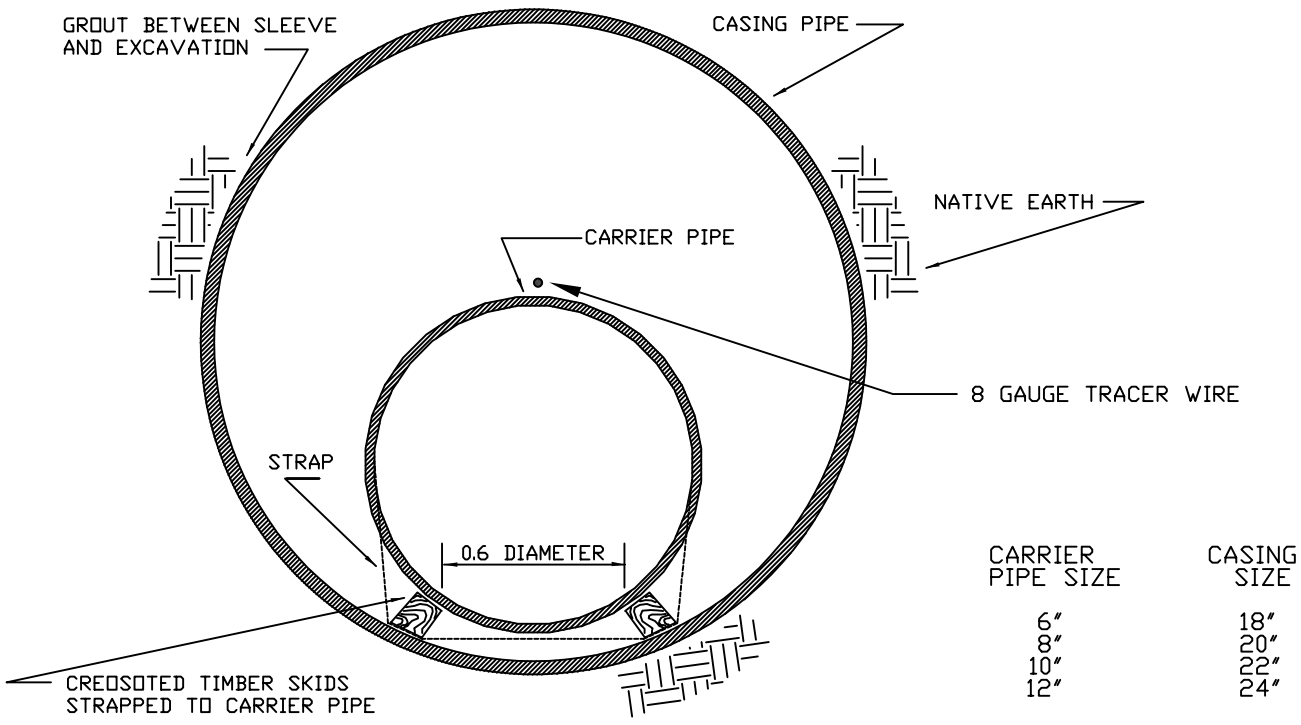
NOTES:

1. Carry all bearing surfaces to solid ground.
2. This detail to be used for horizontal 1/4 bends and Class 150 pipe only.
3. All concrete to be 3000 p.s.i.
4. All exposed sides to be supported with wooden forms when backfilling.

SIZE	B	C	E	F
6"	12"	14"	20"	5"
8"	16"	18"	19"	6"
10"	18"	25"	19"	6"
12"	20"	30"	18"	7"
14"	28"	30"	20"	9"
16"	29"	36"	20"	10"
18"	31"	42"	23"	12"
20"	34"	46"	30"	12"
24"	46"	48"	33"	12"
30"	60"	60"	36"	14"
36"	72"	72"	40"	14"

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS		
DRAWN BY CADD		Buttress Quarter Bends
APPROVED BY AQ		
FILE dt-gn-qbnd		



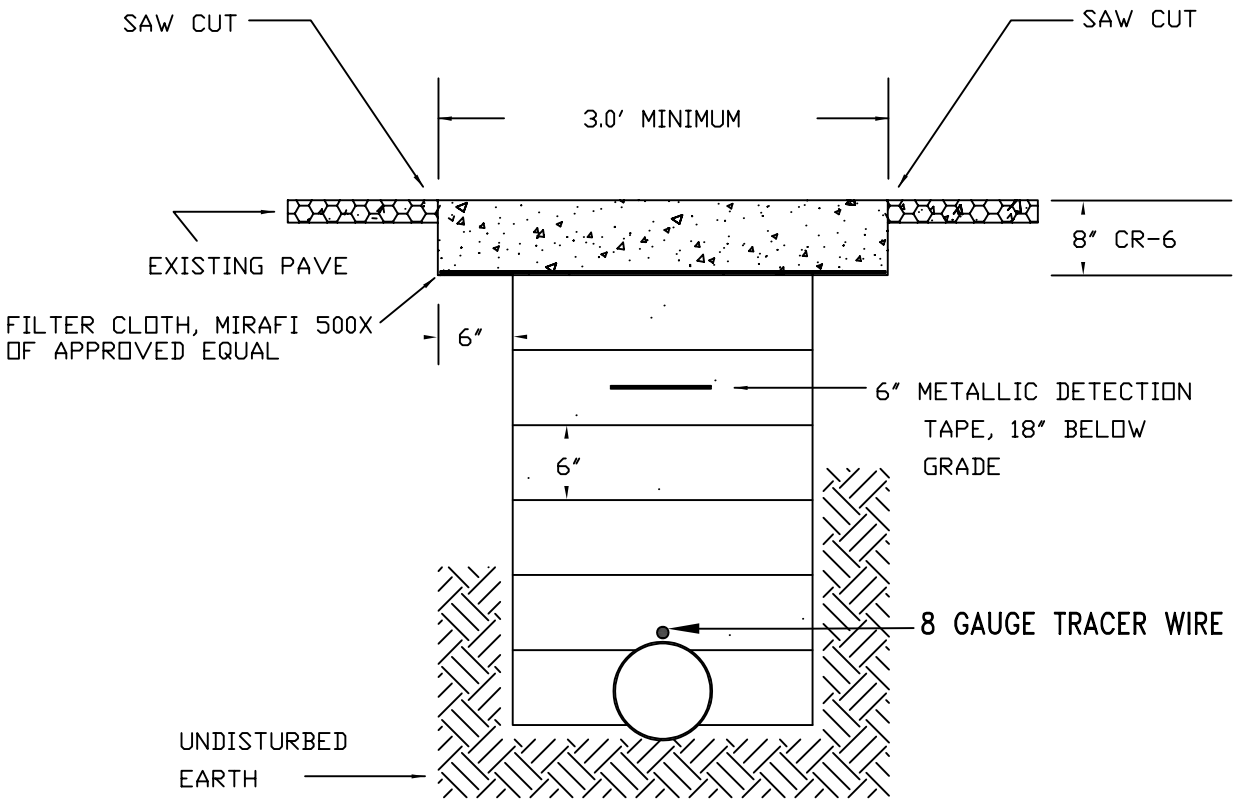
CARRIER PIPE SIZE	CASING SIZE
6″	18″
8″	20″
10″	22″
12″	24″

NOTE:

1. CLOSE ENDS OF CASING PIPE AND FILL ANNULAR SPACE BETWEEN CARRIER AND CASING PIPE WITH SAND OR PROVIDE OTHER POSITIVE MEANS TO PREVENT CARRIER PIPE FLOATATION.
2. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE COPPER

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-27-05	
DRAWN BY AQ	01-11-24	Jack and Bore
APPROVED BY CADD		
FILE dt-gn-jack		

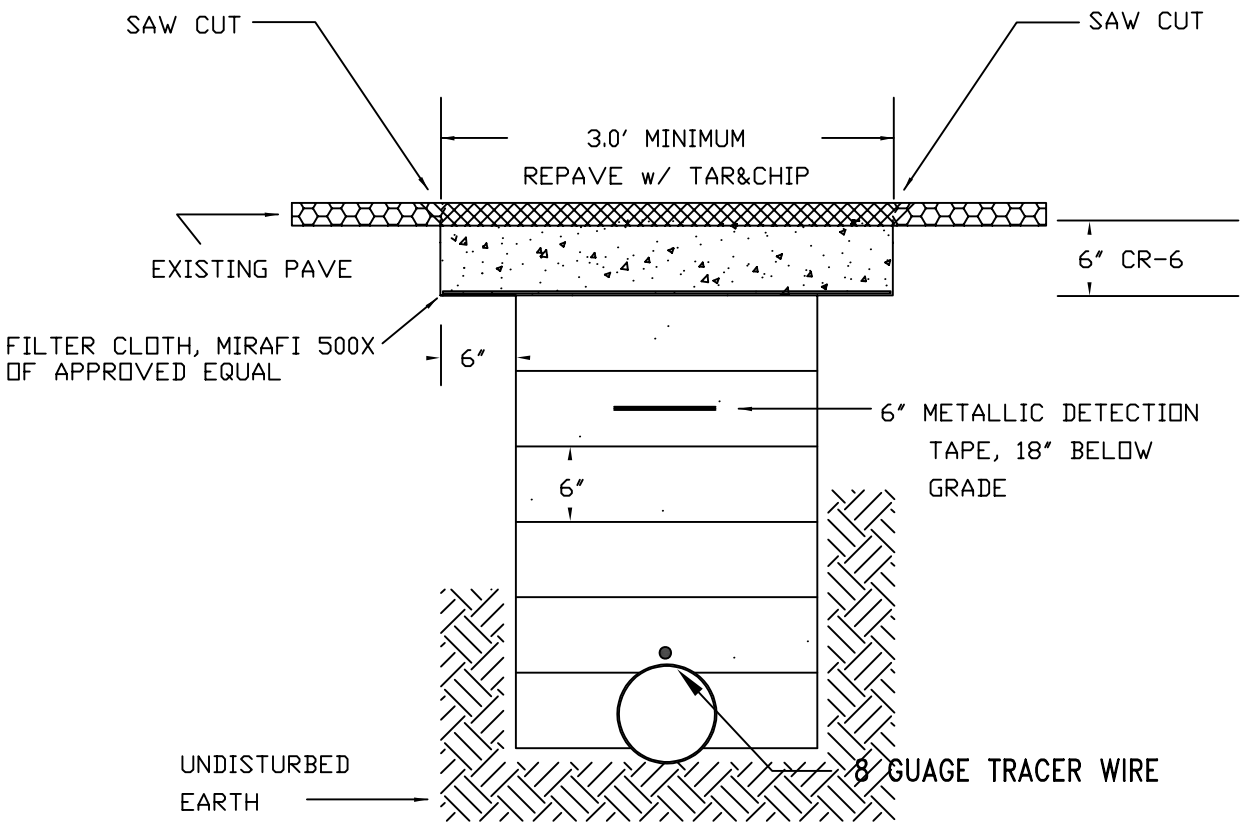


NOTES:

1. CONTRACTOR IS TO MAINTAIN TRENCH TO COUNTY SATISFACTION THROUGHOUT LENGTH OF CONTRACT OR UNTIL PERMANENTLY PAVED.
2. DETAIL APPLIES AS PERMANENT REPAIR OF SHOULDER AREAS AND 'OTHER PUBLIC' ROADS.
3. BACKFILL TO BE NATIVE MATERIAL IF SUITABLE OR SELECT IF SO DIRECTED BY COUNTY OR BY SPECIFICATION.
4. BACKFILL TO BE COMPACTED IN 6 INCH LIFTS.
5. BACKFILL TO BE WELL TAMPED TO SPRINGLINE OF PIPE.
6. PROVIDE A HMWPE COATED, SOLID, 8 GAUGE COPPER TRACER WIRE ABOVE ALL PIPE.

QUEEN ANNE'S COUNTY 1706

DATE 1-16	REVISION	Sanitary District Detail
SCALE NTS	10-17-24	
DRAWN BY CADD		Roadway Trench Repair
APPROVED BY AQ		Temporary & 'Other Public'
FILE dt-ski-gn-trench		



NOTES:

1. CONTRACTOR IS TO MAINTAIN CR-6 IN TRENCH TO COUNTY SATISFACTION THROUGHOUT LENGTH OF CONTRACT OR UNTIL PERMANENTLY PAVED.
2. BACKFILL TO BE DRY NATIVE MATERIAL, OR IF DIRECTED BY COUNTY, SELECT MATERIAL.
3. BACKFILL TO BE PLACED IN 6 INCH LIFTS WITH EACH LIFT COMPACTED TO AT LEAST 90%.
4. BACKFILL TO BE WELL TAMPED TO SPRINGLINE OF PIPE.
5. PAVEMENT TO BE TRIPLE SURFACE TREATMENT IN ACCORDANCE WITH SPECIFICATION-02575.
6. FINISH TRENCH GRADE SHALL MATCH EXISTING CROSS SLOPE.
7. PROVIDE A COATED, 8 GAUGE COPPER WIRE ABOVE ALL PVC, HDPE, & PE PIPE.

QUEEN ANNE'S COUNTY 1706

DATE 1-16	REVISION	Sanitary District Detail
SCALE NTS		
DRAWN BY AQ		Roadway Trench Repair Permanent Tar & Chip
APPROVED BY CADD		
FILE dt-gn-trench2		

General Notes

1. Two weeks prior to the intended start of construction, the Contractor shall notify the Sanitary District and shall schedule a pre construction meeting (410-643-3535).

2. All materials and methods of construction shall be in accordance with the 1998 edition of "Specifications for Construction of Sewer Collection, Sewer Transmission, and Water Distribution Lines" available from the Sanitary District.

3. Two days prior to initiating construction, , Contractor to contact Miss Utility (1-800-441-8305) and the Sanitary District and submit all cut sheets and an approximate schedule of work.

4. The Owner, via the Contractor, shall provide one division valve key and one fire hydrant wrench for every five, or fraction thereof, water division valves or fire hydrants placed in the project. One meter pit key shall be provided for every ten, or fraction thereof, meter pits placed in the project.

5. No water construction may begin until site is excavated to subgrade.

6. Refer to Sanitary District Specifications for allowable water main and service lateral materials.

Testing Requirements

1. A pressure test shall be applied prior to any service taps being installed. A test pressure of 150 psi shall be sustained for 15 minutes at no loss in order to pass.

2. A leak test shall be applied after all service taps are installed. A test pressure of 70 psi shall be sustained for 24 hours with an allowable loss as specified in the Sanitary District specifications.

3. After passing the leak test, the mains shall be disinfected by having an initial free chlorine residual of 50 ppm at the start of the test and having in excess of 25 ppm of free chlorine after 24 hours.

4. Upon passing the disinfection Contractor to arrange for sampling and bacteriological testing by an approved, lab after disinfection and flushing.

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	10-17-24	
DRAWN BY AQ		General Notes Water
APPROVED BY CADD		
FILE dt-gn-wnotes		

SPECIFICATIONS

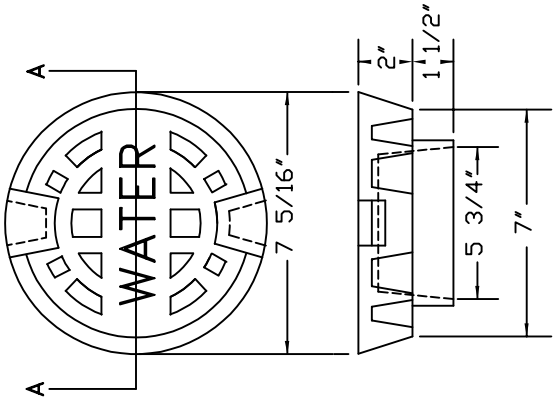
CAST IRON – SCREW TYPE
MIN. T.S. 30,000 P.S.I.

TOP SECTION 16"
BOTTOM SECTION 18"

BOXES ADJUSTABLE 34" TO 46"
TOP SECTION 16"
BOTTOM SECTION 30"

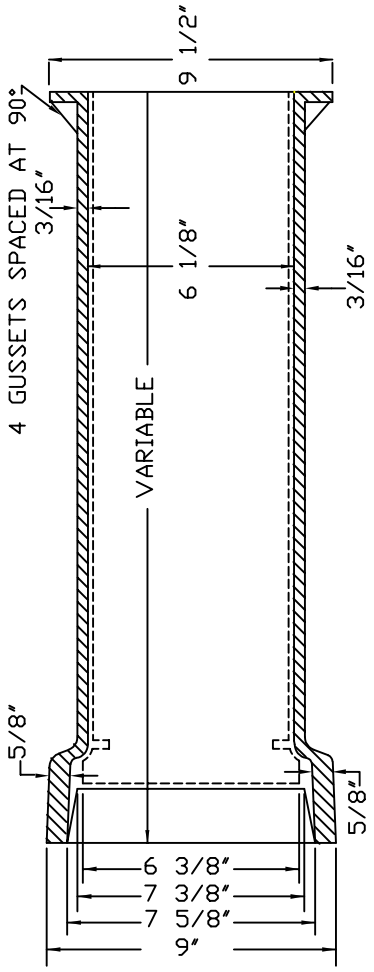
MIN. WT. PER BOX – 100 LBS.

TYLER PIPE 5 1/4" SHAFT
SLIP TYPE 6855 SERIES

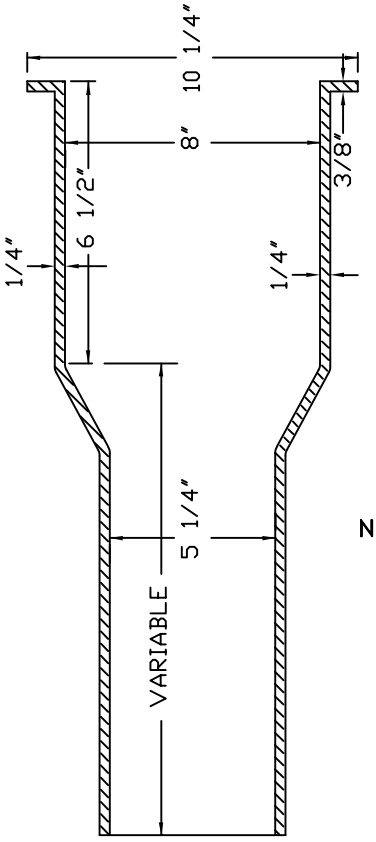


PLAN VIEW

SECTION A–A



SECTION THROUGH BOTTOM HALF OF VALVE BOX

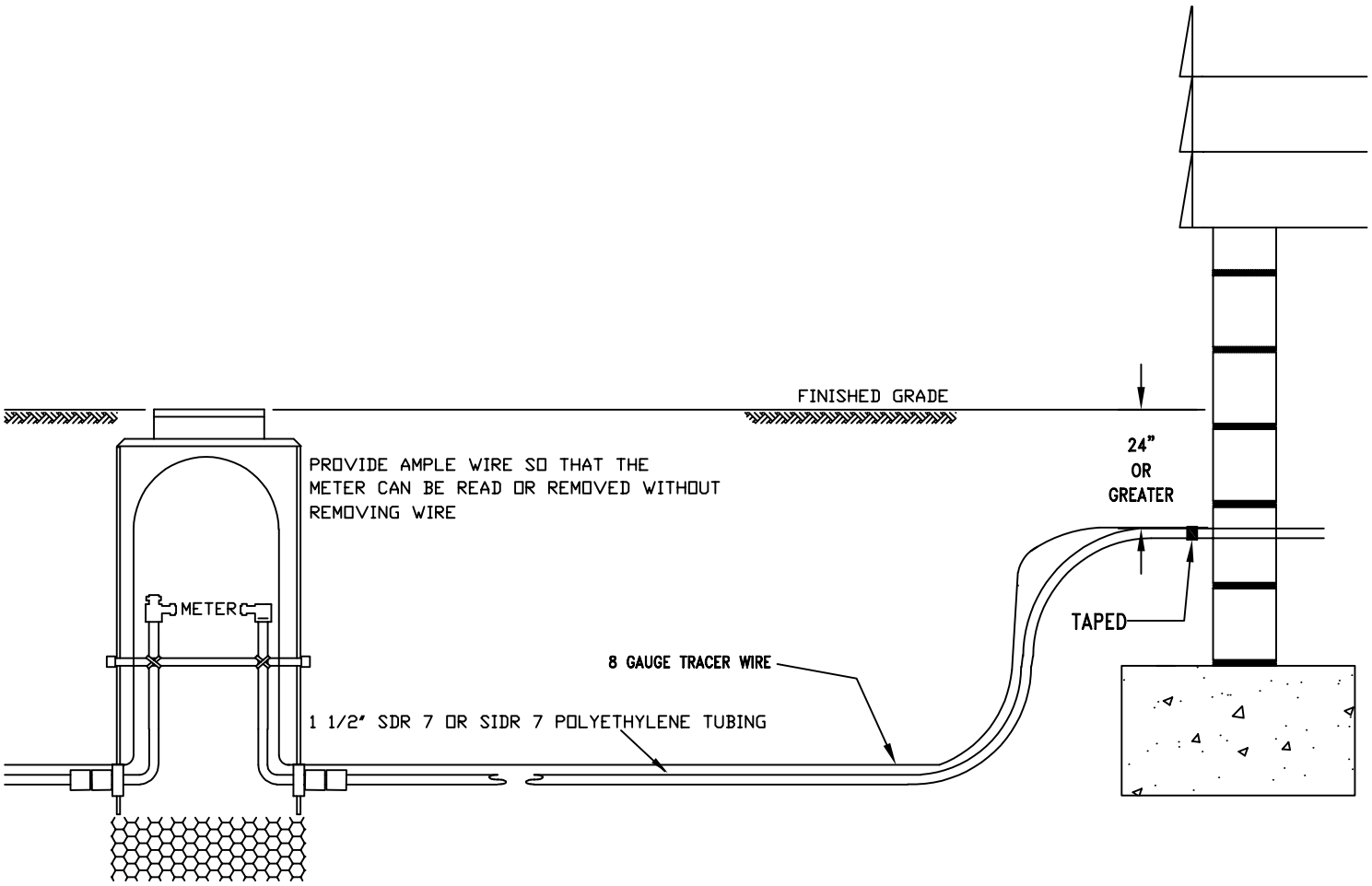


SECTION THROUGH TOP HALF OF VALVE BOX

NOTE: VALVE BOXES REQUIRING MORE THAN 3 SECTIONS SHALL BE INSTALLED WITH 6–INCH PVC SLEEVE TO MAINTAIN ALIGNMENT

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	1-29-04	
DRAWN BY CADD	01-12-24	Water/Sewer Valve Box & Cover
APPROVED BY AQ		
FILE dt-wtr-swr-vbox		

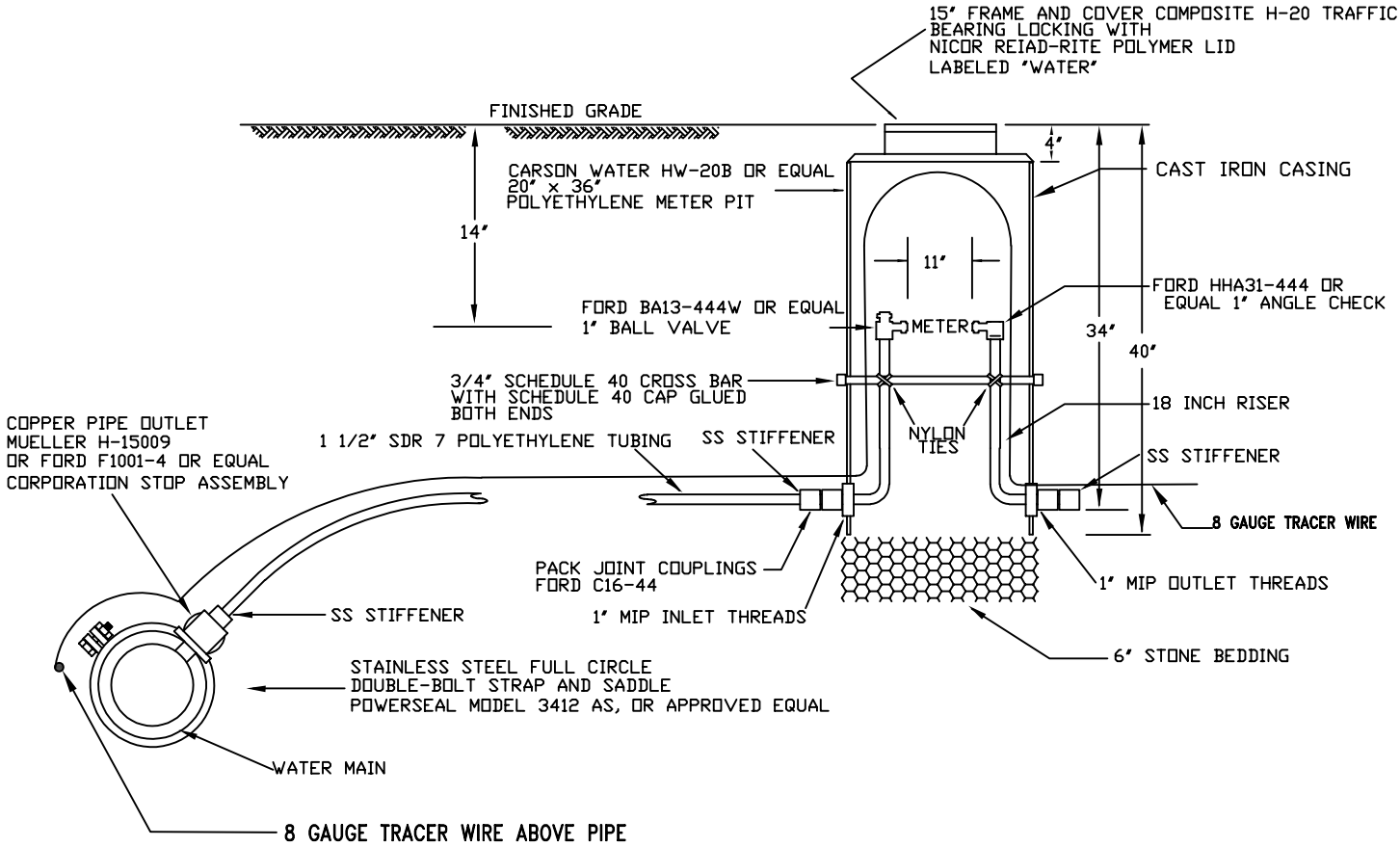


NOTES:

1. SEE METER DETAIL FOR SPECIFICS ON ITS INSTALLTION.
2. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
3. SERVICE LINE TO BE A MINIMUM OF 30 INCHES DEEP BETWEEN METER PIT AND STRUCTRE.
4. SERVICE LINE ALLOWED TO SHALLOW 3 FEET FRON STRUCTURE FOUNDATION.
5. SERVICE TO ENTER FOUNDATION NO LESS THAN 24 INCHES DEEP TO BE BELOW THE FROST LINE.
6. TRACER WEIR TO BE TAPED TO SERVICE LINE IMMEDIATELY ADJACENT TO FOUNDATION.

QUEEN ANNE'S COUNTY 1706

DATE 1-06	REVISION	Sanitary District Detail
SCALE NTS	01-12-24	
DRAWN BY CADD		Water
APPROVED BY AQ		Water Service Tracer Wire
FILE dt-wtr-service		



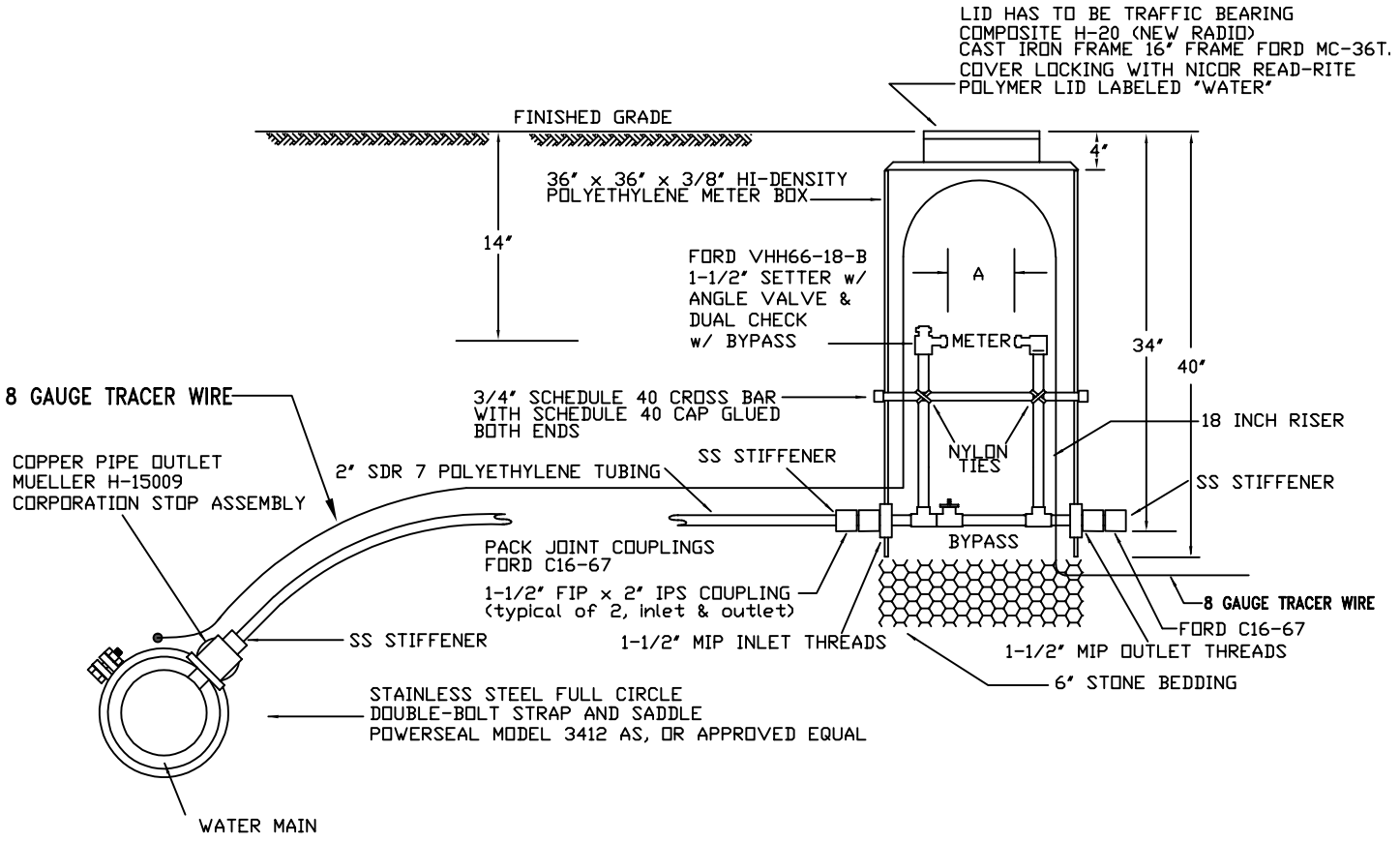
NOTES:

1. METER TO BE PURCHASED FROM SANITARY DISTRICT AND INSTALLED BY LICENSED PLUMBER.
2. METER TO BE 1" WATER METER WITH APPLICABLE ANTENNA OR READING DEVICE AS INSTRUCTED BY QAC INSPECTOR.
3. STAINLESS STEEL STIFFENERS SHALL BE INSTALLED AT ALL TRANSITION POINTS.
4. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
5. TRACER WIRE TO METER PIT TO BE SECURED TO MAIN TRACER WIRE VIA SPLIT BUG CONNECTION.
6. NOTE THESE METER PITS ARE NOT TRAFFIC BEARING AND CANNOT BE USED IN PAVED AREAS.

THIS DETAIL REPRESENTS THE MINIMUM SERVICE ALLOWED – HOWEVER IT MAY BE INSUFFICIENT FOR HOMES WHICH REQUIRE FIRE SUPPRESSION SPRINKLER SYSTEMS – CONSULT WITH SPRINKLER CONTRACTOR AND MODIFY SERVICE DIAMETER AS NECESSARY.

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	1-12-24	
DRAWN BY CADD	8-8-08	Water – 1-inch Residential Water Service
APPROVED BY AQ	11-16-10	
FILE dt-wtr-meter	10-20-14	



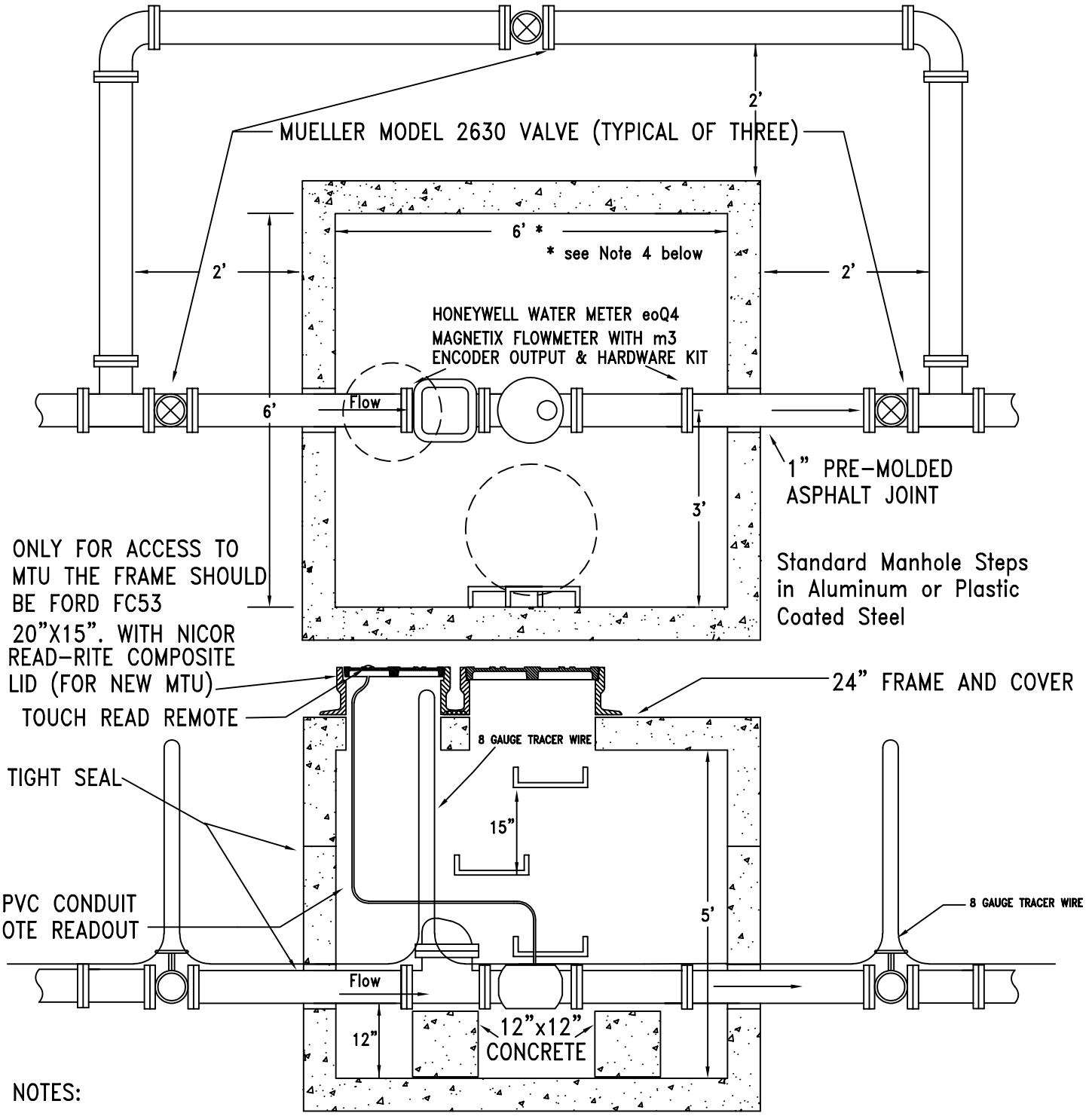
SETTER DIMENSIONS
If 1 1/2" meter is to be used, then A = 13".
If 2" meter is to be used, then A = 17".

NOTES:

1. METER TO BE PURCHASED FROM SANITARY DISTRICT AND INSTALLED BY OWNER.
2. METER TO BE 1-1/2" or 2" SENSUS WATER METER WITH TOUCH READ REMOTE.
3. STAINLESS STEEL STIFFENERS SHALL BE INSTALLED AT ALL TRANSITION POINTS.
4. TRACER WIRE TO BE HMWPE COATED, 8 GAUGE, SOLID, COPPER.
5. TRACER WIRE TO METER PIT TO BE SECURED TO MAIN TRACER WIRE VIA SPLIT BUG CONNECTION.
6. DETAIL AS SHOWN IS A 2" SERVICE WITH 1-1/2" METER – SHOULD A 2" METER BE DESIRED ALL FITTINGS SHOULD BE UP-SIZED TO 2".

QUEEN ANNE'S COUNTY 1706

DATE 3-02	REVISION	Sanitary District Detail
SCALE NTS	June 2004	
DRAWN BY CADD	June 2011	Water
APPROVED BY AQ	1-12-24	1 1/2" & 2" Water Service
FILE dt-wtr-meter2r		



NOTES:

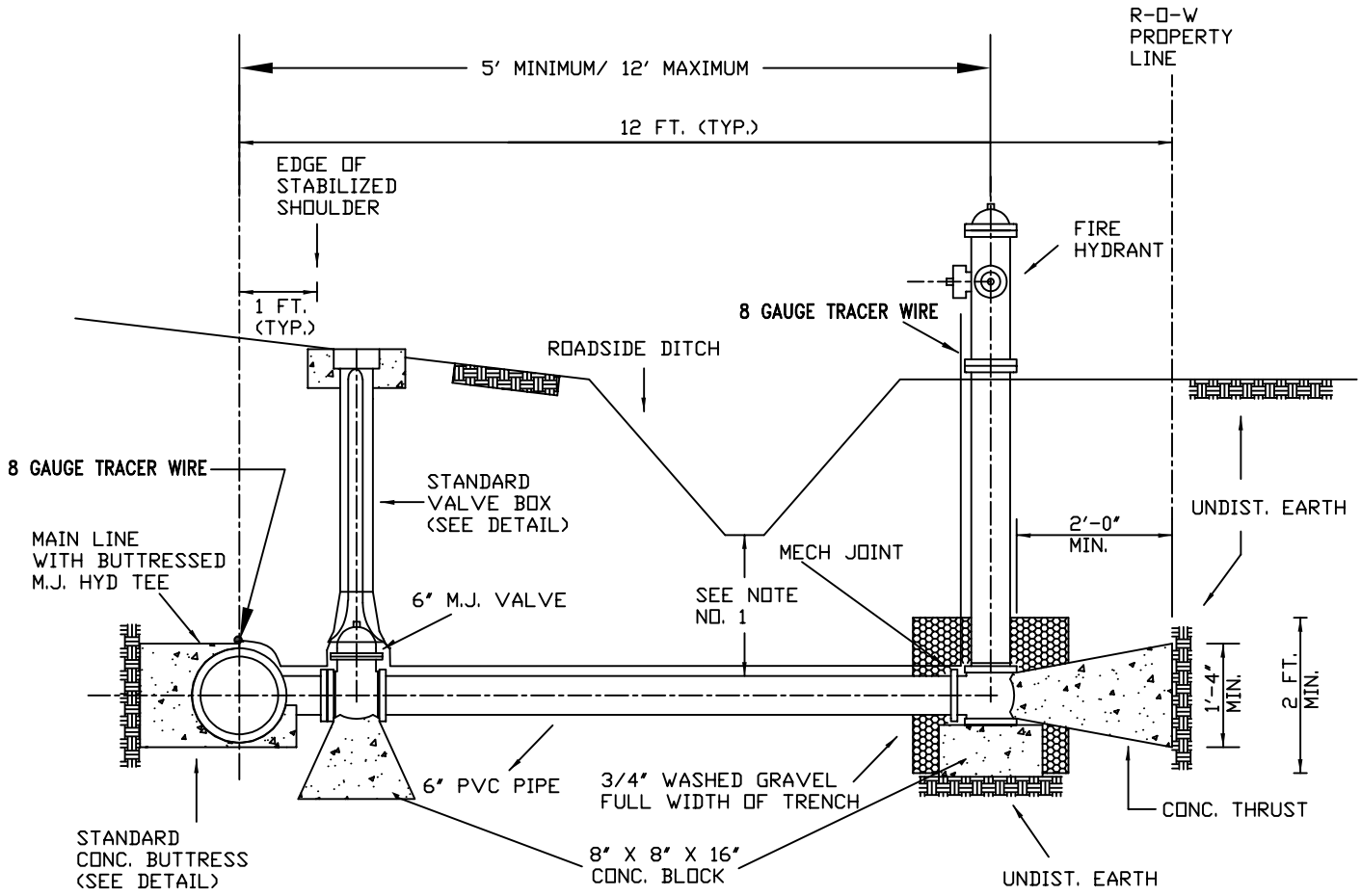
1. ALL METER VAULTS TO BE 6 INCH PRECAST REINFORCED CONCRETE DESIGNED FOR H-20 LOADING.
2. ALL FRAME & COVERS, AND METERS, SHALL BE TO COUNTY STANDARD
3. WATER METERS SHALL BE SENSUS ONMI F2 SERIES AND FURNISHED AND INSTALLED BY DEVELOPER.
4. INCREASE VAULT LENGTH TO 8 FEET FOR 6 INCH AND 8 INCH SERVICES.
5. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GUAGE COPPER.

QUEEN ANNE'S COUNTY 1706

DATE	1-98	REVISION
SCALE	NTS	01-12-24
DRAWN BY	AQ	12-28-05
APPROVED BY	CADD	10-2-06
FILE	dt-wtr-meter46r	11-5-14

Sanitary District Detail

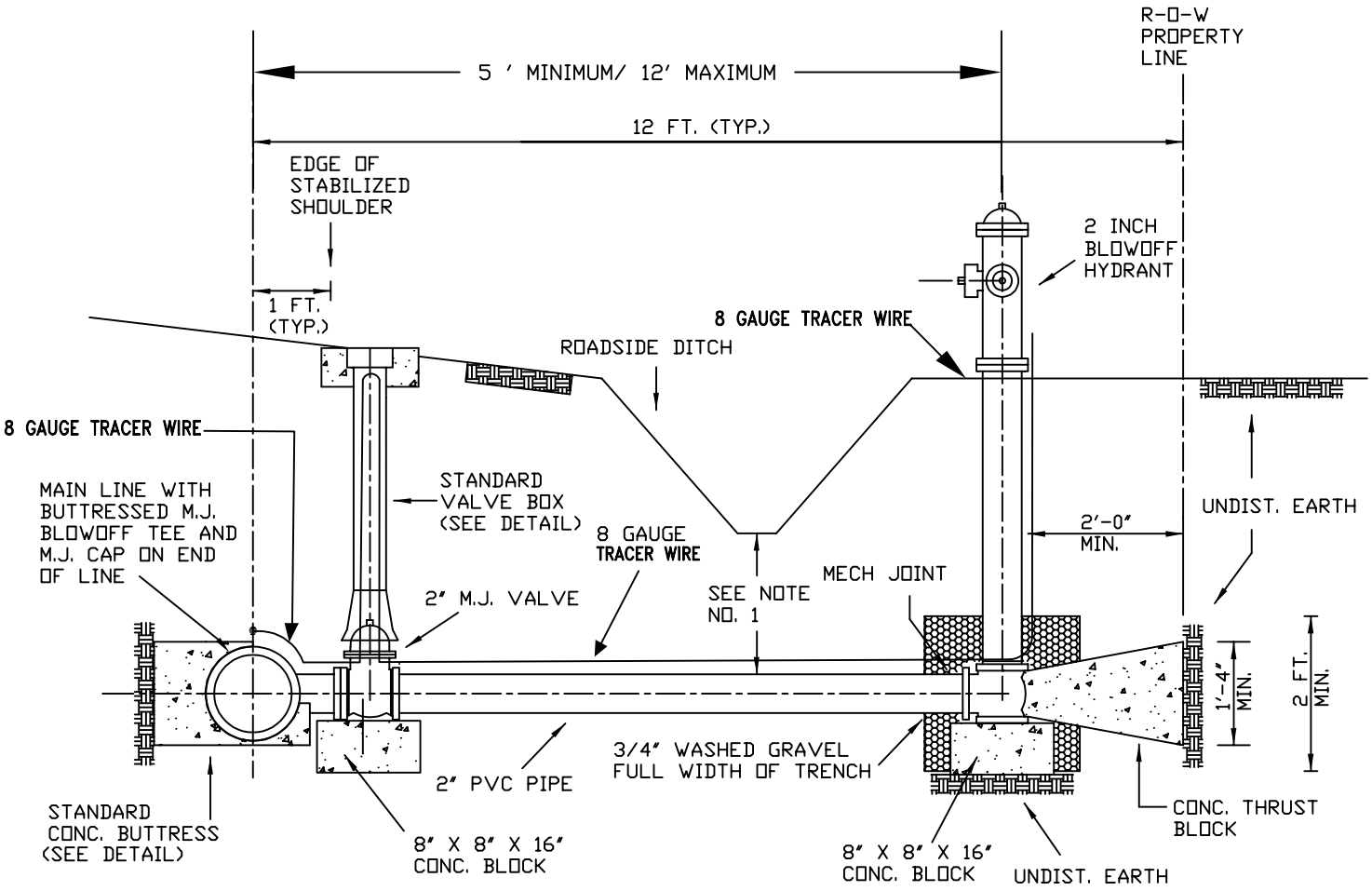
Water
Meter Vault 4", 6" and 8"



NOTES:

1. MAINTAIN 3.5 FOOT OF COVER THROUGH ROADSIDE DITCH. IF UNABLE TO MAINTAIN ADEQUATE COVER, ROTATE THE MECHANICAL JOINT HYDRANT TEE AND UTILIZE APPROPRIATE FITTINGS. AS A LAST RESORT, ENCASE THE 6 INCH SERVICE LINE WITH CONCRETE IF COVER IS INADEQUATE.
2. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
3. FIRE HYDRANT TO BE A MINIMUM OF 5' FROM E.O.P. A MAXIMUM OF 12'.

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-13-05	
DRAWN BY AQ	01-12-24	Water Fire Hydrant Setting
APPROVED BY CADD		
FILE dt-wtr-hydrant		

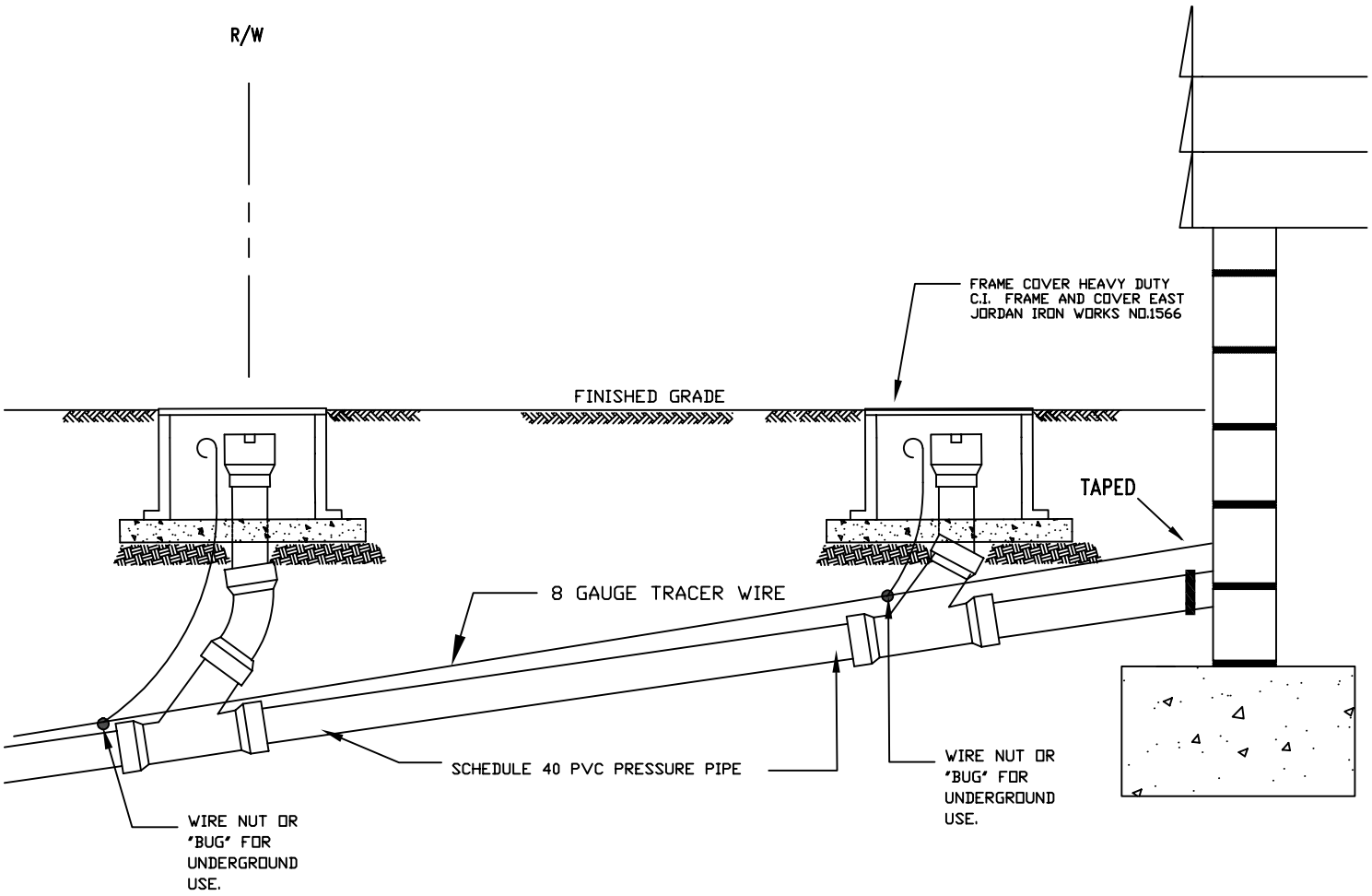


NOTES:

1. MAINTAIN 3.5 FOOT OF COVER THROUGH ROADSIDE DITCH. IF UNABLE TO MAINTAIN ADEQUATE COVER, ROTATE THE MECHANICAL JOINT HYDRANT TEE AND UTILIZE APPROPRIATE FITTINGS. AS A LAST RESORT, ENCASE THE 6 INCH SERVICE LINE WITH CONCRETE IF COVER IS INADEQUATE.
2. ECLIPSE MODEL 2 OR APPROVED EQUAL.
3. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
4. Minimum 5' from E.O.P. MAXIMUM 12'.

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	9-29-99	
DRAWN BY AQ	12-13-05	Water
APPROVED BY CADD	01-11-24	Blow-off Hydrant Setting
FILE dt-wtr-blowoff		

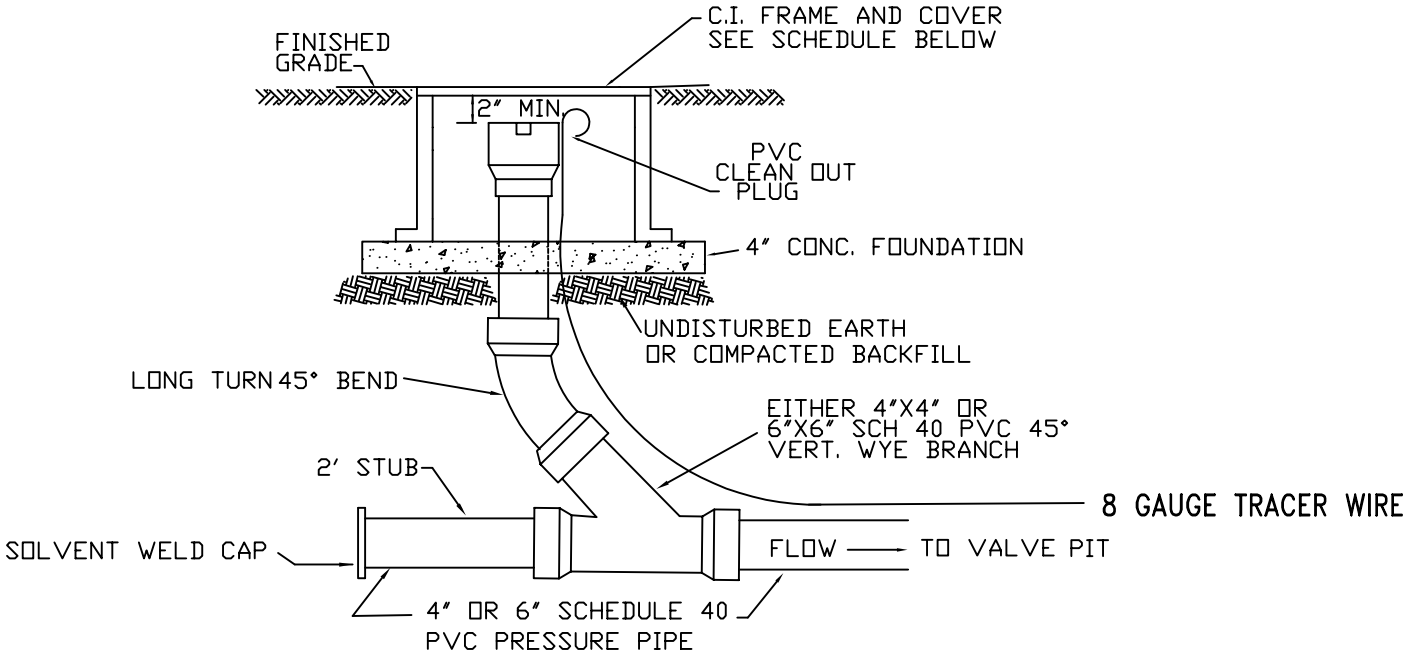


NOTES:

1. SEE CLEANOUT DETAIL FOR SPECIFICS ON ITS INSTALLATION.
2. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
3. SERVICE LINE TO BE A MINIMUM OF 12 INCHES DEEP AT FOUNDATION.
4. TRACER WIRE TO BE TAPED TO SERVICE LINE IMMEDIATELY ADJACENT TO FOUNDATION.
5. PLACE CLEANOUT IMMEDIATELY ADJACENT TO HOUSE, 3 TO 5 FEET FROM FOUNDATION. AT A MINIUM THERE MUST BE 1 FOOT BETWEEN THE CLEANOUT AND THE FOUNDATION.

QUEEN ANNE'S COUNTY 1706

DATE 1-06	REVISION	Sanitary District Detail
SCALE NTS	01-11-24	
DRAWN BY CADD		Sewer
APPROVED BY AQ		Sewer Service Tracer Wire
FILE dt-gs-service		



FRAME AND COVER REQUIRED	
PIPE SIZE	CASTING #
4" 6"	East Jordan Iron Works No. 1566 East Jordan Iron Works No. 1566

Notes:

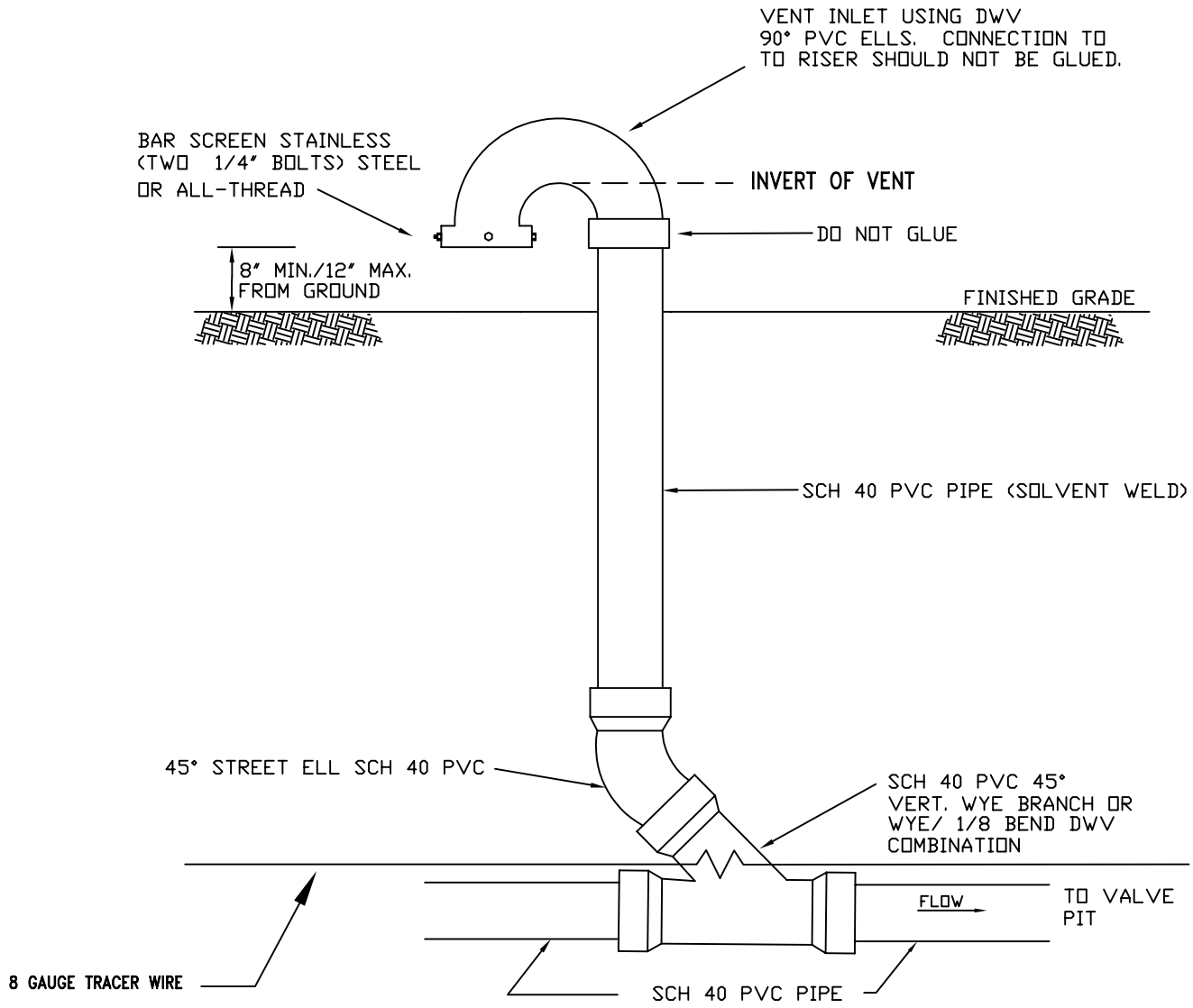
1. RIGHT OF WAY CLEAN OUTS ARE NECESSARY AT THE EDGE OF ANY EASEMENTS.
2. TRAFFIC BEARING AREAS ARE DEFINED AS BEING IN, OR WITHIN 3 FEET OF, ANY PAVING, DRIVEWAYS, OR ANY OTHER AREA WHERE VEHICULAR TRAFFIC IS LIKELY.
3. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE COPPER.

QUEEN ANNE'S COUNTY 1706

DATE	1-98	REVISION
SCALE	NTS	12-9-05
DRAWN BY	AQ	5-10-06
APPROVED BY	CADD	1-21-16
FILE	dt-gs-co	01-11-24

Sanitary District Detail

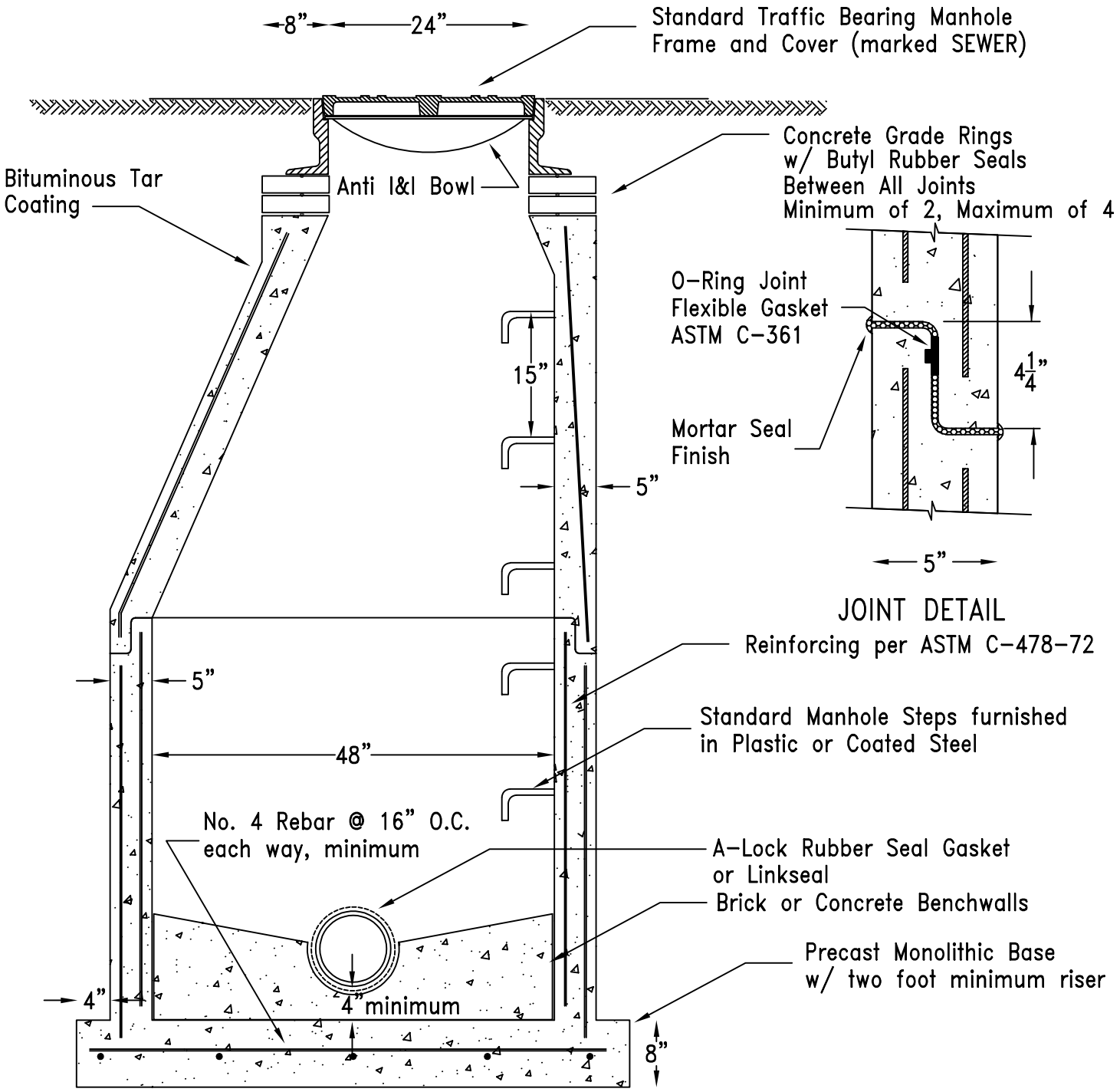
Gravity Sewer Cleanouts



NOTE:
1. VENT TO BE LOCATED 20 LINEAR FEET FROM VALVE PIT.
2. VENT AND CLEANOUT TO BE OF THE SAME DIAMETER AS THE SEWER LATERAL.
3. VENT TO BE LOCATED AT LEAST 10 FEET AWAY FROM ANY DOORS, WINDOWS OR FOUNDATION VENTS.
4. INVERT OF VENT TO BE BELOW LOWEST FLOOR ELEVATION.
5. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE COPPER.

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-27-05	
DRAWN BY AQ	01-11-24	Gravity Sewer Vent
APPROVED BY CADD		
FILE dt-gs-vent		



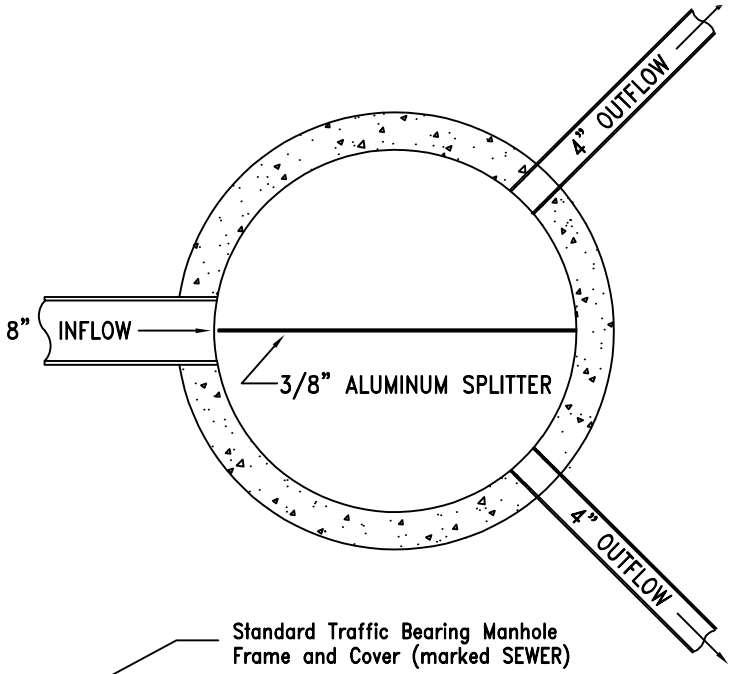
Riser Sections furnished in 2 ft, 3 ft, or 4 ft Lengths such that number of seams is minimal

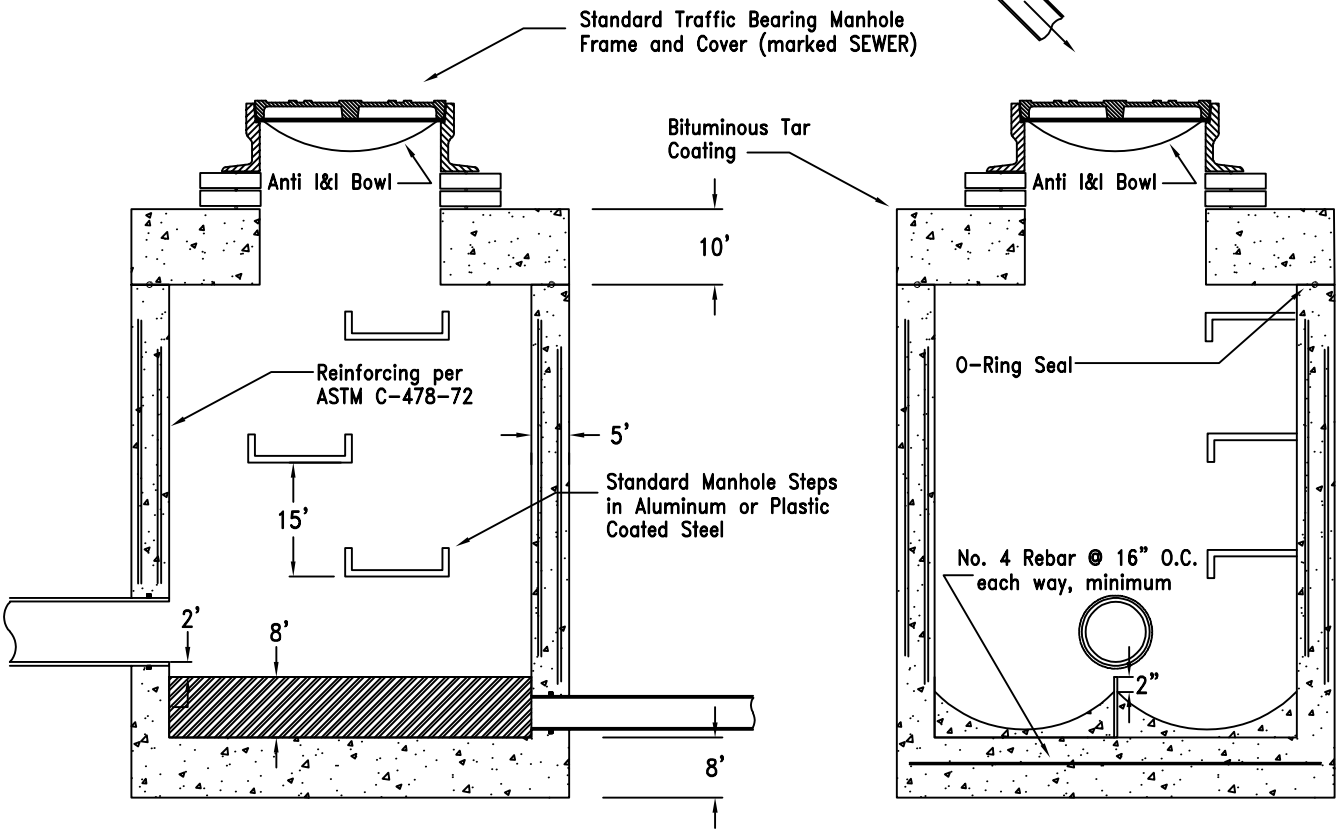
Concrete to be 4000 psi and manufactured per ASTM Spec C-478-72

DATE	1-98	REVISION
SCALE	NTS	01-11-24
DRAWN BY	AQ	
APPROVED BY	CADD	
FILE	dt-gs-pcman	

Sanitary District Detail

Gravity Sewer Precast Manhole





NOTES:

1. WALLS BOTTOM AND TOP TO BE PRECAST CONCRETE. INVERT CHANNEL TO BE POURED 3000 PSI CONCRETE.
2. EXTERIOR WALLS TO HAVE TWO COATS OF WATERPROOF BITUMINOUS COMPOUND.
3. A-LOCK RUBBER GASKETS OR LINKSEAL ARE TO BE USED AROUND ALL PIPE PORTS.

QUEEN ANNE'S COUNTY 1706

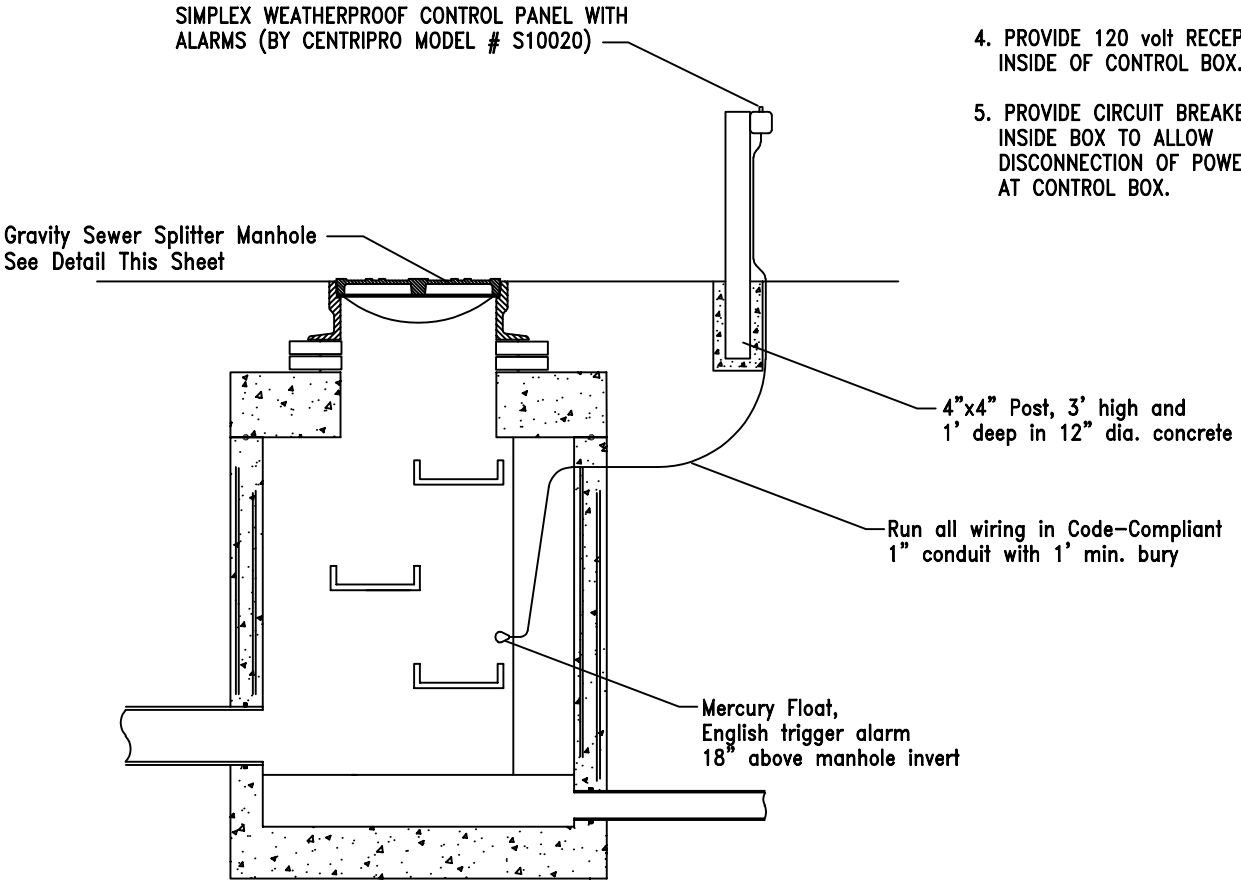
DATE	1-98	REVISION
SCALE	NTS	01-11-24
DRAWN BY	AQ	
APPROVED BY	CADD	
FILE	dt-gs-splitmh	

Sanitary District Detail

Gravity Sewer Splitter Manhole

CONTROL BOX NOTES:

1. WARNING LIGHT SYSTEM TO BE WIRED AS A DEDICATED CIRCUIT.
2. BOX IS TO BE WEATHERPROOF AND LOCKABLE.
3. NO CONTROLS ARE TO BE LOCATED ON THE OUTSIDE OF THE CONTROL BOX.
4. PROVIDE 120 volt RECEPTACLE INSIDE OF CONTROL BOX.
5. PROVIDE CIRCUIT BREAKER INSIDE BOX TO ALLOW DISCONNECTION OF POWER AT CONTROL BOX.



NOTES:

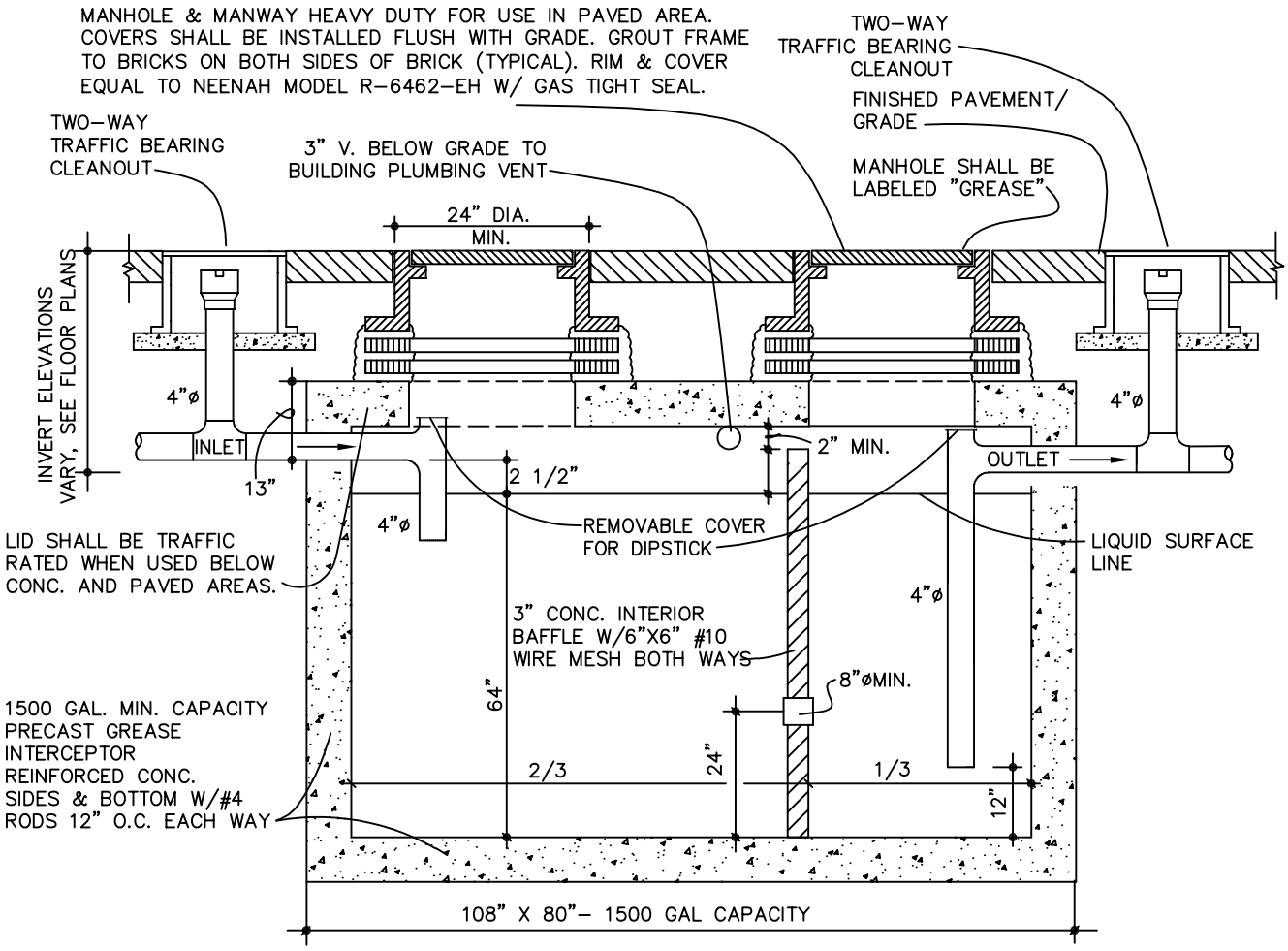
1. INSTALLATION SHALL INCLUDE ALL ELECTRICAL WORK REQUIRED TO OPERATE THE ALARM SYSTEM.
2. THE ALARM SYSTEM SHALL USE A SIMPLEX WEATHERPROOF CONTROL PANEL BY CENTRIPRO MODEL # S10020.
3. CONTROL INCLUDE HAND-OFF-AUTOMATIC SWITCH, AUTO RESET FOR HIGH WATER ALARM, WEATHERPROOF FLASHING LIGHT.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND FOLLOW MANUFACTURER'S SUGGESTED INSTALLATION PROCEDURES FOR ALL COMPONENTS.
5. ALL METAL FASTENERS ARE TO BE STAINLESS STEEL.
6. FLOAT WIRE TO BE ONE CONTINUOUS LENGTH WITH NO SPLICES BETWEEN FLOAT AND CONTROL PANEL.

QUEEN ANNE'S COUNTY 1706

DATE 8-2005		REVISION
SCALE NTS		8-17-12
DRAWN BY DMS		4-23-19
APPROVED BY AQ		
FILE dt-gs-splitwl		

Detail

Gravity Sewer Splitter Manhole Warning Light



NOTES:

1. ALL TANK SEAMS ARE TO BE TOP SEAM & WATER TIGHT.
2. CAST IRON MANHOLE FRAME AND COVERS ARE TO BE PROVIDED FOR EACH ACCESS HATCH AND CLEANOUT.
3. REFER TO CLEANOUT DETAIL FOR MORE INFORMATION.

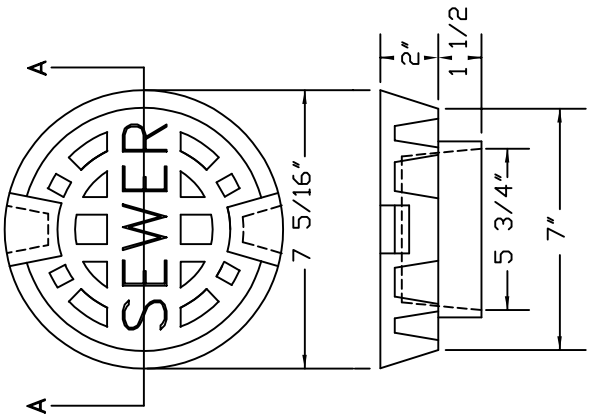
QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-27-05	
DRAWN BY AQ		Gravity Sewer Grease Trap
APPROVED BY CADD		
FILE dt-gs-gtrap2		

SPECIFICATIONS

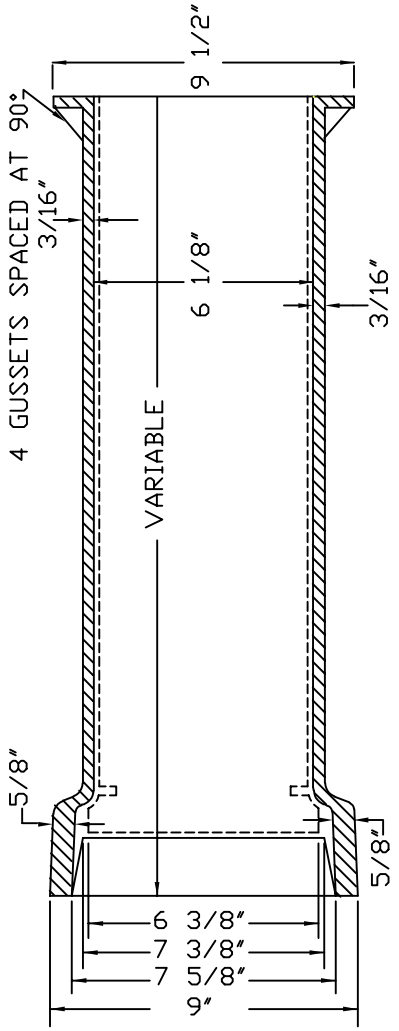
CAST IRON – SCREW TYPE
MIN. T.S. 30,000 P.S.I.
TOP SECTION 16"
BOTTOM SECTION 18"
BOXES ADJUSTABLE 34" TO 46"
TOP SECTION 16"
BOTTOM SECTION 30"
MIN. WT. PER BOX – 100 LBS.

TYLER PIPE 5 1/4" SHAFT
SLIP TYPE 6855 SERIES

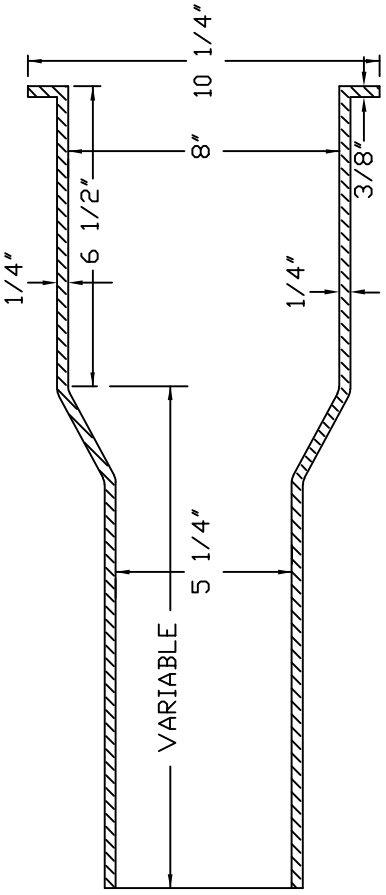


PLAN VIEW

SECTION A–A



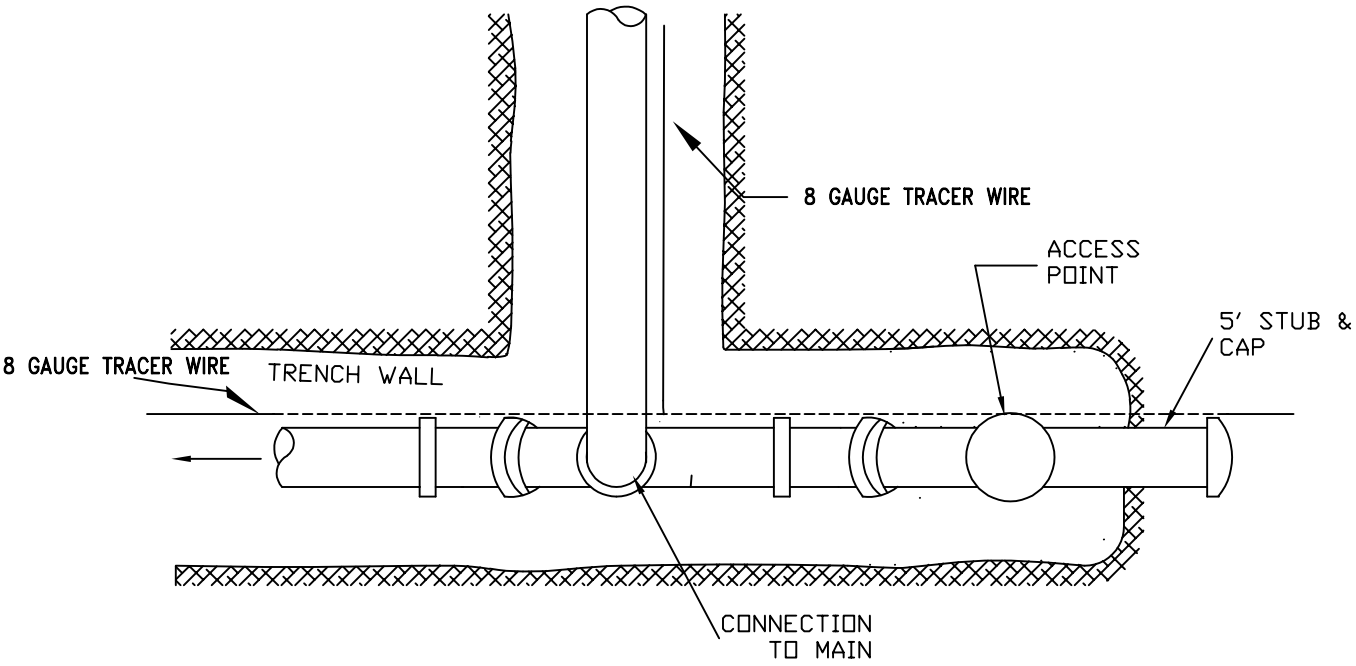
SECTION THROUGH BOTTOM HALF OF VALVE BOX

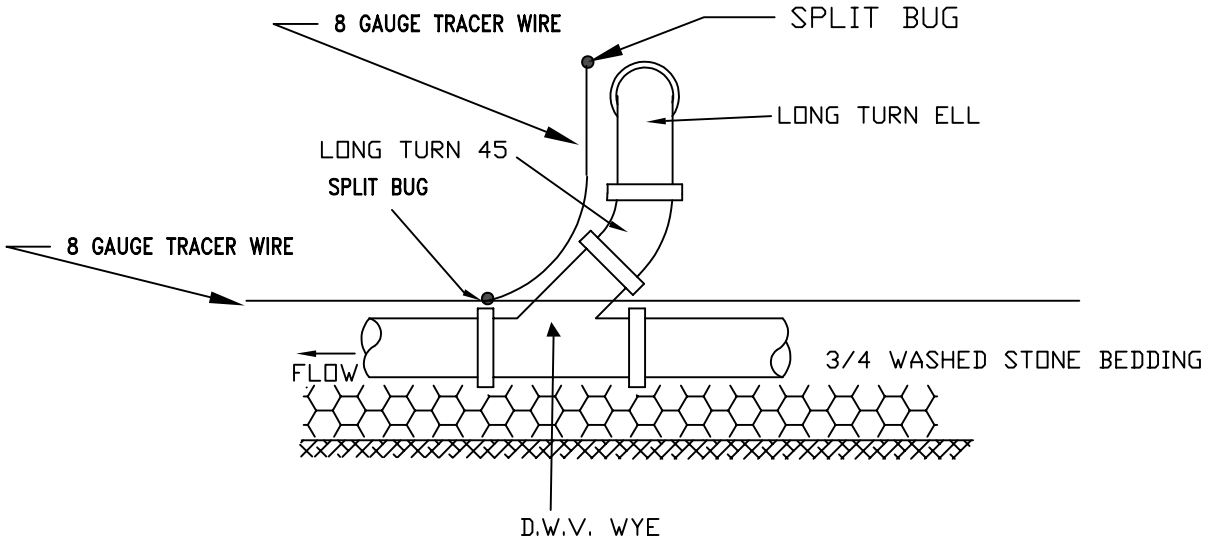


SECTION THROUGH TOP HALF OF VALVE BOX

QUEEN ANNE'S COUNTY 1706

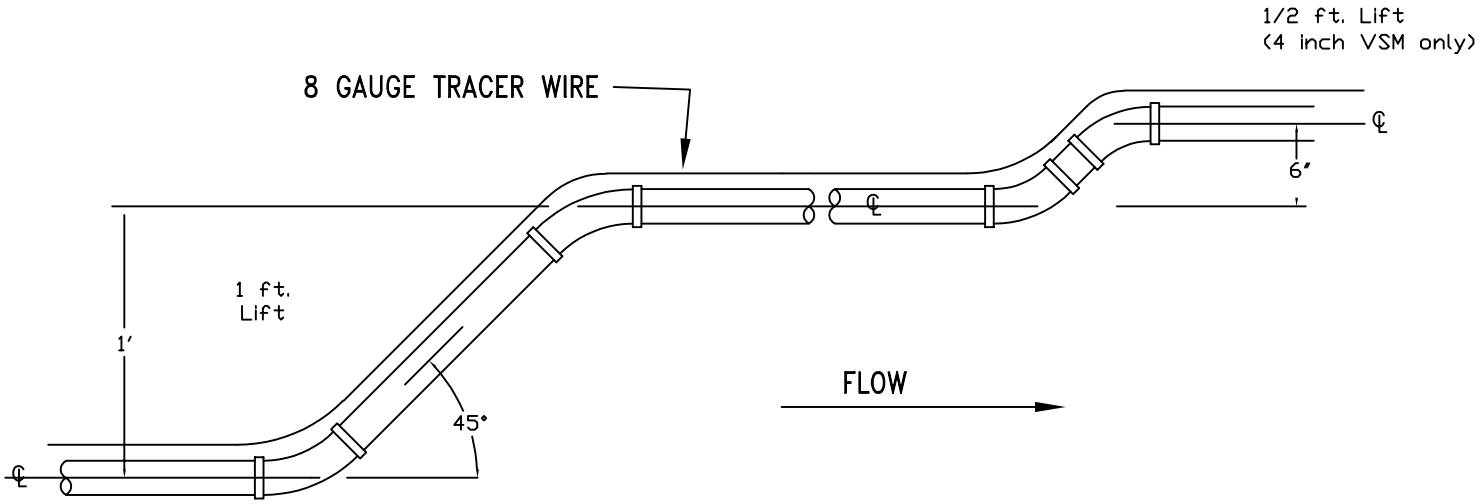
DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	01-11-24	
DRAWN BY CADD		Vacuum Sewer Valve Box & Cover
APPROVED BY AQ		
FILE dt-vs-vbox		





1. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.
2. WIRES TO BE MECHNICALLY CONNECTED VIA A SPLIT BUG.

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-16-05	
DRAWN BY CADD	01-12-24	Vacuum Sewer Over the Top Connection
APPROVED BY AQ		
FILE dt-vs-ott		



NOTES:

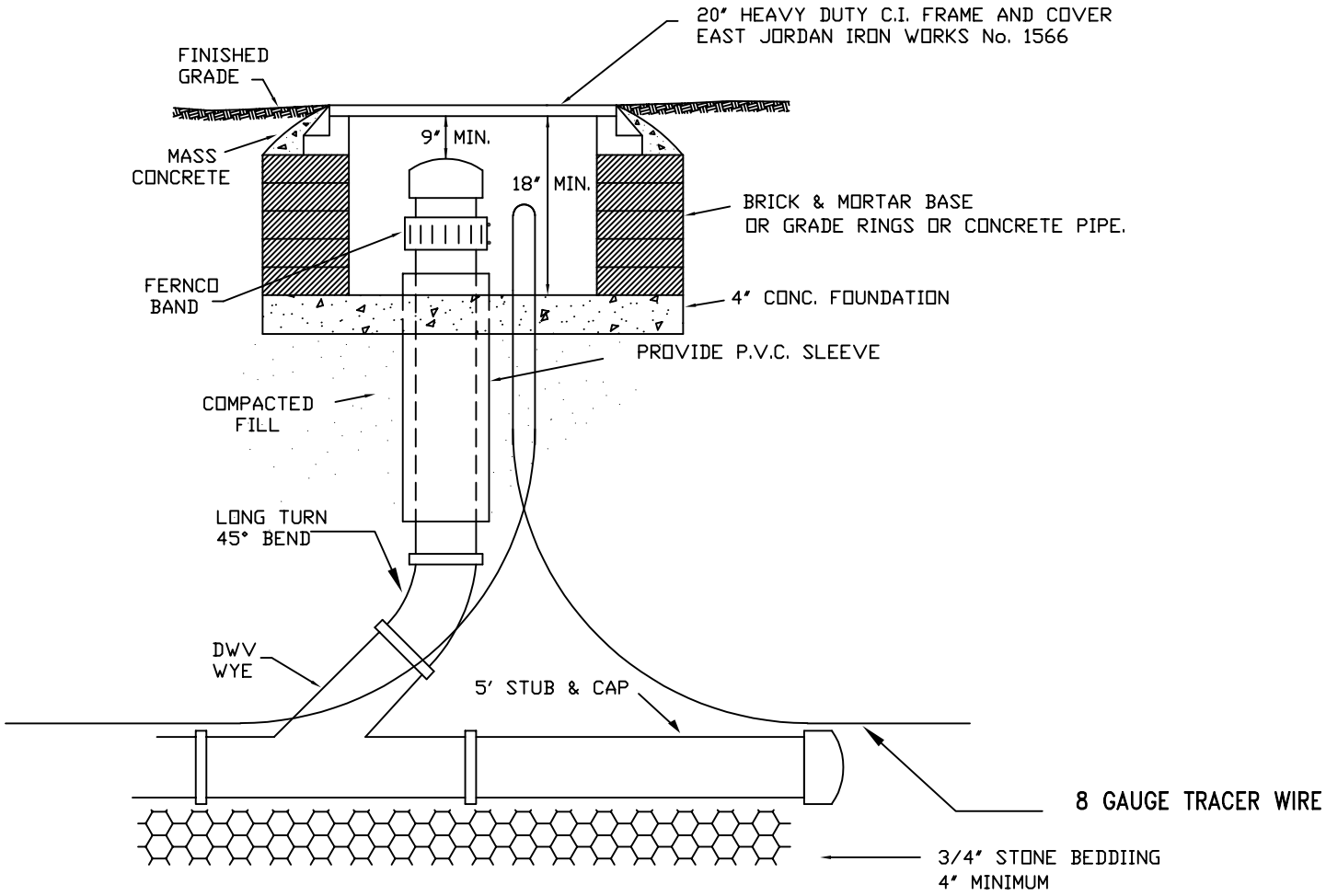
1. STONE BEDDING NOT SHOWN. ALL VACUUM SEWER LINES TO HAVE A MINIMUM BEDDING OF AT LEAST 6 INCHES STONE BEDDING. BEDDING TO CONSIST OF 3/4 INCH ROUND STONE.
2. MINIMUM DISTANCE BETWEEN LIFTS IS 20 FEET.
3. MAXIMUM SERIES OF LIFTS IS 5 AT 20 FOOT INTERVALS.
4. NO LIFT WITHIN 20 FOOT OF CONNECTION TO MAIN.
5. SLOPES BETWEEN LIFTS IS TO BE THE LARGER OF THE FOLLOWING:
   a. 0.2%
   b. 40% OF 6 INCH OR LARGER PIPES, OR 80% OF 4 INCH PIPE.
6. SLOPE MUST BE 0.2% FOR AT LEAST 50 FEET PRIOR TO FIRST IN SERIES OF LIFTS.
7. TRACER WIRE TO BE HMWPE COATED SOLID, 8 GAUGE COPPER.

QUEEN ANNE'S COUNTY 1706

DATE 1-98		REVISION
SCALE NTS		12-09-05
DRAWN BY CADD		01-11-24
APPROVED BY AQ		
FILE dt-vs-lft		

Sanitary District Detail

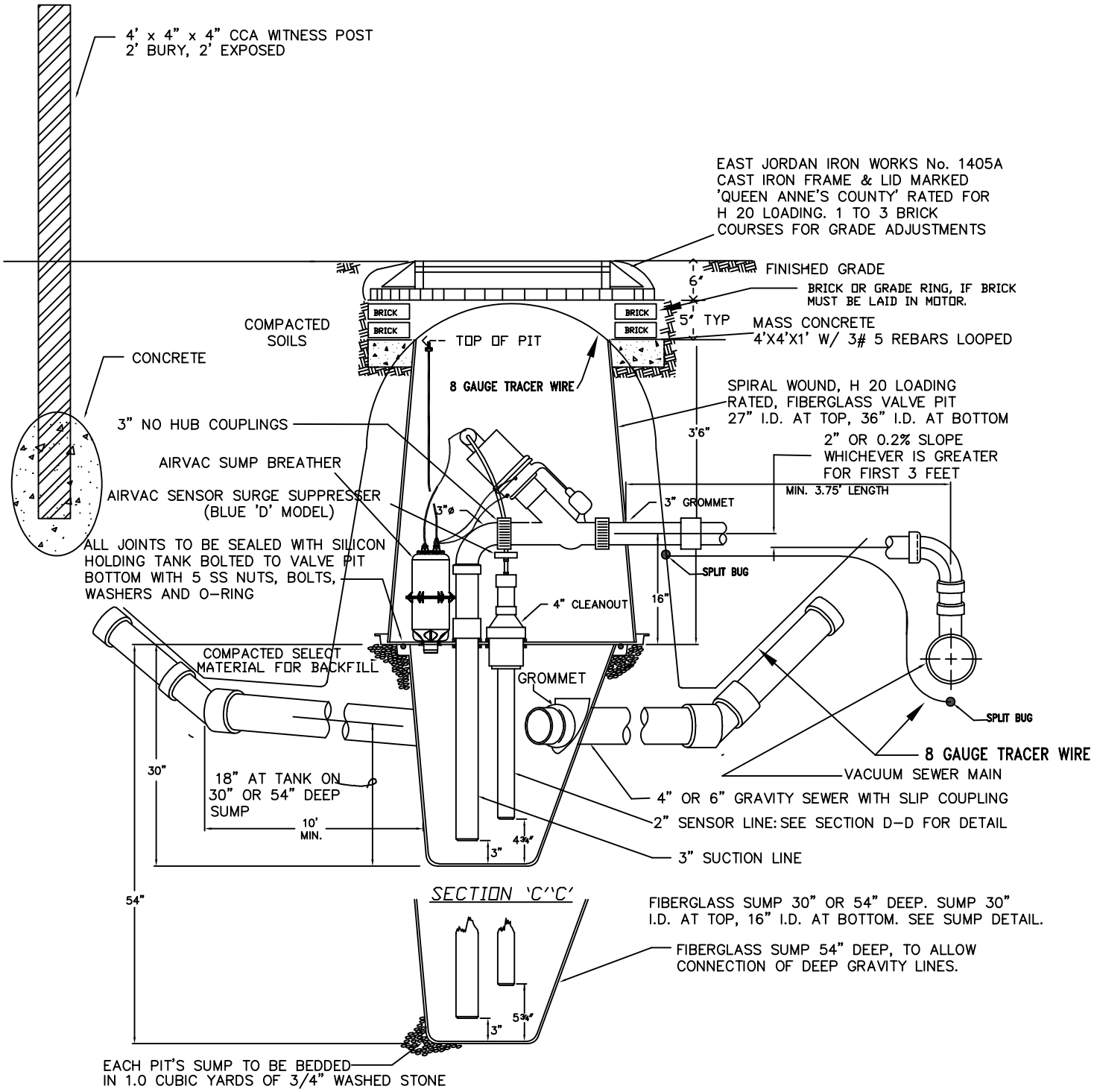
Vacuum Sewer Lift Section



NOTE:

1. OFFSET CENTERLINE OF ACCESS POINT 3 INCHES TO ONE SIDE OF ACCESS POINT CHAMBER TO ALLOW EASE OF ACCESS TO FERNCO TIGHTENING NUTS.
2. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER.

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	12-9-05	
DRAWN BY CADD	5-10-06	Vacuum Sewer Access Point
APPROVED BY AQ	01-11-24	
FILE dt-vs-ap		



1. LOCATE WITNESS POST IMMEDIATELY ADJACENT TO VALVE PIT AS DIRECTED BY INSPECTOR.
2. TRACER WIRE TO BE MECHANICALLY CONNECTED VIA A SPLIT BUG.
3. TRACER WIRE TO BE HMWPE COATED, SOLID, 8 GAUGE, COPPER

QUEEN ANNE'S COUNTY 1706	DATE 1-00	REVISION
	SCALE NTS	3-13-02
	DRAWN BY CADD	4-20-06
	APPROVED BY AQ	01-11-24
	FILE dt-vs-spit	

Sanitary District Detail

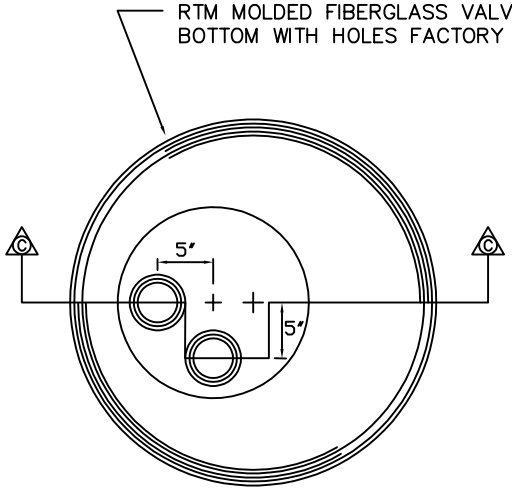
Vacuum Sewer Valve Pit Section

NOTES:

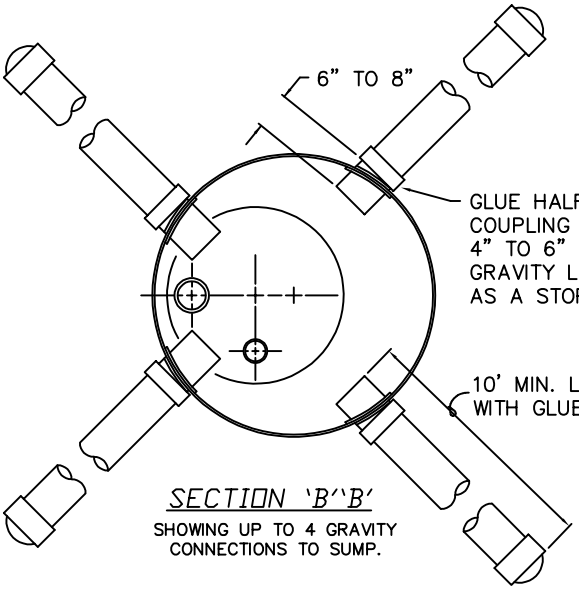
1. THE FOLLOWING HOLES IN VALVE PIT AND SUMP TO BE FIELD CUT:
   1½" BREATHER (PIT)
   4" GRAVITY (SUMP)
   ALL REMAINING HOLES TO BE FACTORY CUT.

2. ONLY HOME OR APARTMENTS WHOSE LOWER FLOOR ELEVATIONS ARE THE SAME SHOULD BE CONNECTED TO A COMMON VACUUM VALVE PIT INSTALLATION.

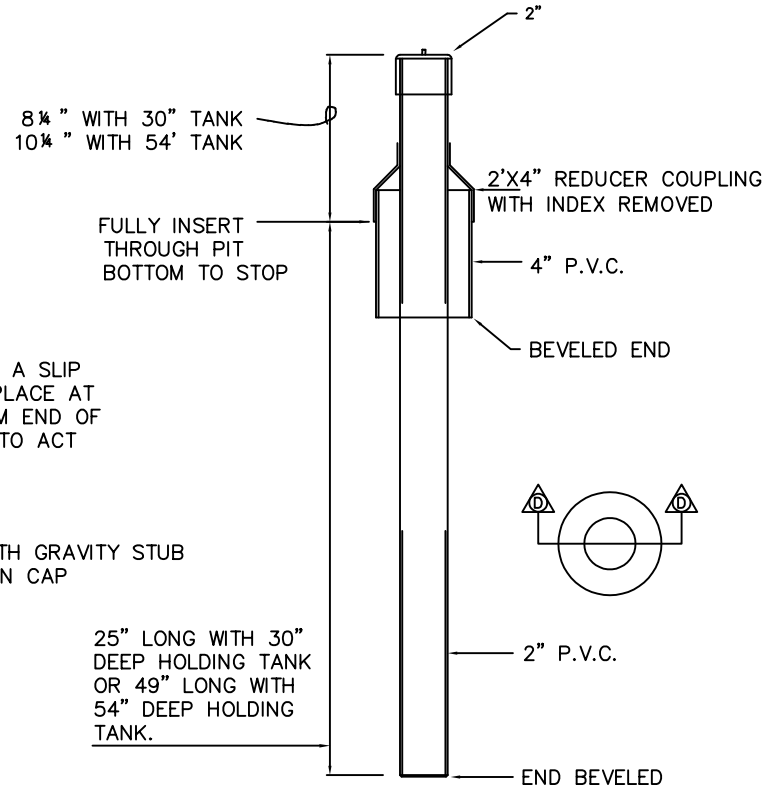
3. REFER TO DETAIL dt-vs-vpit FOR LOCATIONS OF CROSS SECTIONS HERE SHOWN.



SECTION 'A'-'A'



SECTION 'B'-'B'
SHOWING UP TO 4 GRAVITY CONNECTIONS TO SUMP.



SECTION 'D'-'D'
P.V.C. SENSOR CAP

QUEEN ANNE'S COUNTY 1706

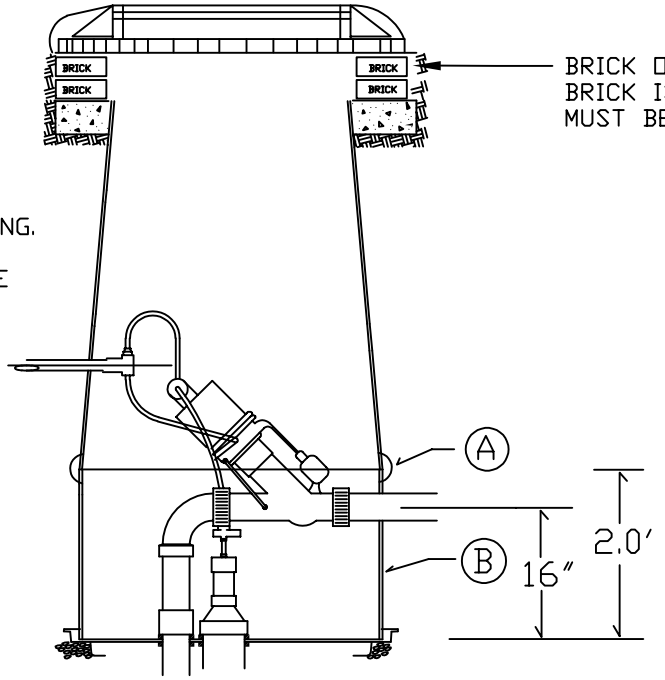
DATE	1-98	REVISION
SCALE	NTS	
DRAWN BY	CADD	
APPROVED BY	AQ	
FILE	dt-vs-vpsec	

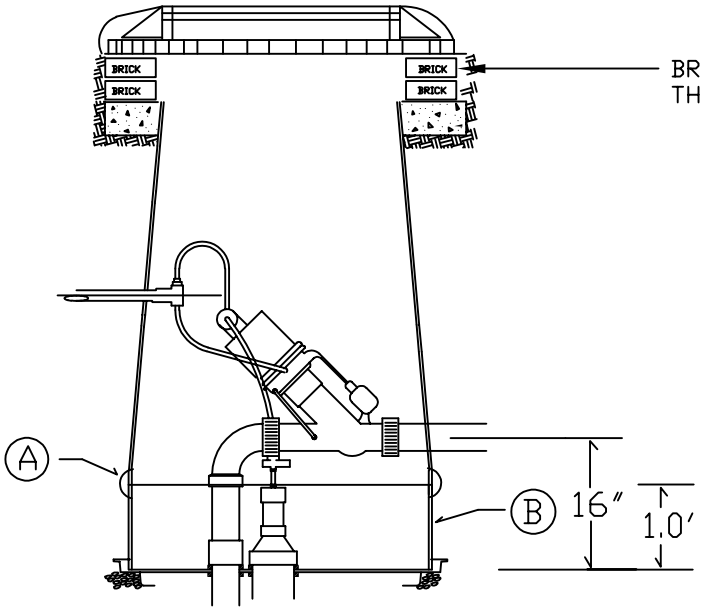
Sanitary District Detail

Vaccum Sewer Valve Pit Sections

NOTES:

1. (A) JOINT SECURED BY USE OF RESIN AND FIBERGLASS WINDINGS.
2. (B) 36" I.D. FIBERGLASS PIPING.
3. 12" AND 24" EXTENSIONS ARE SHOWN, OTHER LENGTHS ARE AVAILABLE.
4. MOLDED IN WALL STEP UP REQUIRED ON EXTENSIONS OF 2 FOOT OR GREATER AS PER AIRVAC DRAWING M-64S (6/6/91).

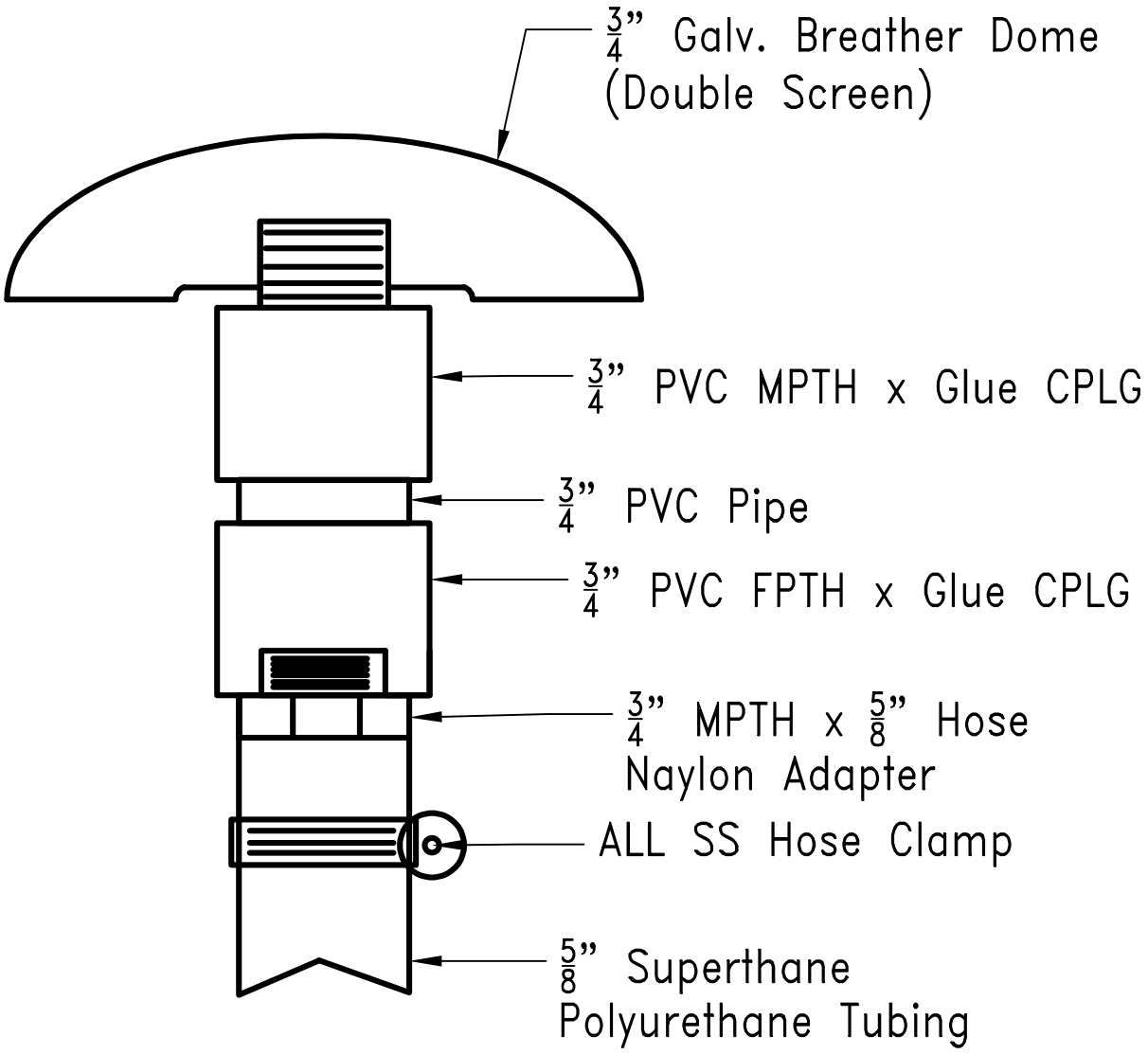




ONLY TO BE USED WITH PRIOR APPROVAL

QUEEN ANNE'S COUNTY 1706

DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	01-11-24	
DRAWN BY CADD		Vaccum Sewer Valve Pit Extension
APPROVED BY AQ		
FILE dt-vs-vpext		

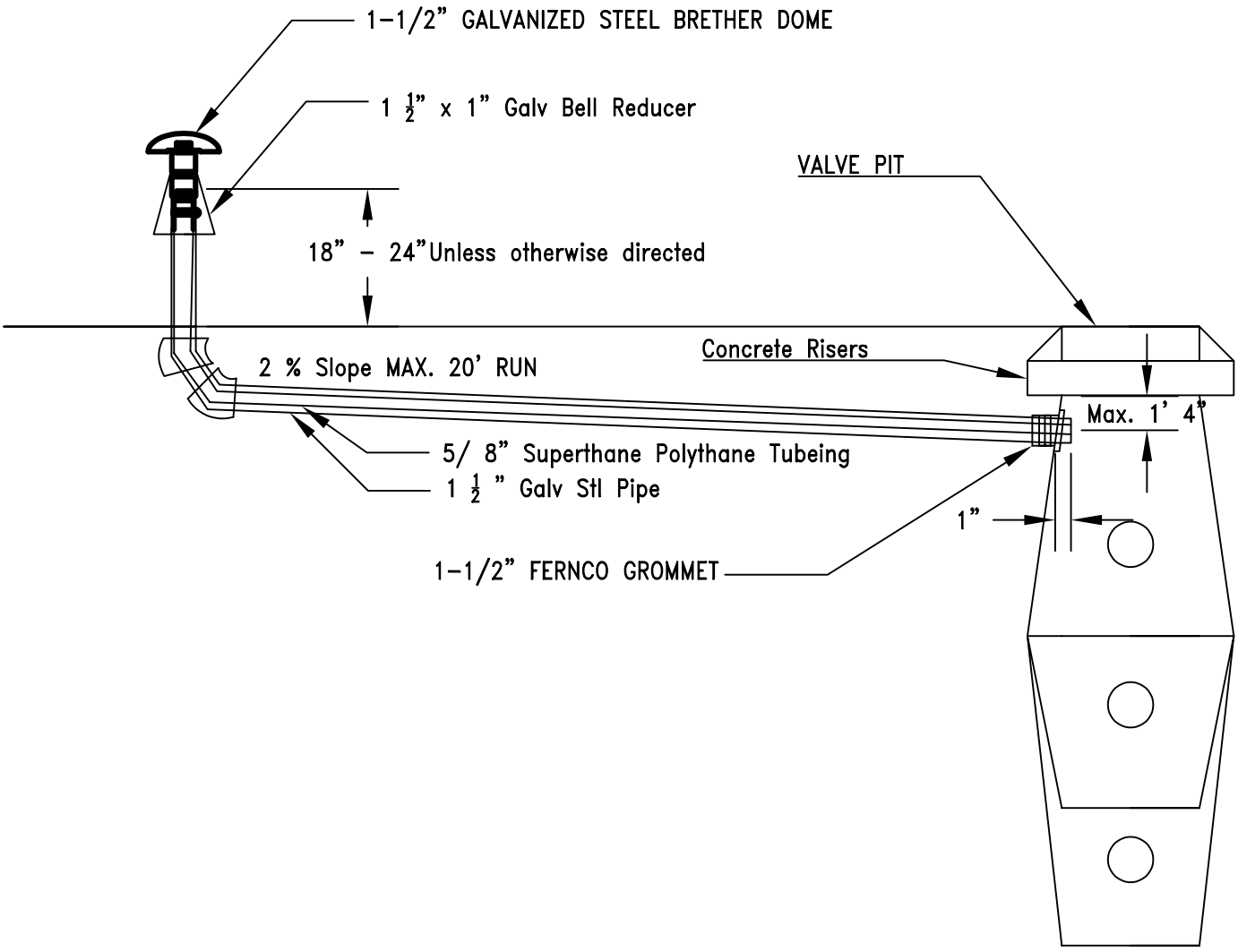


QUEEN ANNE'S COUNTY 1706

DATE 08/22/24	REVISION	
SCALE NTS		
DRAWN BY MS		
APPROVED BY CADD		
FILE dt-vs-bvvp		

Sanitary District Detail

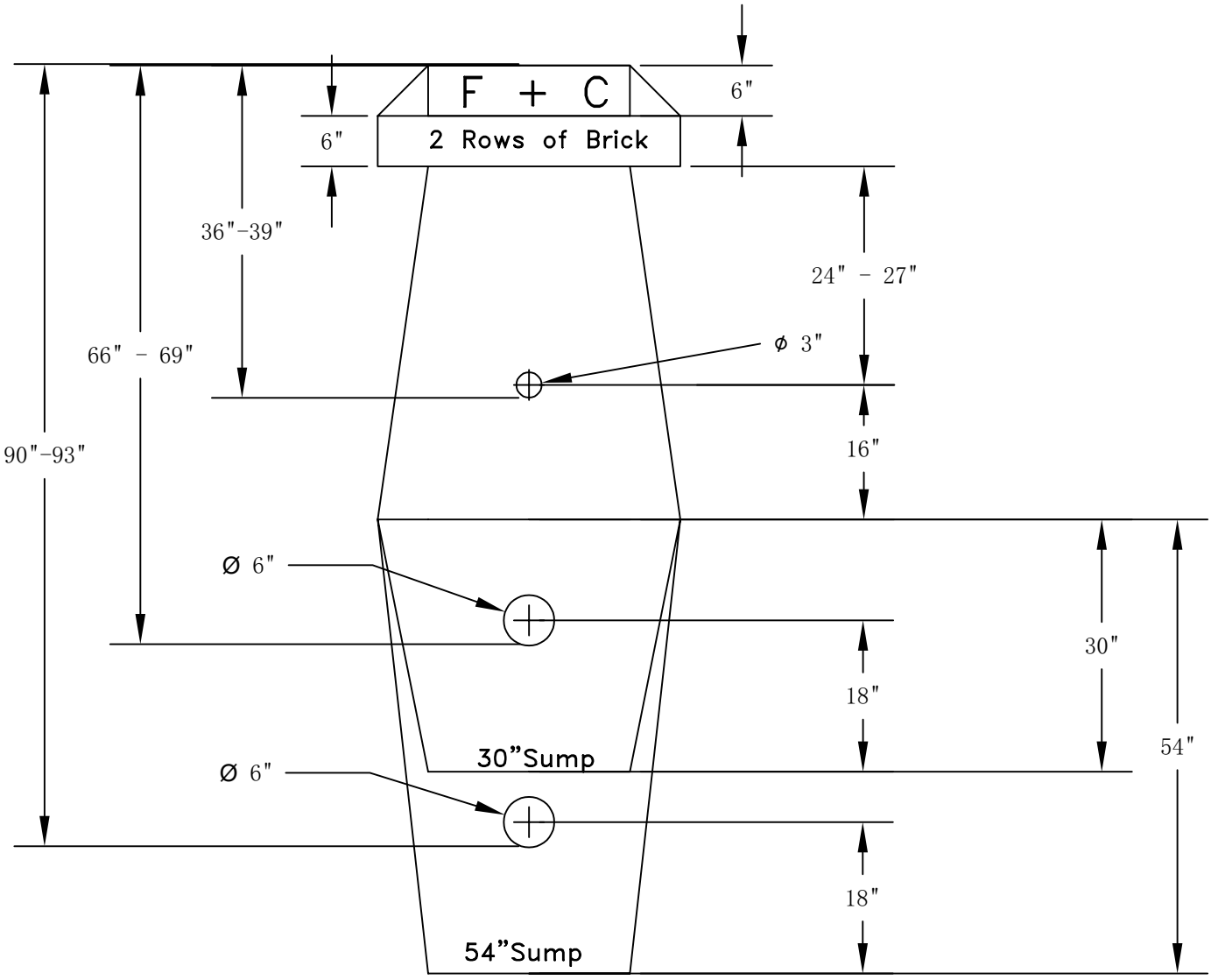
1-1/2" Galvanized Steel Breather Dome Assembly



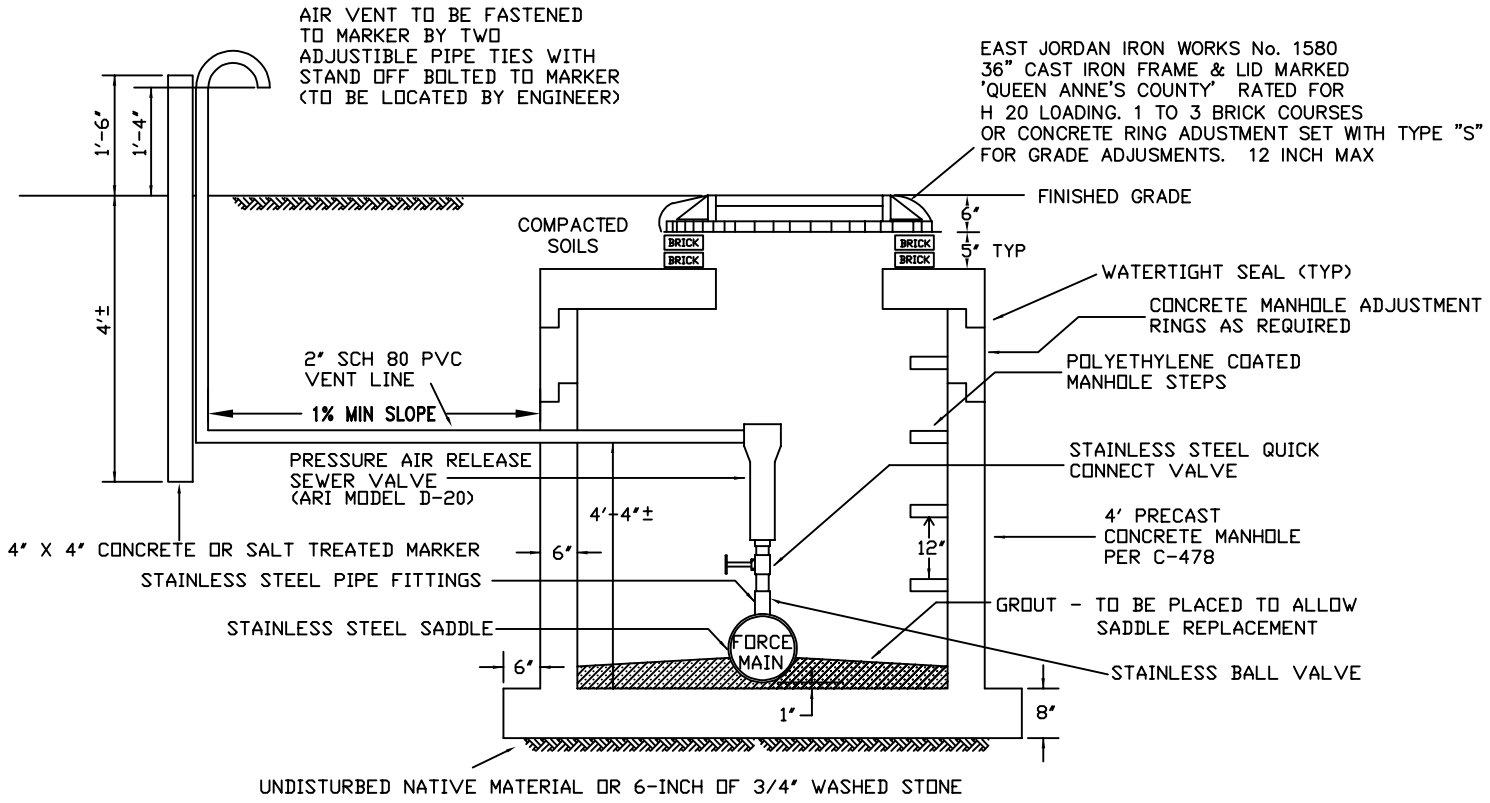
QUEEN ANNE'S COUNTY 1706	DATE 8/22/2024	REVISION
	SCALE NTS	
	DRAWN BY MS	
	APPROVED BY CADD	
	FILE dt-vs-bvvp	

Sanitary District Detail

Breather Dome and Valve Pit Assembly

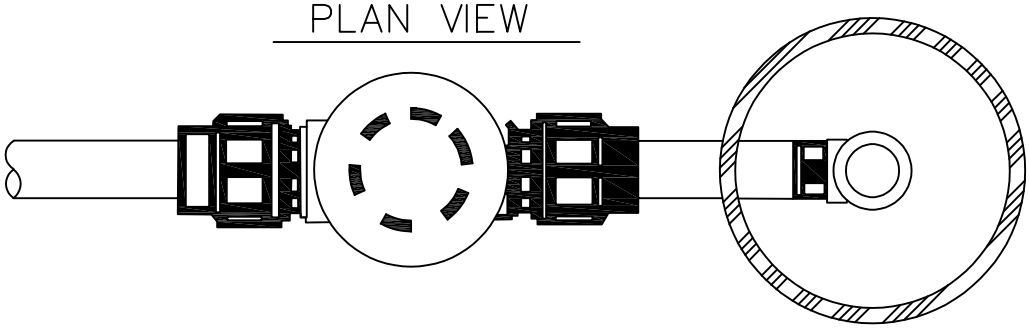


QUEEN ANNE'S COUNTY 1706	DATE 08/22/2024	REVISION	Sanitary District Detail
	SCALE NTS		
	DRAWN BY MS		Valve Pit 30" and 54" Sump
	APPROVED BY CADD		
	FILE dt-vs-bvvp		

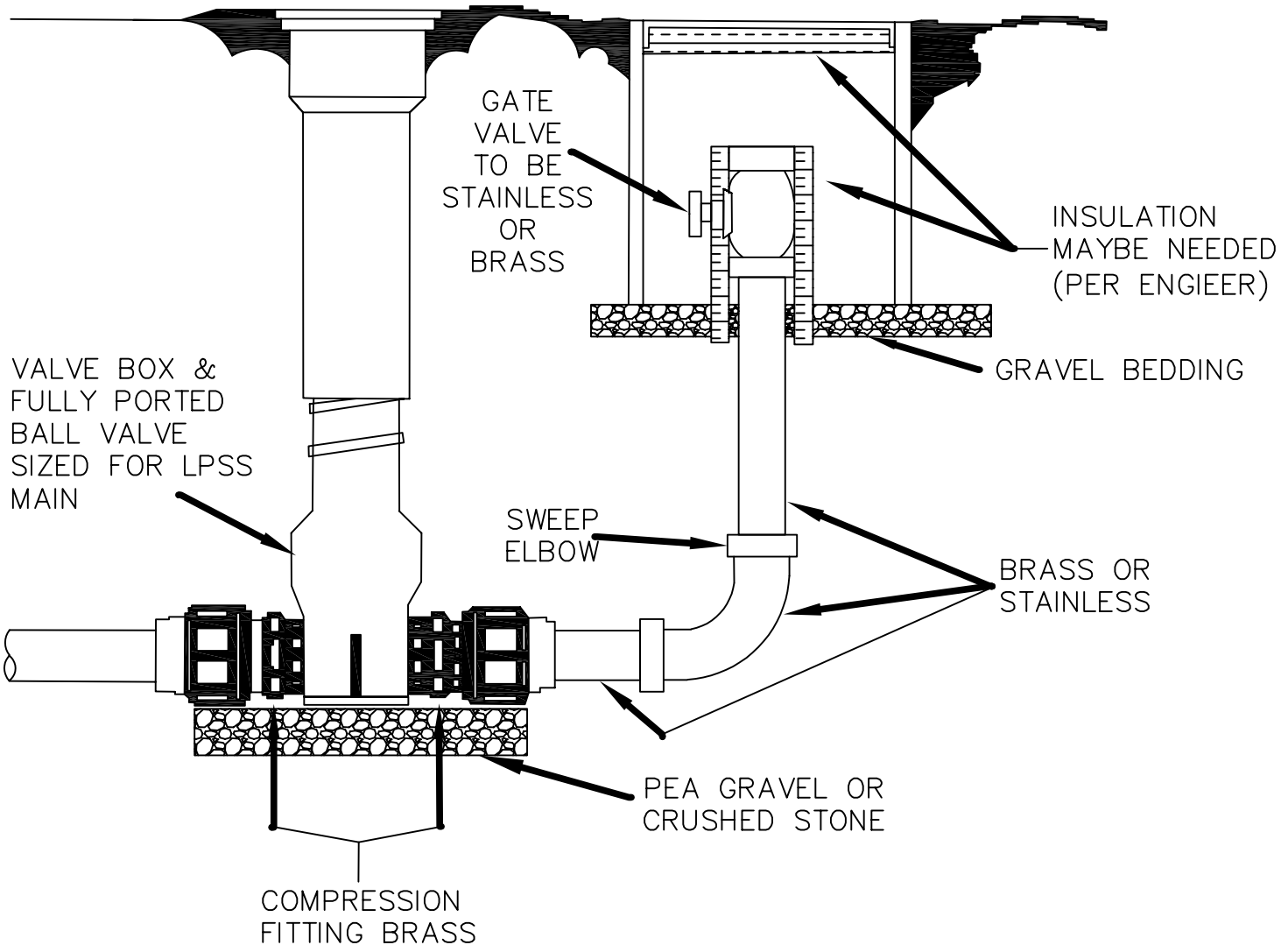


DATE 1-98	REVISION	Sanitary District Detail
SCALE NTS	4-20-06	
DRAWN BY AQ	5-13-15	Pressure Sewer Air Release Valve
APPROVED BY CADD		
FILE dt-ps-arv		

PLAN VIEW



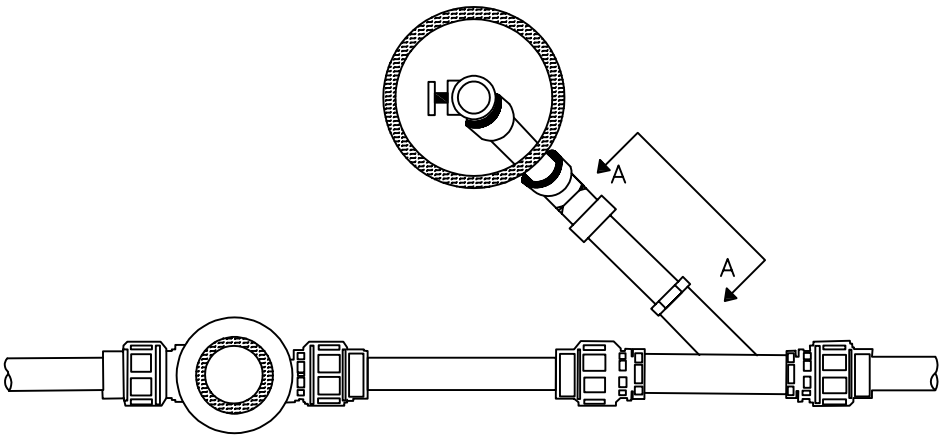
SIDE VIEW



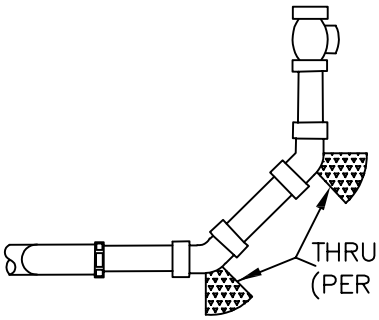
QUEEN ANNE'S COUNTY 1706	DATE 5-13-2010	REVISION
	SCALE NTS	
	DRAWN BY SGS	
	APPROVED BY E-One	
	Model ESD 10-00094	

Sanitary District Detail

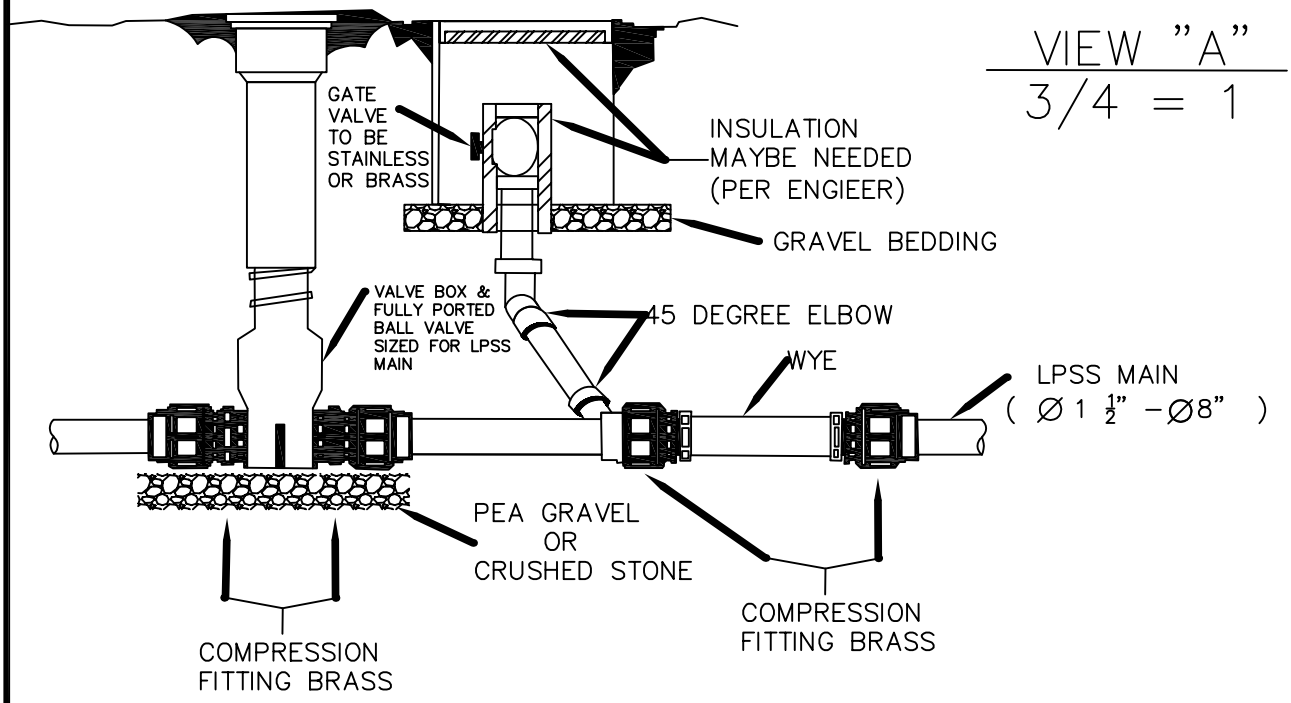
E-One Grinder Pump System End Of Line Clean Out Assembly



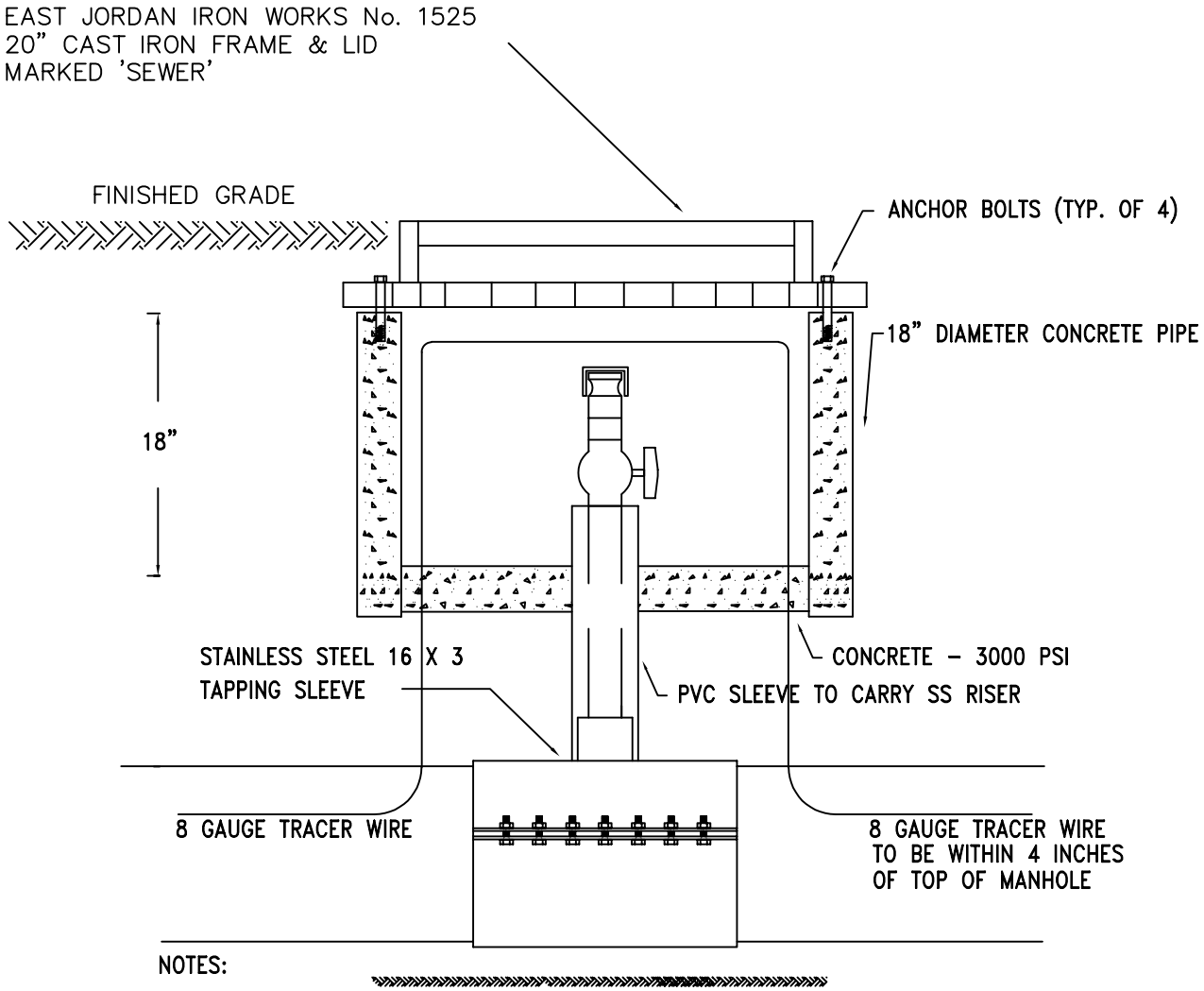
PLAN VIEW



VIEW "A"
3/4 = 1



DATE 5-13-2010	REVISION	Sanitary District Detail
SCALE NTS	9-5-2025	
DRAWN BY SGS		E-One Grinder Pump System Force Main Cleanout Assembly
APPROVED BY E-One		
Model LM000113		

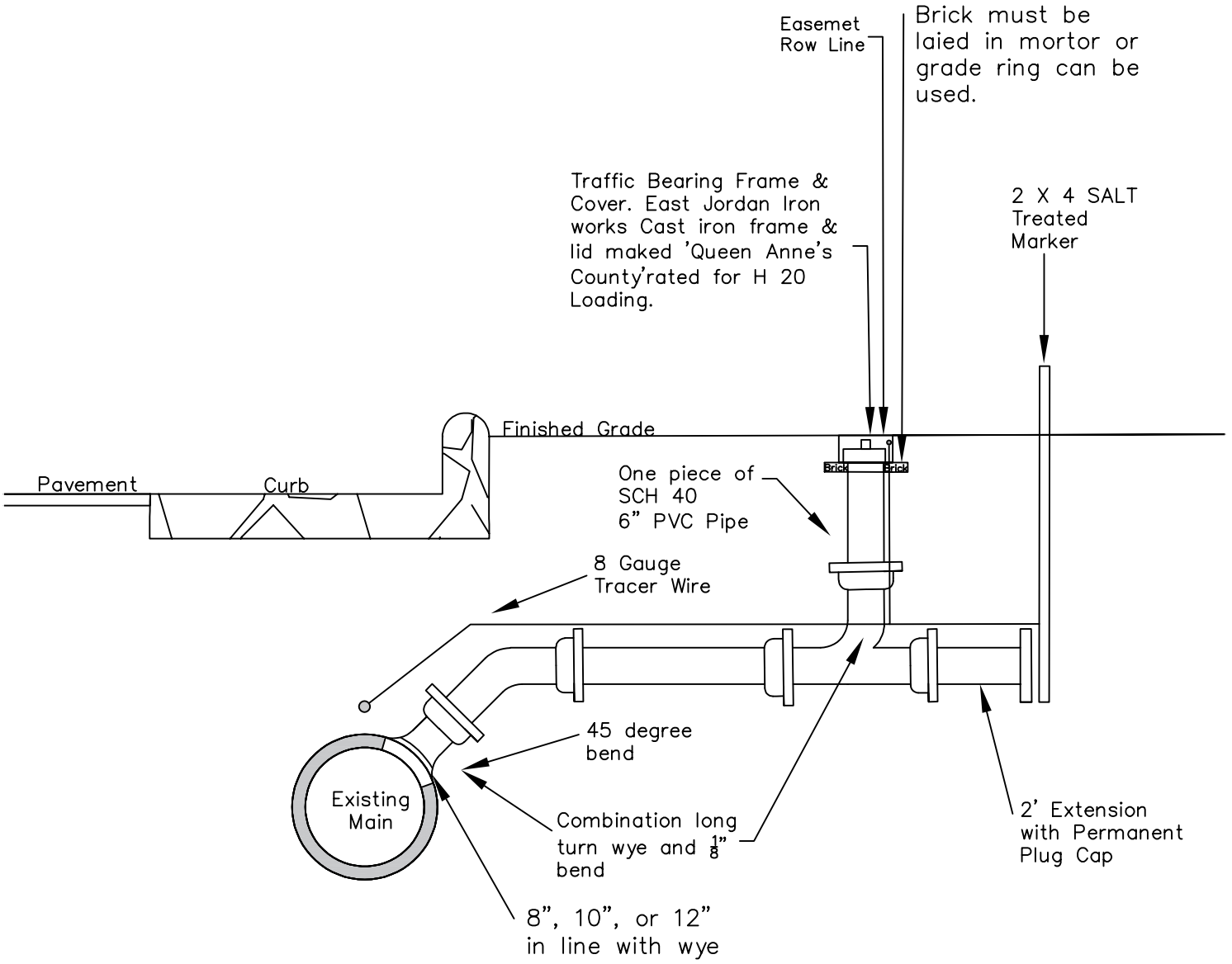


NOTES:

1. RISER PIPE TO HAVE CAM-LOCK QUIK CONNECT FITTING WITH CAP.
2. RISER DIVISION VALVE TO BE STAINLESS STEEL QUARTER TURN BALL VALVE WITH STAINLESS STEEL BODY.
3. RISER PIPE TO BE STAINLESS STEEL.

QUEEN ANNE'S COUNTY 1706

DATE 3-11	REVISION	Sanitary District Detail
SCALE NTS	01-11-24	
DRAWN BY AQ		Sewer Force Main
APPROVED BY CADD		Testing Point Assembly
FILE dt-fm-test		



NOTES:

1. Barrel of pipe to rest on undistubed soil.
2. Tracer wire to be HMWPE coated, solid 8 gauge copper wire.
3. Minimum slope grade is 1%.
4. The full length of the service ditch shall be compacted in 6" lifts with mechanical tamp.
5. Pipe to be Sch 40 Pressure PVC.

QUEEN ANNE'S COUNTY 1706	DATE 02/06/2025	REVISION
	SCALE NTS	
	DRAWN BY MS	
	APPROVED BY CADD	
	FILE dt-sw-lat	

Sanitary District Detail

Sewer Lateral with Cleanout