

SECTION 10 - INSPECTION AND ACCEPTANCE OF PUBLIC DEDICATION

In addition to the inspection by District construction inspectors, District maintenance personnel shall also make inspections of the pump station construction. **Contact the District's maintenance supervisor, at 636-441-1244, to schedule inspections. Forty eight (48) hour advance notice is required for scheduling inspections.** Failure to have the inspection performed at the proper time during the construction process may result in the District requiring the removal and reconstruction of the completed work. The contractor responsible for construction of the pump station shall notify the District when the facility is ready the following two types of inspections.

10.1 INITIAL CONSTRUCTION INSPECTIONS

Initial construction inspections shall be performed following the completion of the wet well floor, the installation of the pump bases and prior to allowing water or sewage into the pump station. The contractor shall be responsible for ensuring that the floor is clean and dry for these inspections.

10.2 FINAL DEDICATION INSPECTIONS

Final dedication inspections shall be performed when one hundred percent (100%) of the pump station structure, storage tank and force main have been completed and all electrical and mechanical equipment and appurtenances, access road and other pavement have been installed and are in operable condition. Representatives from the pump equipment manufacturer and the installing electrical contractor shall be present at the pump station for these inspections.

A. Submittal Requirements

Prior to requesting inspections the following items shall be electronically mailed the District's engineering supervisor:

- As-built electrical schematics.
- As-Built plans of the pump station and related appurtenances prepared in a NAD83, MO East Zone, US Foot (MO83-EF) state plane coordinate system (SPCS), by a Missouri-licensed engineer or a Missouri-licensed land surveyor, certifying that all structures, sewers, roads and other pavement were built in accordance with the approved plans and located within existing easements.
- A comma-separated values (CSV) file containing points for all pump station and related appurtenances as-built points in SPCS represented in a "Point Number, Northing, Easting, Elevation, Description" format.
- Manufacturer's pump start-up test procedures; the recorded factory test readings for voltage, current and other significant parameters documented on standard forms; and blank forms for the field test.
- Letter of completion from paving contractor, guaranteeing that all pavement and pavement subsurface has been installed per the District-approved plans and specifications.
- Control panel schematics, 11"x17" in size, laminated to the inside of the control panel exterior door.
- Operating manuals and specification literature.
- Copy of electric, gas and water bills to facilitate the transfer of these accounts to the District at the time of dedication.
- As-built drawings prepared by a Missouri-licensed engineer or land surveyor shall be in State Plane Coordinates and shall indicate the physical location of the pump station, retention, access road, force main locator markers and other related structures. GPS survey of all force mains is required, and District approval of such shall be coordinated by the Developer with the District's engineering supervisor.

B. Pump Tests

In the presence of the District's maintenance personnel, the contractor shall subject the pump equipment to such operating tests as may be required by the District to demonstrate that the equipment performs in accordance with the design requirements. As a minimum, the following two tests shall be performed:

- The insulation resistance of the pump's windings and cables shall be tested. The installed pumps shall not register less than 100 meg-ohms resistance per winding on a meg-ohm meter.
- The pumps shall be subjected to start-up tests with the voltage, current and other significant parameters being recorded on the standard forms provided by the manufacturer. The contractor shall arrange for an adequate supply of water for the tests. The minimum quantity of water to be provided shall be equivalent to 1.5 minutes of continuous pumping at the rated pump capacity for each pump operating alone. Each pump shall be tested a minimum of two times.

10.3 CONSTRUCTION, OPERATION AND MAINTENANCE

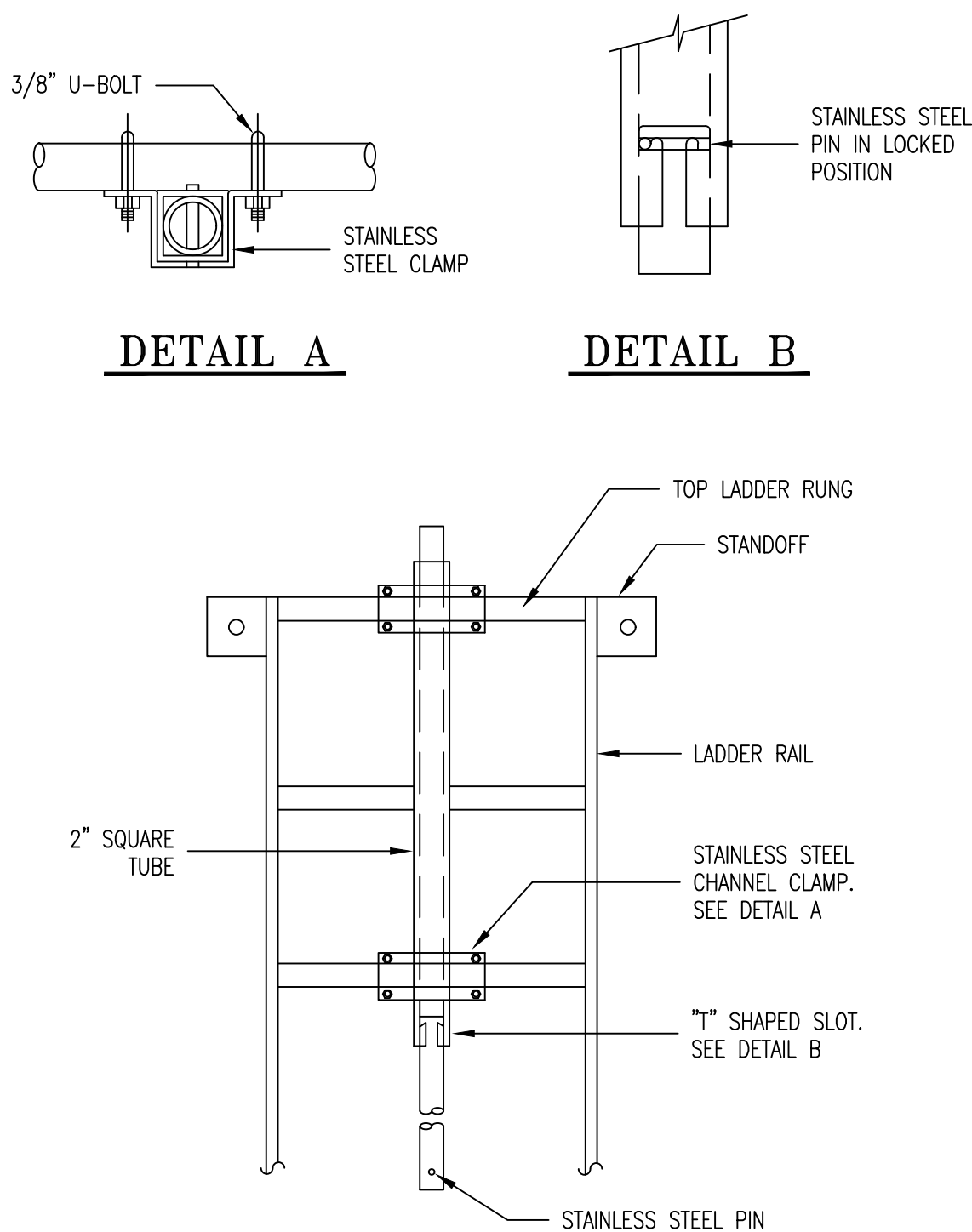
It is the responsibility of the Developer to ensure that the pump station is constructed in accordance with the District-approved construction plans. Public dedication of pump stations and related appurtenances shall only be accepted by the District after all electronic copies of associated as-builts, point coordinate files, operation manuals, specification literature and electrical diagrams have been received by the District and all inspection deficiencies have been addressed to the satisfaction of the District.

10.4 WARRANTY

In addition to the equipment manufacturer's general warranties, the Developer shall warrant the pump station and related appurtenances to be free from defects in materials and workmanship for a period of not less than one year from the date of the District's final written acceptance of Developer's public dedication of said pump station.

10.5 FINAL ACCEPTANCE OF THE PUBLIC DEDICATION

Final acceptance of the public dedication of the pump station shall be subject to the completion of all items stated above as well as the installation of fencing and satisfactory completion of all site restoration as required.



NOTE: SEE SECTION 3.7 OF DUCKETT CREEK SANITARY DISTRICT SPECIFICATIONS

STAINLESS STEEL LADDER
NTS

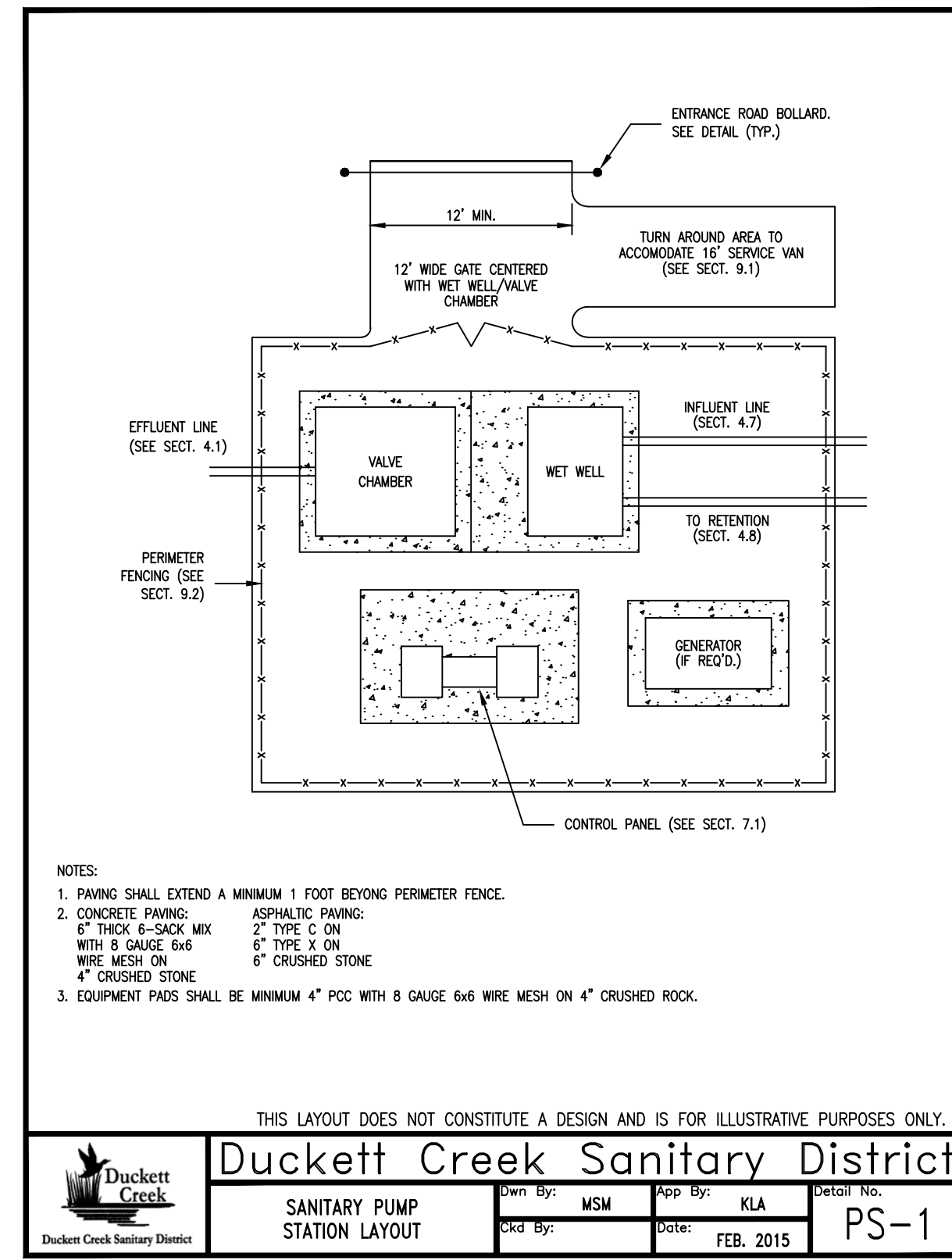
Due to dangerous levels of Hydrogen Sulfide in the District's collection system, a Wet well Aeration System will be required for this project. The District has found the following components to be an effective means of H2S control; however a commercially available system may be installed if it can be proven to be as effective.

Please provide the following components:

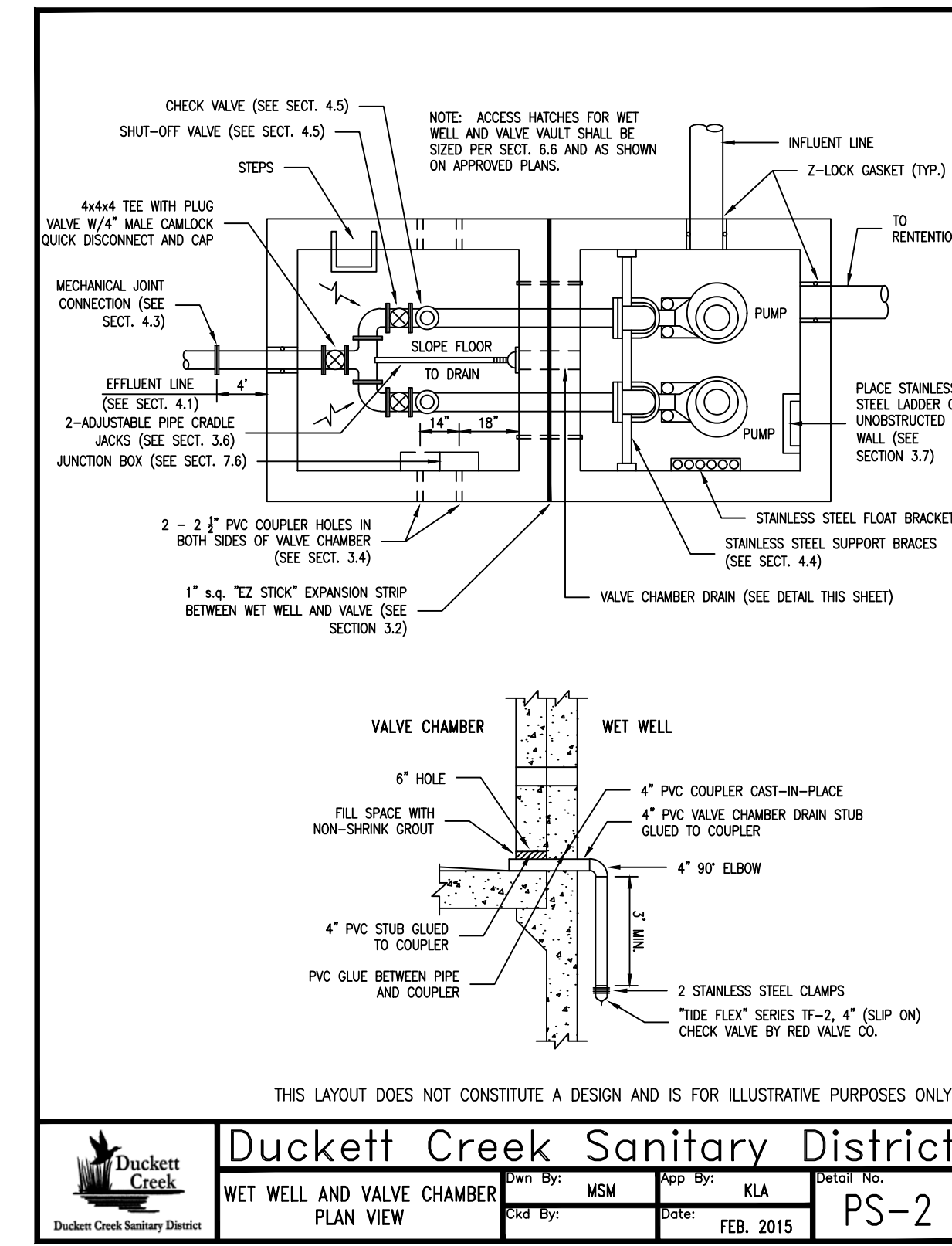
QTY:

- Airtech, Inc. Model 3BA7210-0AA7599, 35 CFM Regenerative Blower 0.84HP, 115/230V, 1-phase - 60Hz
- EDI Flexair Tube Diffuser, Model 91762 Part #00262; USA Blue Book Stock #32148
- RDM products Con Pak Model PSE-181D Enclosure
- 1" Heavy Wall Threaded Stainless Steel Coupler
- 1" 90 Degree Stainless Steel Elbow
- 1" Stainless Steel Close Nipple
- 1" Stainless Steel Male Thread x Hose Barb Adapter
- Stainless Steel Hose Clamps for 1" Hose
- Feet of Silicone Rubber Heater Hose
- 1" x 1 1/2" Galvanized Bushing
- 1 1/2" Galvanized Street Ell
- 1" Galvanized Male Thread x Hose Barb Adapter
- 1" 90 Degree Elbow
- 14 Gauge Outdoor Type 6 foot Extension Cord

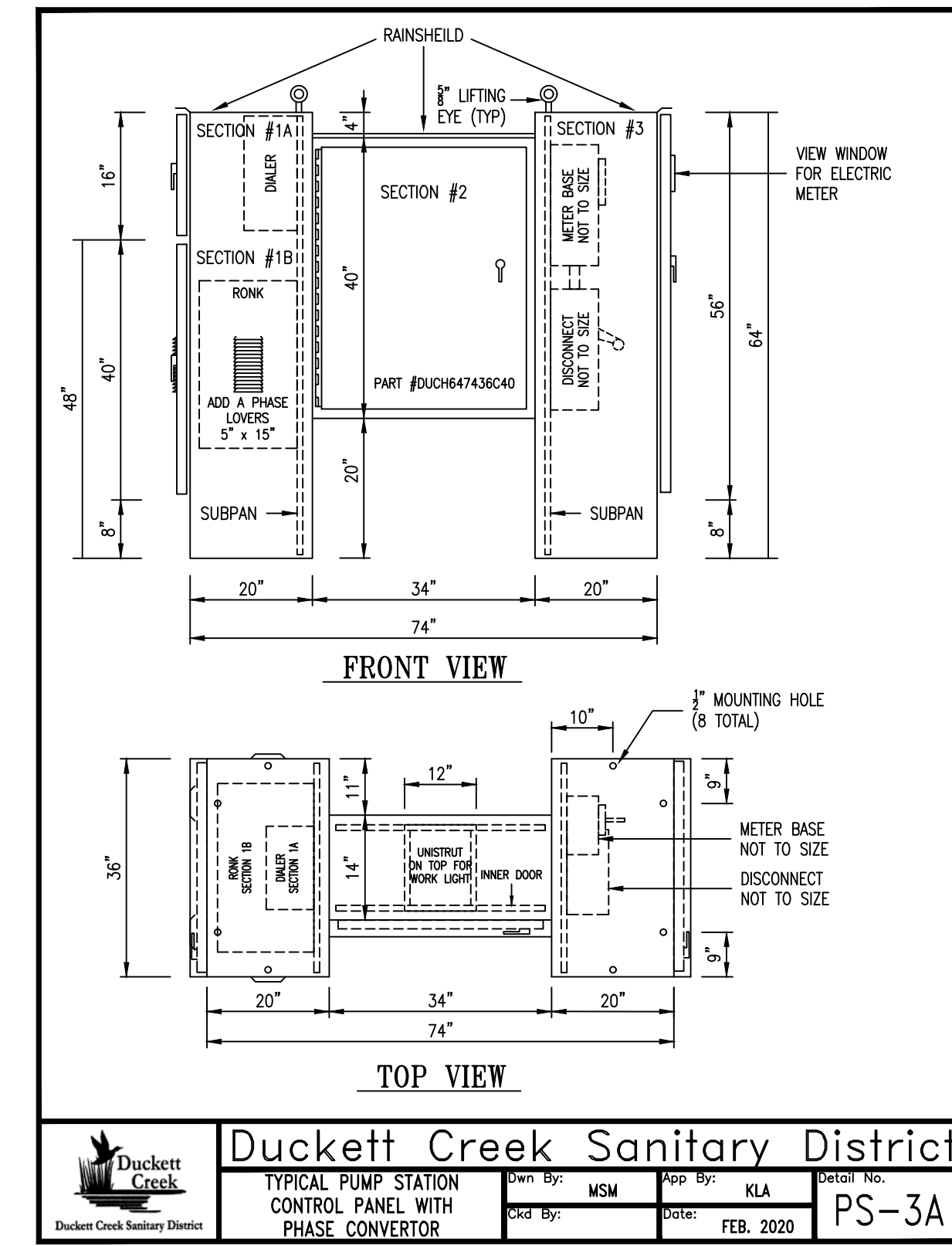
District personnel will assemble and install components as needed.



Duckett Creek Sanitary District
SANITARY PUMP STATION LAYOUT
Dwn By: MSM App By: KLA Detail No: PS-1
Ckd By: Date: FEB. 2015



Duckett Creek Sanitary District
WET WELL AND VALVE CHAMBER PLAN VIEW
Dwn By: MSM App By: KLA Detail No: PS-2
Ckd By: Date: FEB. 2015



Duckett Creek Sanitary District
TYPICAL PUMP STATION CONTROL PANEL WITH PHASE CONVERTOR
Dwn By: MSM App By: KLA Detail No: PS-3A
Ckd By: Date: FEB. 2020

ADVANCED DRAINAGE SYSTEMS, INC.

PRODUCT INFORMATION	
ENGINEERED PRODUCT MANAGER:	CRAIG DAHLGREN 314-296-1595 CRAIG.DAHLGREN@ADS-PIPE.COM
ADS SALES REP:	BRIAN SNELSON 618-552-6105 BRIAN.SNELSON@ADS-PIPE.COM
PROJECT NO:	S203771

ADS HP RETENTION/DETENTION PIPE SYSTEM SPECIFICATION

THIS SPECIFICATION DESCRIBES ADS HP RETENTION/DETENTION PIPE SYSTEMS FOR USE IN NON-PRESSURE, GRAVITY-FLOW STORM WATER COLLECTION SYSTEMS UTILIZING ADS HP PIPE PRODUCTS AND A CONTINUOUS OUTFALL STRUCTURE.

PIPE REQUIREMENTS
ADS RETENTION/DETENTION SYSTEMS MAY UTILIZE ANY OF THE VARIOUS PIPE PRODUCTS BELOW:

- HP STORM PIPE SHALL MEET ASTM F2881
- SANITITE HP PIPE SHALL MEET ASTM F2784
- ALL PRODUCTS SHALL HAVE A SMOOTH INTERIOR AND EITHER ANNULAR EXTERIOR CORRUGATIONS OR SMOOTH EXTERIOR WITH ANNULAR INNER CORRUGATIONS. PRODUCT-SPECIFIC PIPE SPECIFICATIONS ARE AVAILABLE IN THE DRAINAGE HANDBOOK SECTION 1 "SPECIFICATIONS".

JOINT PERFORMANCE
HP PIPE PRODUCTS PIPE SHALL BE JOINED USING A BELL AND SPIGOT JOINT. THE JOINT SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. SPIGOTS SHALL HAVE GASKETS MEETING THE REQUIREMENTS OF ASTM F477. 12-80 INCH (300-1500 mm) DIAMETERS SHALL HAVE A BELL REINFORCED WITH A POLYMER COMPOSITE BAND. THE BELL TOLERANCE DEVICE SHALL BE INSTALLED BY THE MANUFACTURER.

PIPE AND FITTING CONNECTIONS SHALL UTILIZE A SPUN-ON, WELDED OR INTEGRAL BELL AND SPIGOT. DETENTION SYSTEMS ARE SUBJECT TO GREATER LEAKAGE THAN TYPICAL STORM SEWER APPLICATIONS AND THEREFORE ARE NOT APPROPRIATE FOR APPLICATIONS REQUIRING LONG-TERM FLUID CONTAINMENT OR HYDROSTATIC PRESSURE. FOR ADDITIONAL DETAILS REFER TO TECHNICAL NOTE 7.01 "RAINWATER HARVESTING".

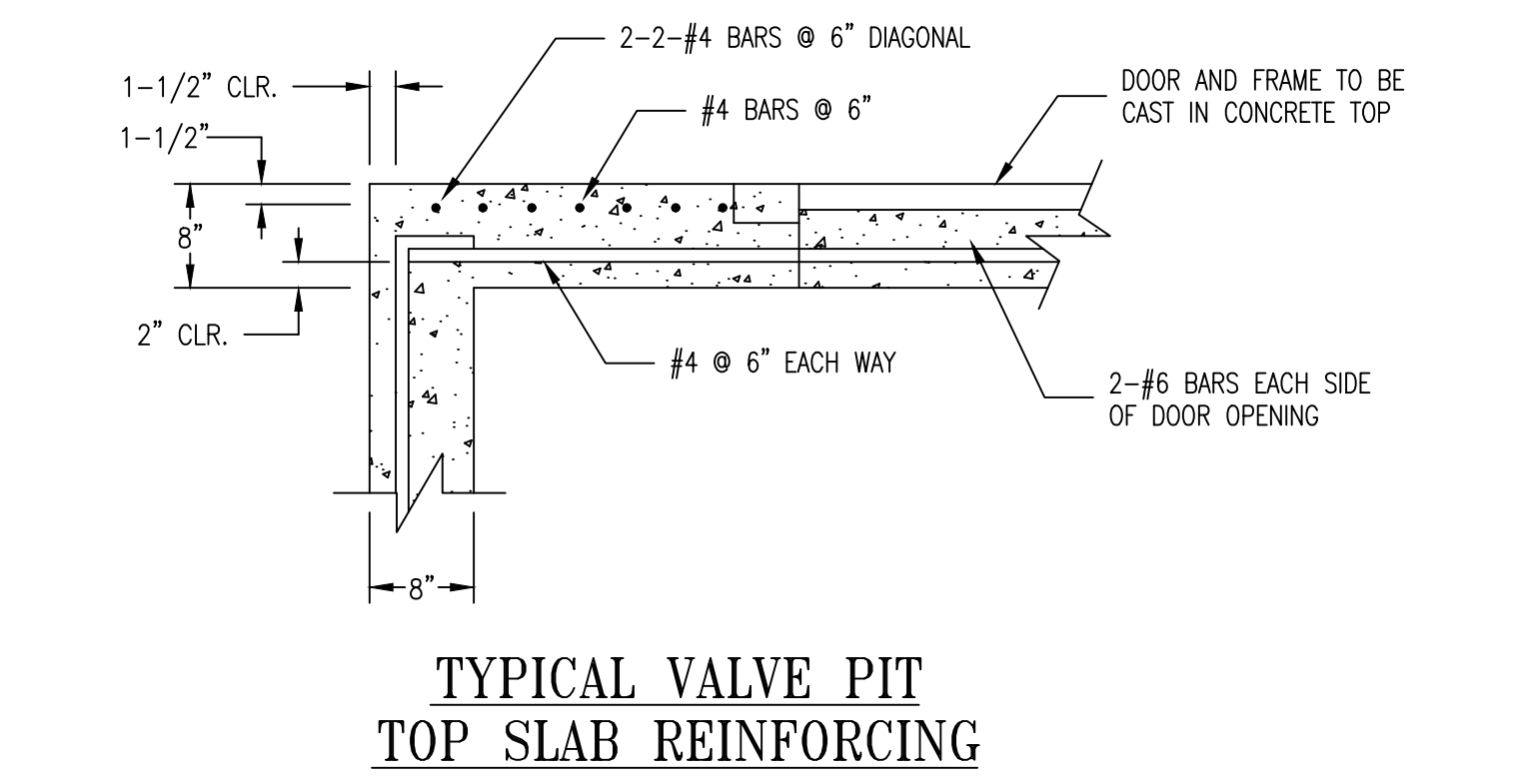
FITTINGS
FITTINGS SHALL CONFORM TO ASTM F2881 OR F2784 FOR APPLICABLE PIPE TYPE AND DIAMETERS. CUSTOM FITTINGS ARE AVAILABLE AND MAY REQUIRE SPECIAL INSTALLATION CRITERION.

INSTALLATION
INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321 AND ADS RECOMMENDED INSTALLATION GUIDELINES, WITH THE EXCEPTION THAT MINIMUM COVER IN NON-TRAFFIC AREAS FOR 12-80 INCH (300-1500 mm) DIAMETERS SHALL BE 1 FT (0.3 m). MINIMUM COVER IN TRAFFICKED AREAS FOR 12-36 INCH (300-900 mm) DIAMETERS SHALL BE 1 FT (0.3 m) AND FOR 42-60 INCH (1050-1500 mm) DIAMETERS, THE MINIMUM COVER SHALL BE 2 FT (0.6 m). BACKFILL SHALL CONSIST OF CLASS I (COMPACTED), OR CLASS II (MINIMUM 90% SPD) MATERIAL, WITH THE EXCEPTION THAT 60 INCH (1500 mm) SYSTEMS SHALL USE CLASS I MATERIAL ONLY. MINIMUM COVER HEIGHTS DO NOT ACCOUNT FOR PIPE BUOYANCY. REFER TO ADS TECHNICAL NOTE 5.05 "PIPE FLOTATION" FOR BUOYANCY DESIGN CONSIDERATIONS. MAXIMUM COVER OVER SYSTEM USING STANDARD BACK FILL IS 8 FT (2.4 m). CONTACT A REPRESENTATIVE WHEN MAXIMUM FILL HEIGHT MAY BE EXCEEDED.

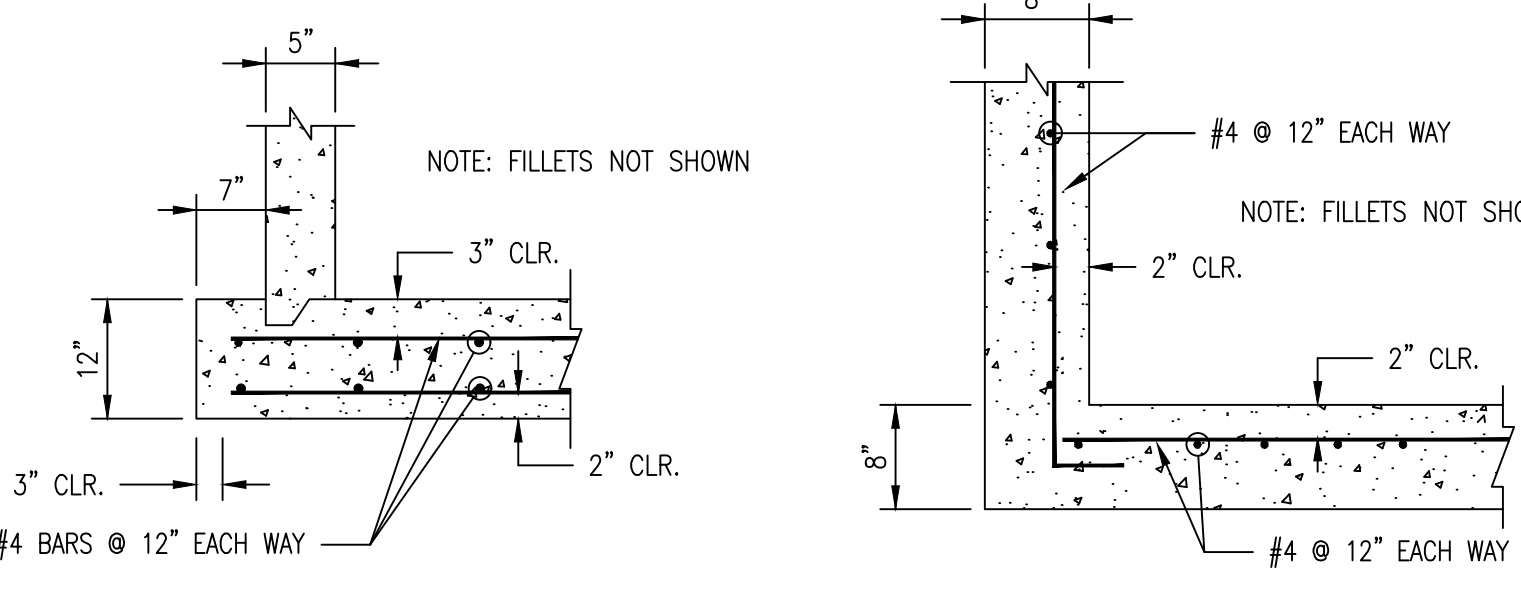
ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES:

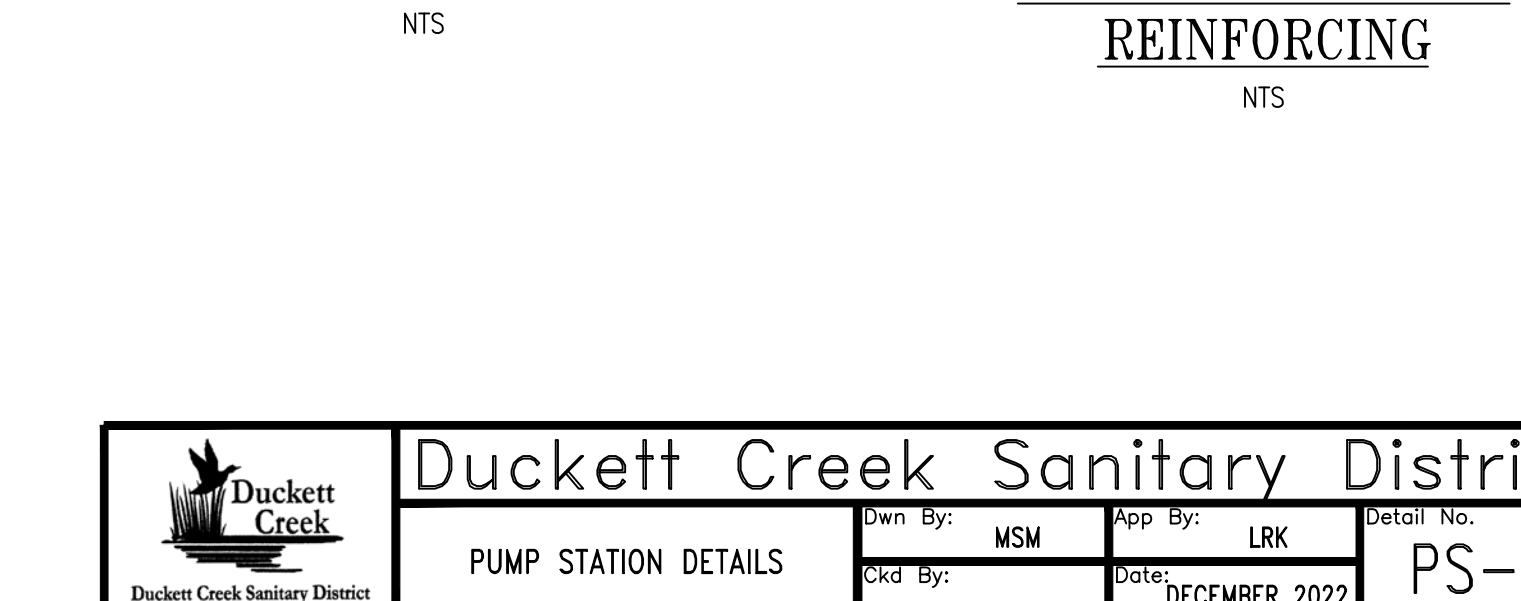
- ALL ELEVATIONS, DIMENSIONS AND LOCATIONS OF RISERS, INLETS AND OUTLETS, SHALL BE VERIFIED BY THE ENGINEER PRIOR TO RELEASING FOR FABRICATION.
- IN SITUATIONS WHERE A FINE-GRAINED BACKFILL MATERIAL IS USED ADJACENT TO THE PIPE SYSTEM, AND ESPECIALLY INVOLVING GROUND WATER CONDITIONS, CONSIDERATION SHOULD BE GIVEN TO THE USE OF GASKETED PIPE JOINTS. AT THE VERY LEAST THE PIPE JOINTS SHOULD BE WRAPPED IN A SUITABLE, NON-WOVEN GEOTEXTILE FABRIC TO PREVENT INFILTRATION OF FINES INTO THE PIPE SYSTEM.
- CONSIDERATION FOR CONSTRUCTION EQUIPMENT LOADS MUST BE TAKEN INTO ACCOUNT.
- ALL PIPE DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.
- ALL RISERS TO BE FIELD EXTENDED OR TRIMMED TO FINAL GRADE.



TYPICAL VALVE PIT TOP SLAB REINFORCING
NTS



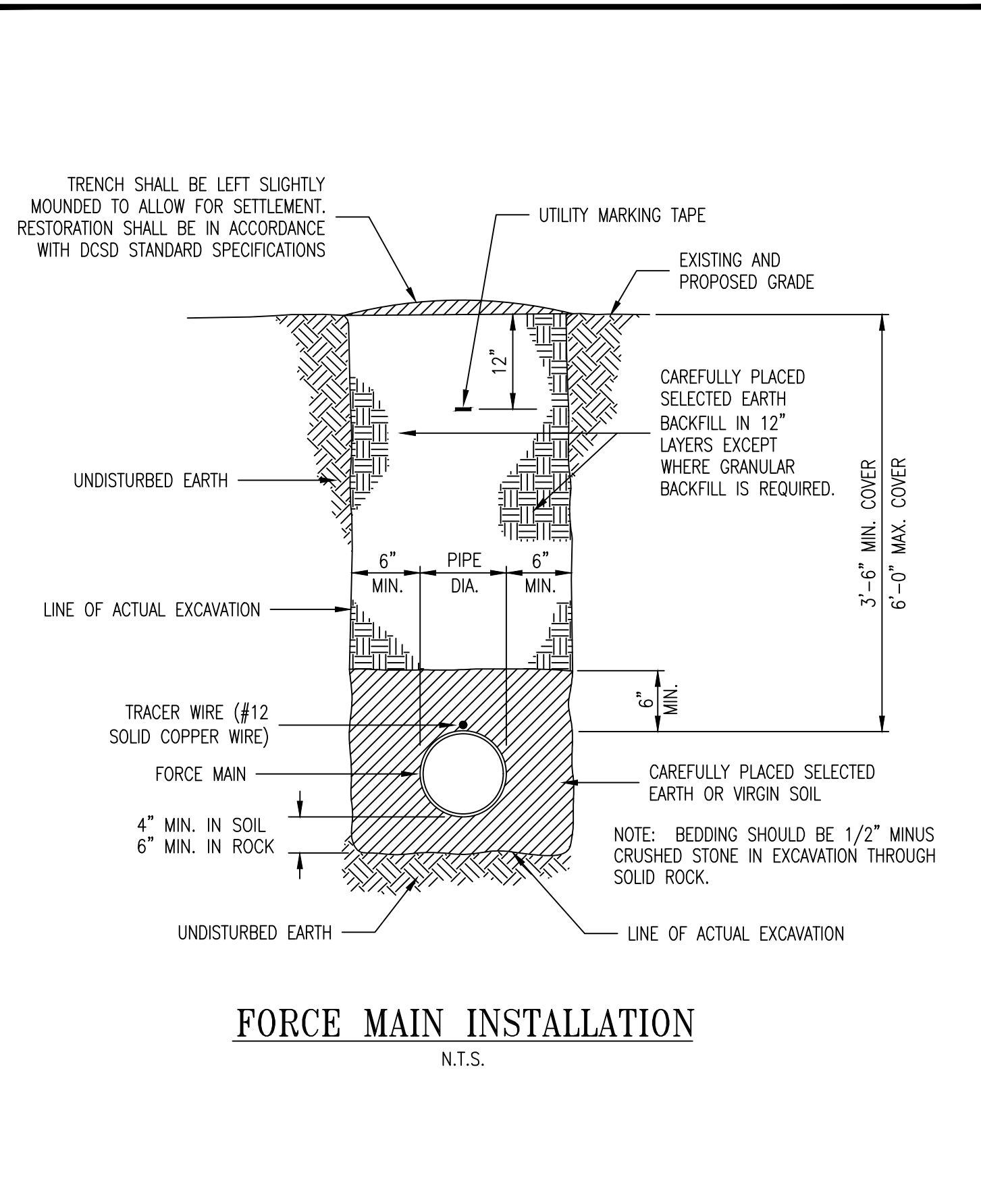
TYPICAL WET WELL BOTTOM SLAB REINFORCING
NTS



TYPICAL VALVE PIT WALL & BASE SLAB REINFORCING
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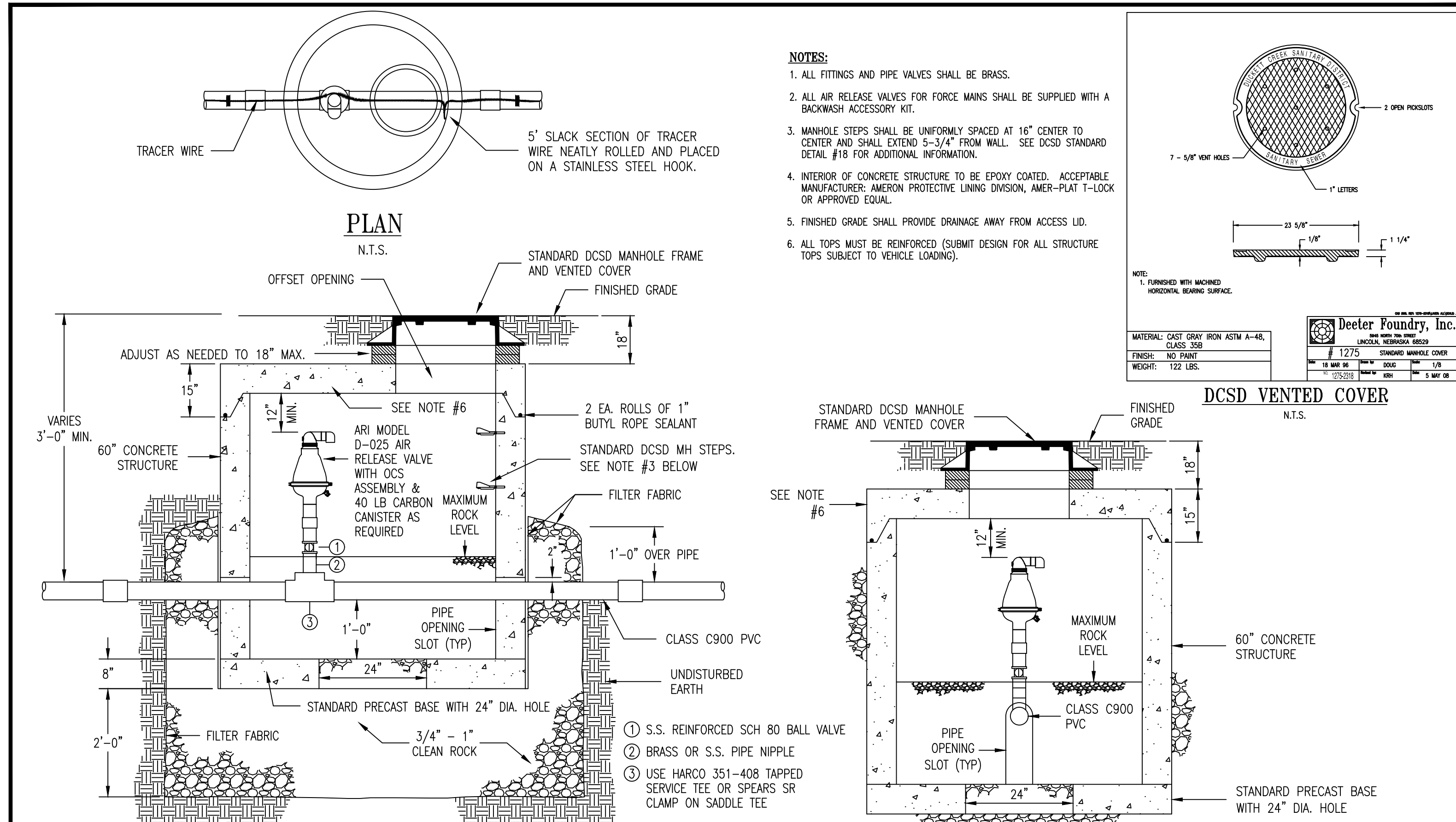
DETENTION PIPE(S) SHALL BE ADS SANITITE HP TRIPLE WALL PIPE. ENGINEER TO CONTACT THE LOCAL ADS REPRESENTATIVE FOR THE DESIGN OF THE DETENTION PIPE SYSTEM.

Duckett Creek Sanitary District
PUMP STATION DETAILS
Dwn By: MSM App By: LRK Detail No: PS-3
Ckd By: Date: DECEMBER 2022



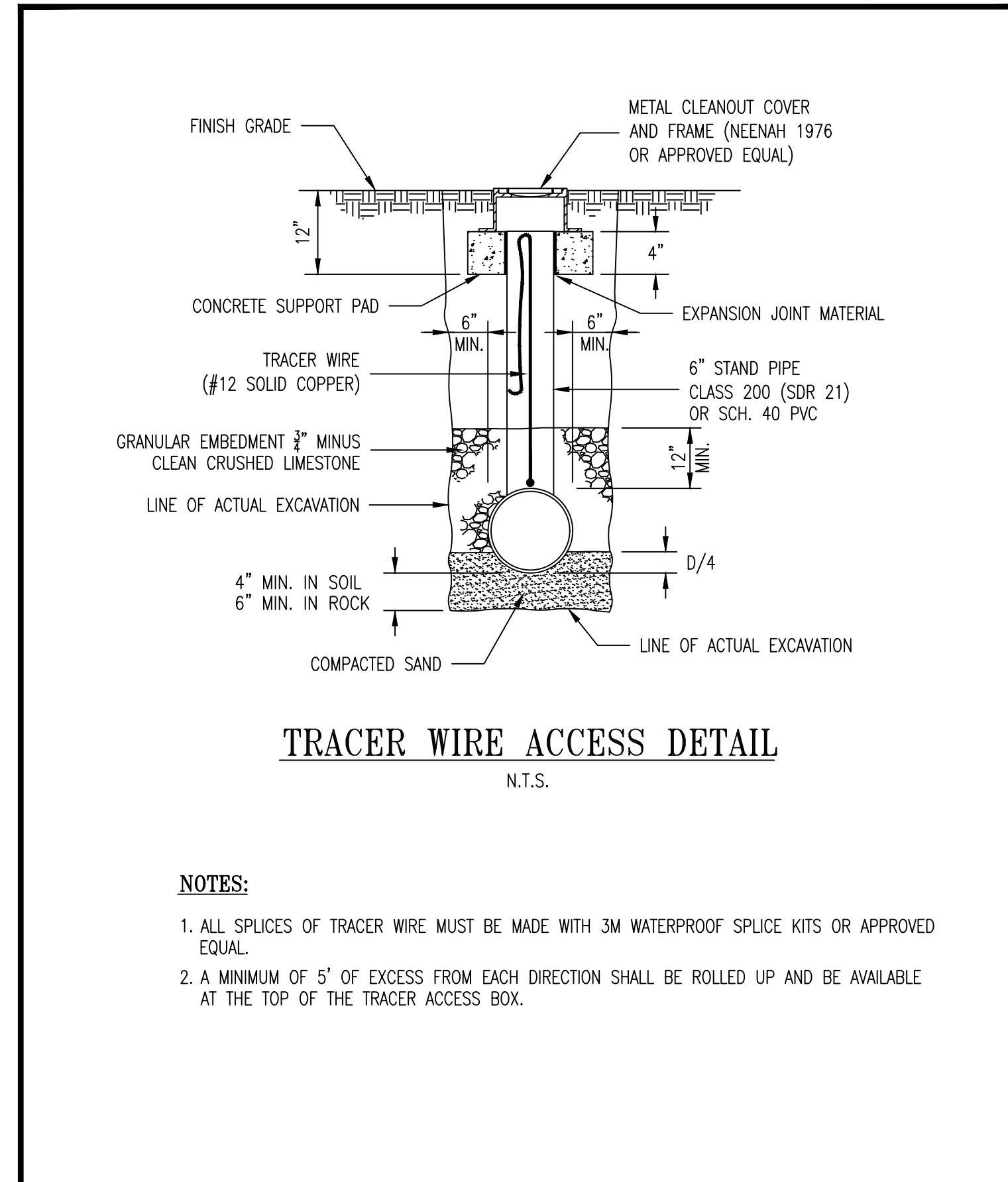
FORCE MAIN INSTALLATION
N.T.S.

	Duckett Creek Sanitary District			
	FORCE MAIN INSTALLATION	Dwn By: MSM Ckd By:	App By: KA Date: FEB. 2015	Detail No. FM-1



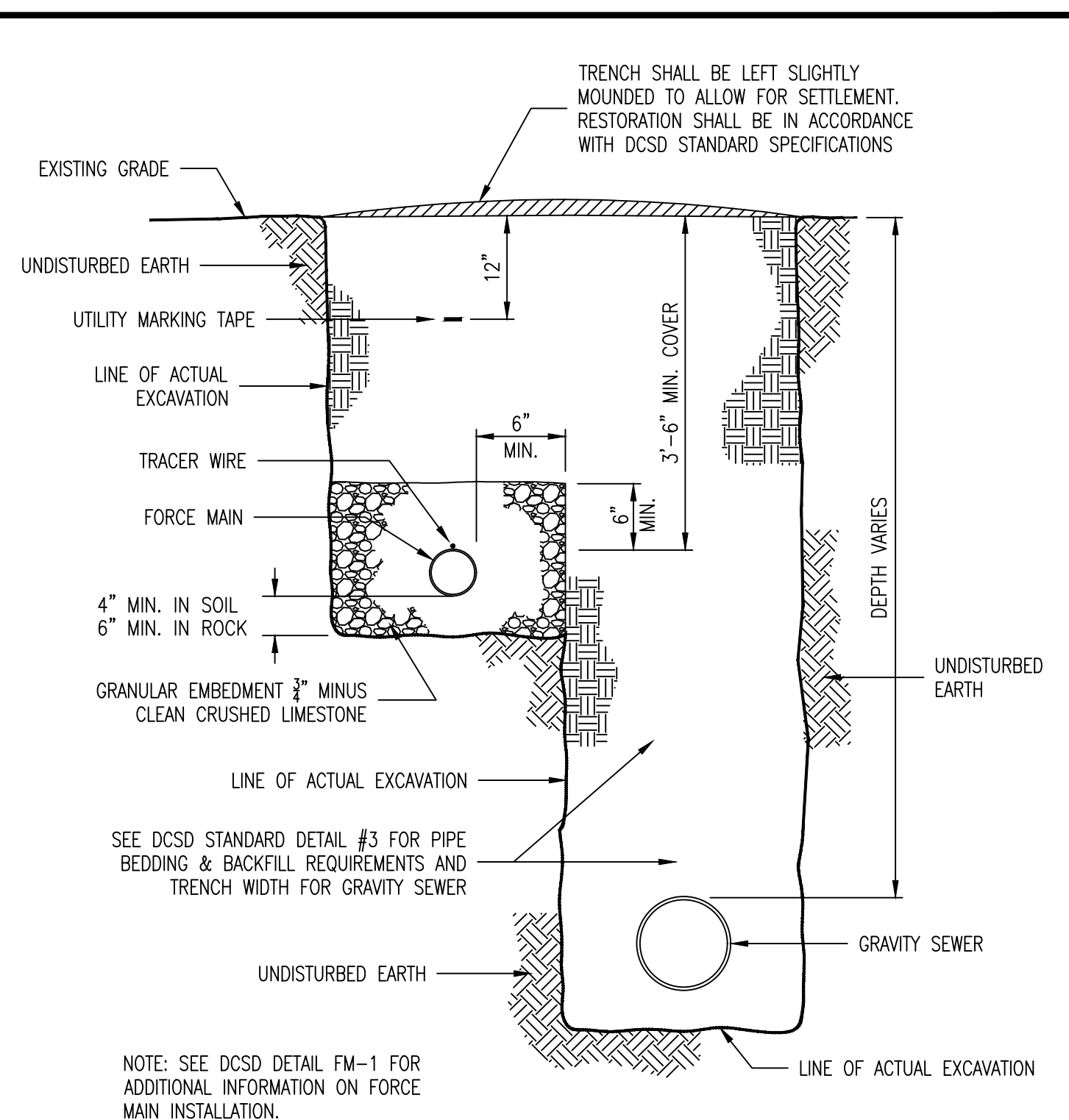
AIR RELEASE VALVE VAULT
N.T.S.

	Duckett Creek Sanitary District			
	AIR RELEASE VALVE	Dwn By: MSM Ckd By:	App By: KA Date: FEB. 2020	Detail No. FM-2



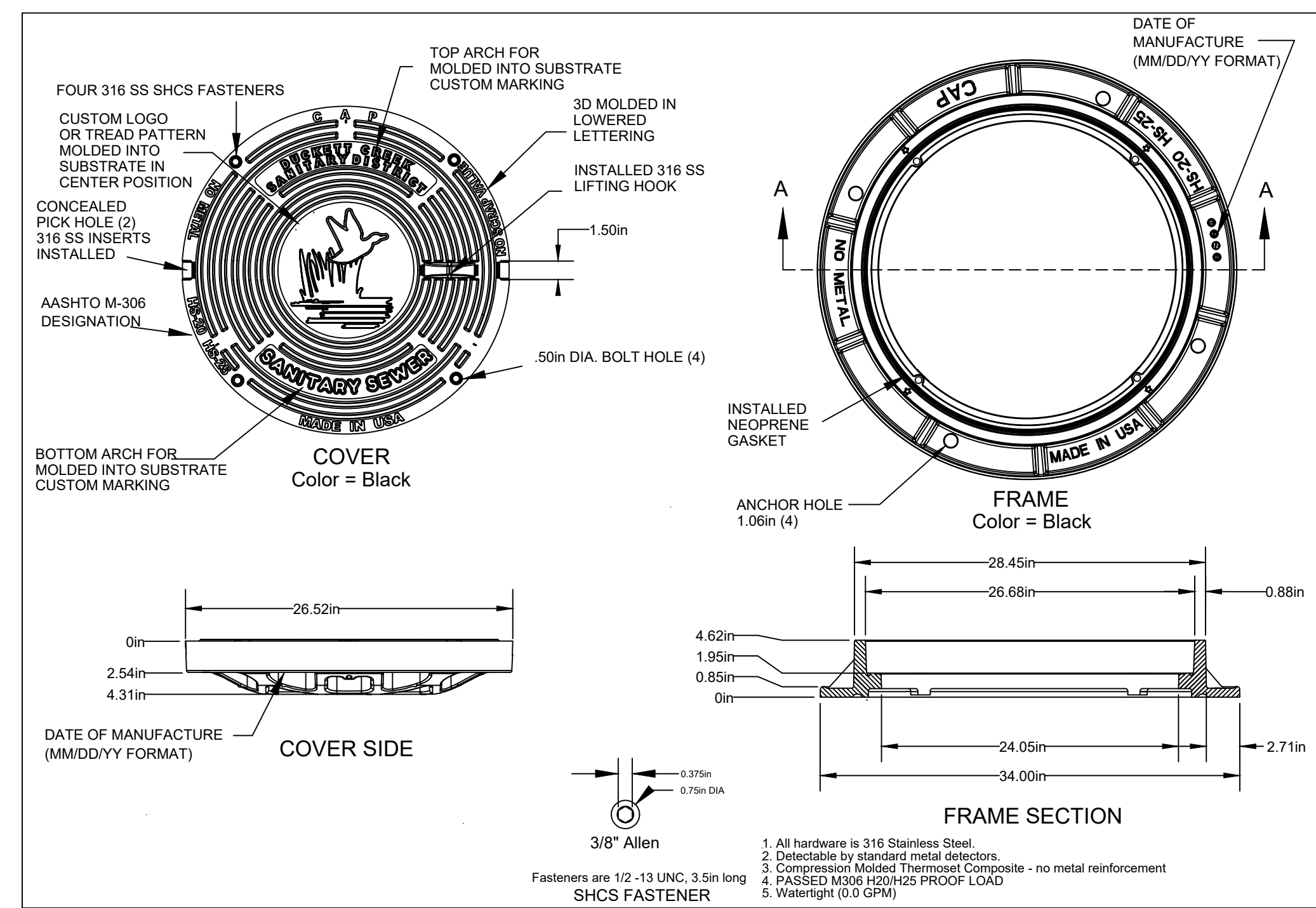
TRACER WIRE ACCESS DETAIL
N.T.S.

	Duckett Creek Sanitary District			
	TRACER WIRE ACCESS DETAIL	Dwn By: MSM Ckd By:	App By: KA Date: FEB. 2015	Detail No. FM-3



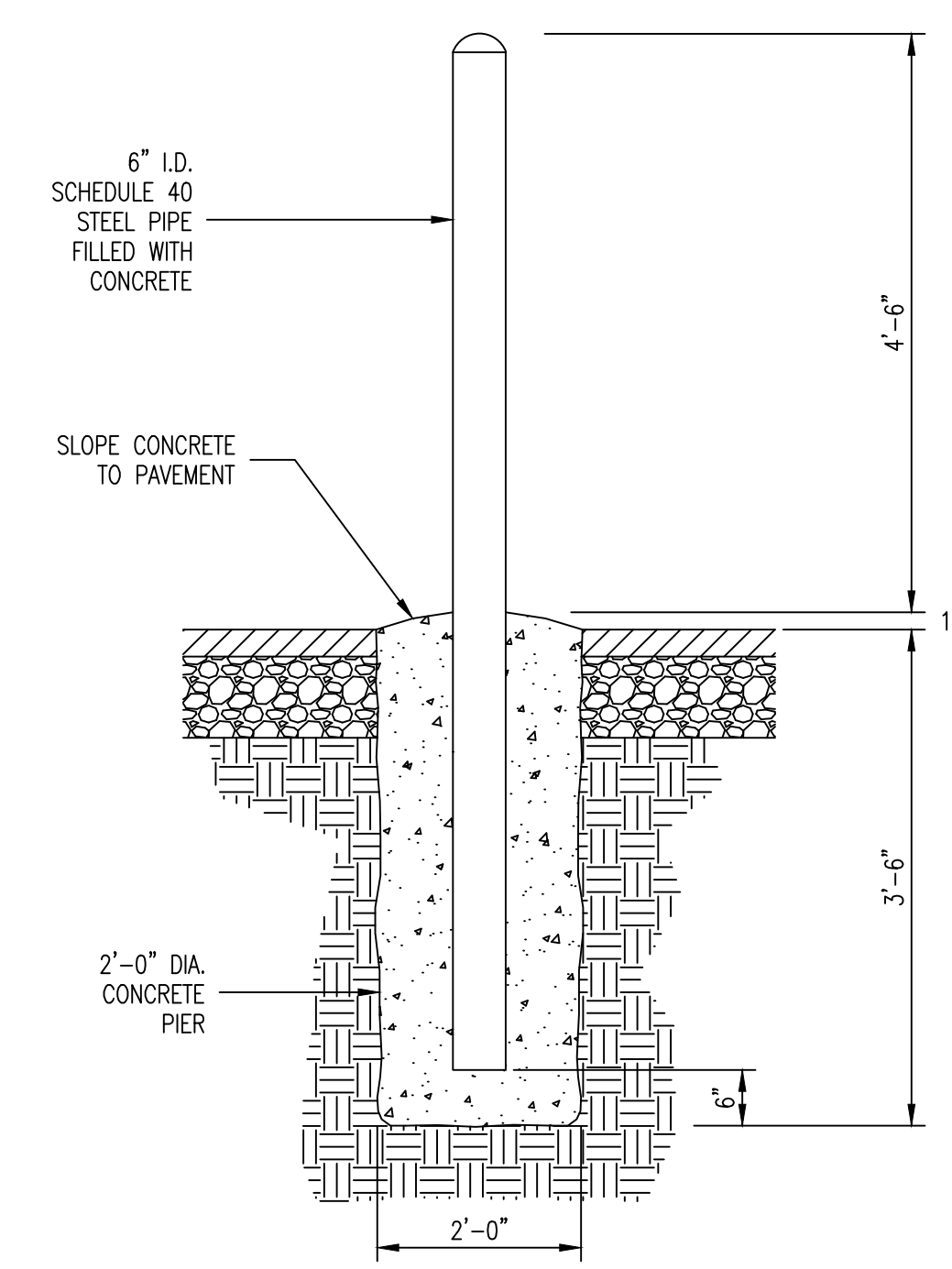
**TYPICAL FORCE MAIN INSTALLATION
ADJACENT TO GRAVITY SEWER**
N.T.S.

	Duckett Creek Sanitary District			
	TYPICAL FORCE MAIN INSTALLATION ADJACENT TO GRAVITY SEWER	Dwn By: MSM Ckd By:	App By: KA Date: FEB. 2015	Detail No. FM-4

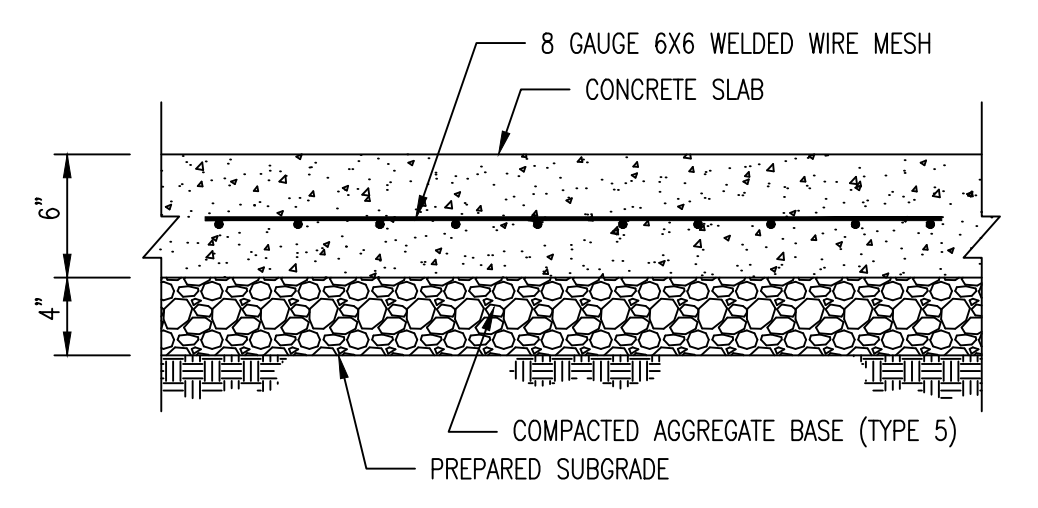


	COMPOSITE ACCESS PRODUCTS, L.P. "JUST CAP THAT" 5216 N. 26TH STREET MCALLEN, TX 78804 WEBSITE: www.justcapthat.com (844) 344-CAP1 (2271)			
	MODEL # CAP ONE	Product Code A-1BK24S4-D01DCOSS-H1	2020-10-01	APPROVED BY: _____ DATE: _____

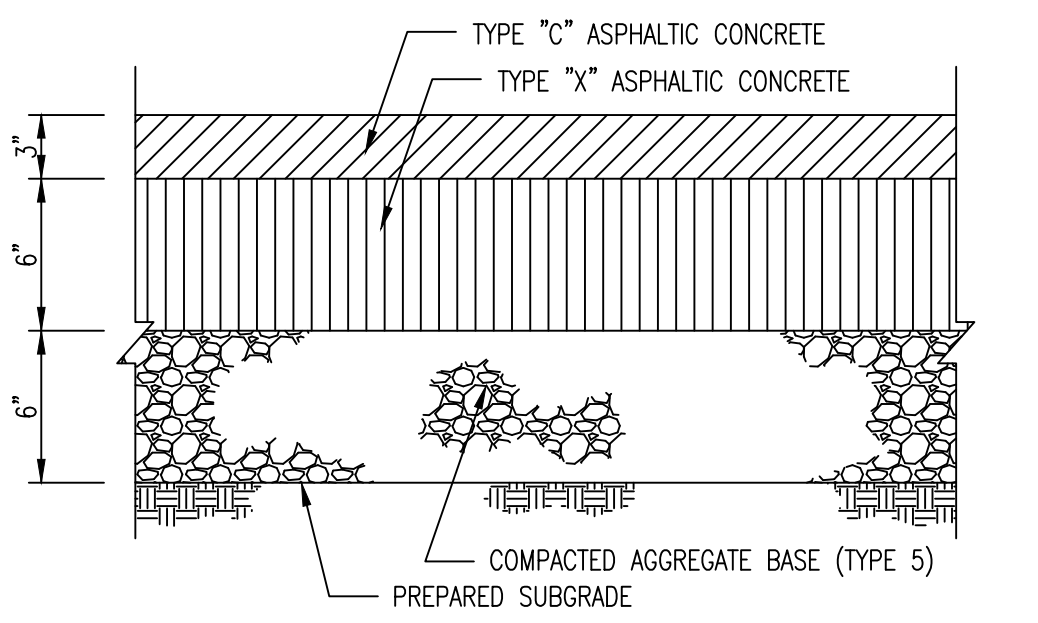
THE COMPOSITE MANHOLE LID IS TO BE INSTALLED ON THE FORCE MAIN DISCHARGE MANHOLE AND A MINIMUM FIVE (5) DOWNSTREAM MANHOLES FROM THE POINT OF CONNECTION.



PIPE BOLLARD DETAIL
NTS

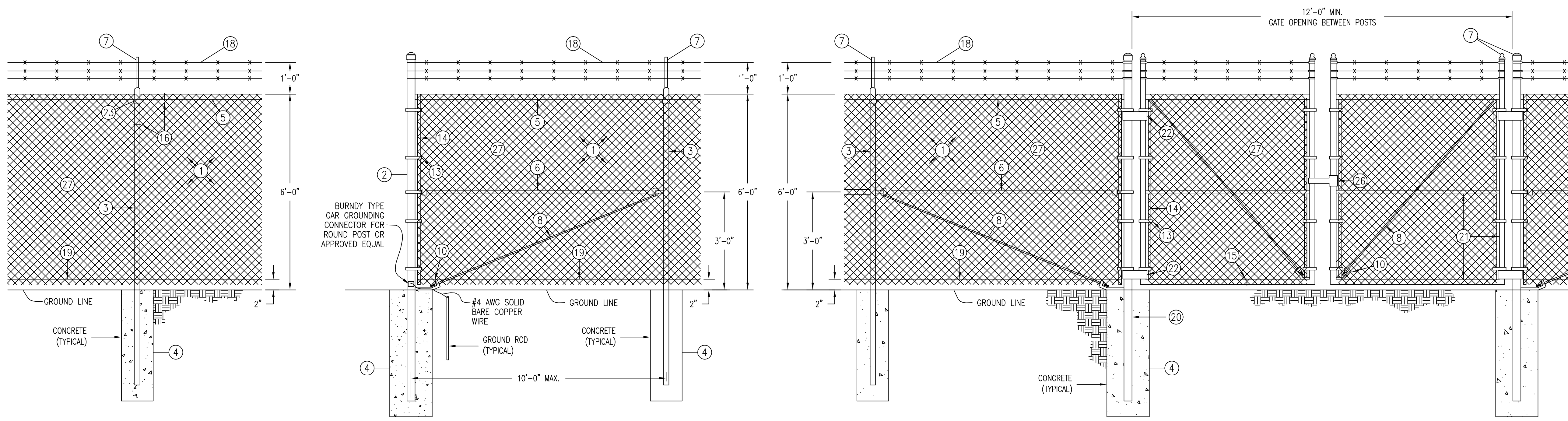


CONCRETE PAVEMENT DETAIL
NTS



ASPHALT PAVEMENT DETAIL
NTS

	Duckett Creek Sanitary District			
	PUMP STATION SITE AND FORCE MAIN DETAILS	Dwn By: MSM Ckd By:	App By: LFK Date: DECEMBER 2022	Detail No. PS-4

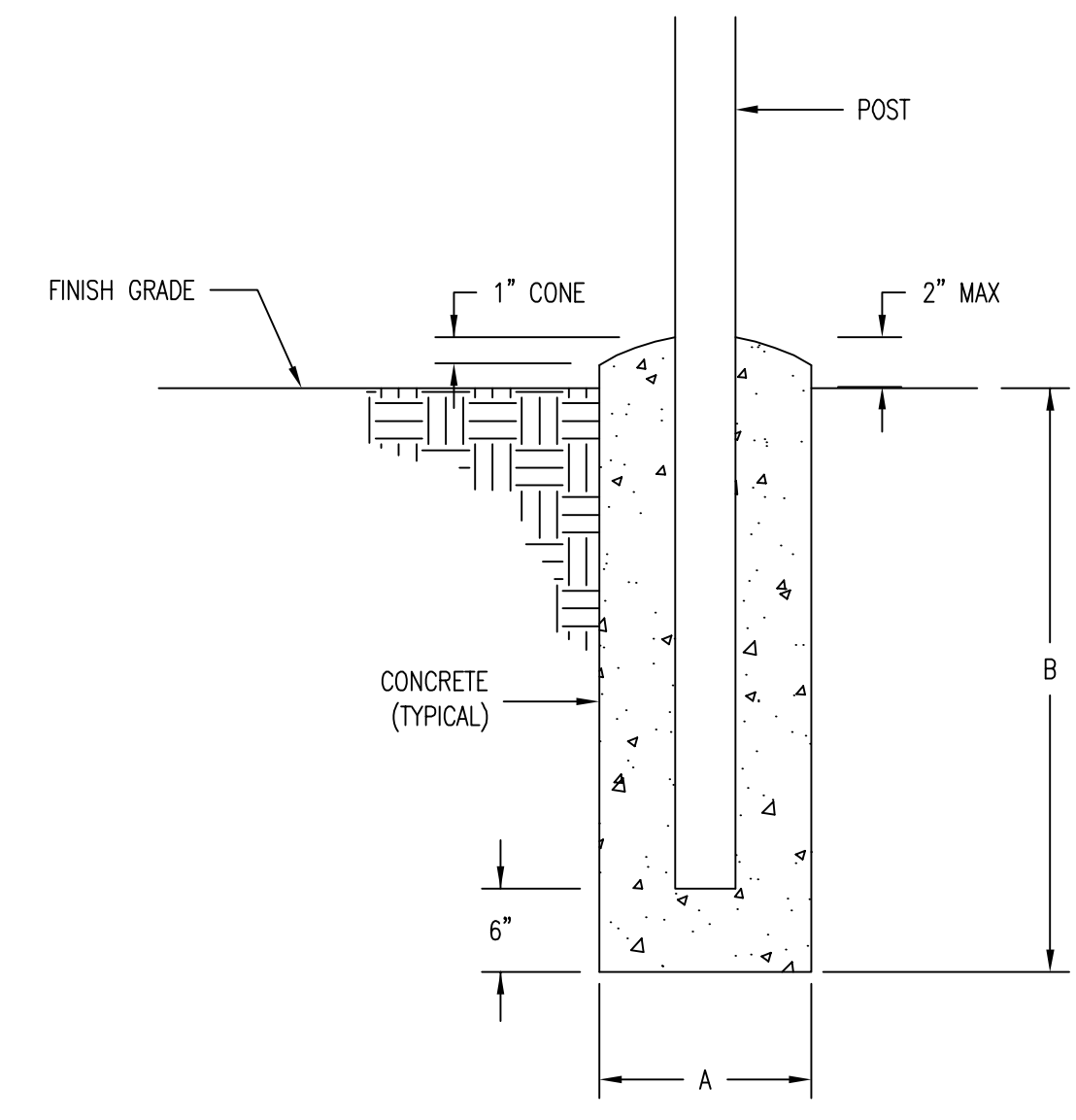


FENCE NOMENCLATURE AND PARTS LIST		
NO.	DESCRIPTION	REMARK
1	FABRIC: CHAIN LINK TYPE	
2	POSTS: PULL, CORNER, P.I.'S	6' HIGH CHAIN LINK FABRIC, 11 GAUGE WIRE SHALL BE GALVANIZED STEEL WOVEN IN A 2" MESH
3	POST: LINE	
4	BASE, FOR POSTS	SEE DETAIL IN THIS DWG.
5	RAIL, TOP	
6	RAIL, BRACE	
7	POST TOP OR EXTENSION ARM	EXTENDING 45° OUTWARD
8	ROD, TRUSS	
9	BAND, TRUSS & BRACE	
10	TRUSS TIGHTENER	
11	RAIL, END	COMPLETE ASSEMBLY
12	BAND, BRACE	TO FIT SHAPE BEING USED
13	BAND, STRETCHER BAR	FOR BRACE BOTH SIDES OF POSTS
14	BAR, STRETCHER	LENGTH TO SUIT FABRIC
15	TIES, FABRIC TO RAILS	ON GATE ONLY
16	TIES, FABRIC TO POSTS	(TOP RAILS)
17	TIES, FABRIC TO WIRES	
18	WIRE, BARBED	3 ROWS ON EXTENSION ARMS
19	WIRE, TENSION COIL SPRING STEEL	BOTTOM ONLY
20	POSTS, GATE	
21	FRAMES, GATE	
22	HINGE	180° SWINGING, BOLT TO POST WITH 1/2" BOLT AFTER GATE IS INSTALLED
23	TOP CAP	
24	BAND END	
25	MALLEABLE IRON GATE KEEPER	
26	FORK LATCH AND HANGER	
27	PRIVACY SLATS	INSTALL "SOLID SLAT" PRIVACY SLATS 1-1/8" x 6", COLOR - BEIGE

STANDARD LINE POST DETAILS
NTS

STANDARD CORNER DETAILS
NTS

DOUBLE SWING GATE DETAILS
NTS



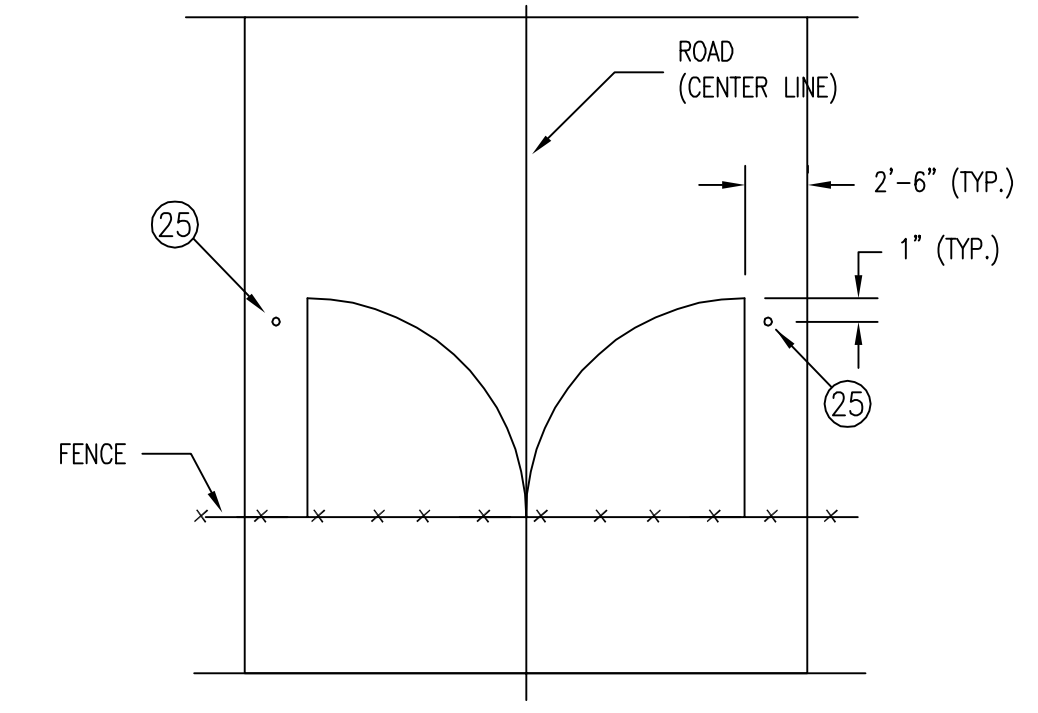
CONCRETE BASE DETAIL
NTS

TYPE OF POST	SIZE	DIA. "A" MIN	DEPTH "B"
LINE & GATE FRAME	1-1/2" NOMINAL (1.9" O.D.)	12"	3'-6"
END CORNER OR PULL POST	2" NOMINAL (2.875" O.D.)	16"	4'-0"
GATE & POST	3-1/2" NOMINAL (4" O.D.)	16"	4'-0"

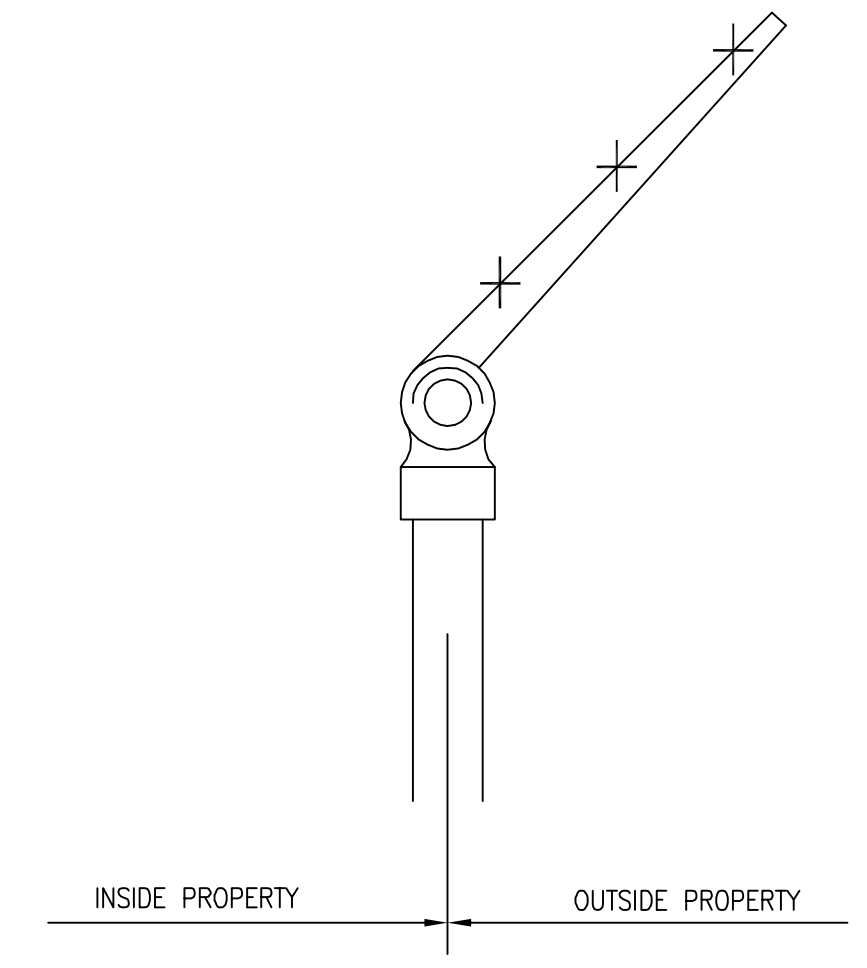


WARNING SIGN DETAIL
NTS

NOTE: SEE SECTION 9.2 OF THE PUMP STATION DESIGN REQUIREMENTS FOR ADDITIONAL INFORMATION ON THE FENCE SPECIFICATIONS.



DOUBLE SWING GATE DETAIL
NTS



EXTENSION ARM DETAIL
NTS