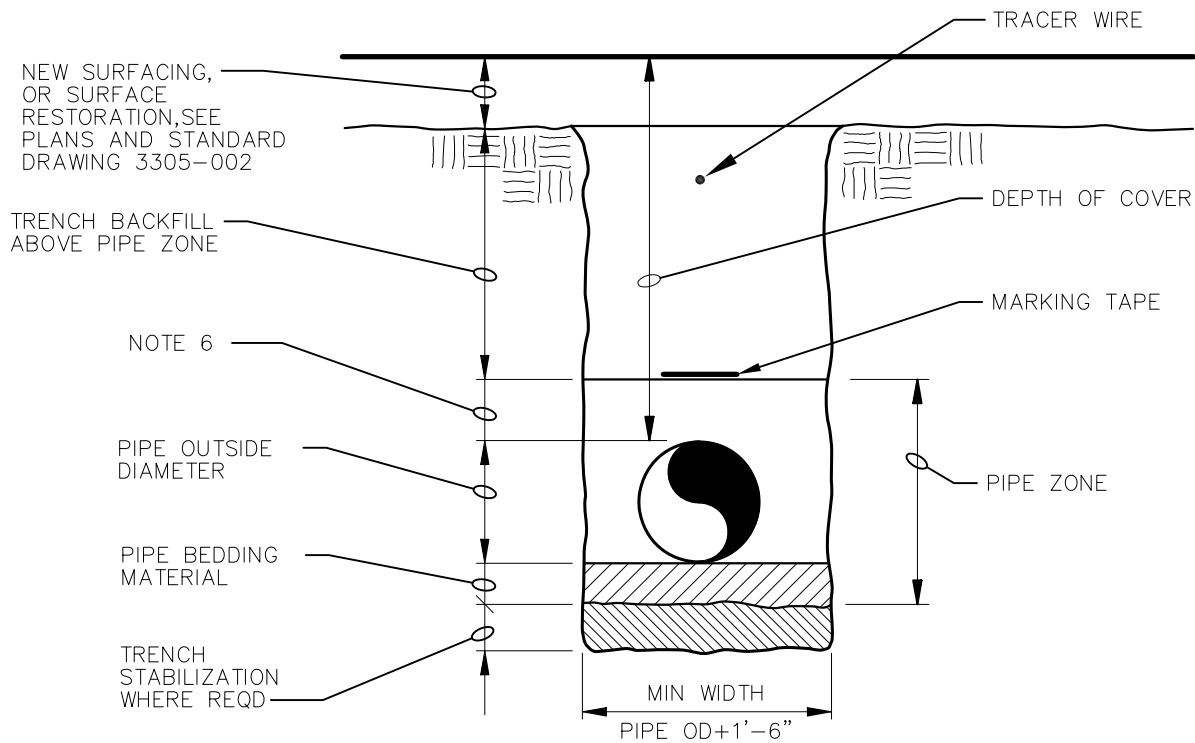


# SECTION 7 STANDARD DRAWING INDEX

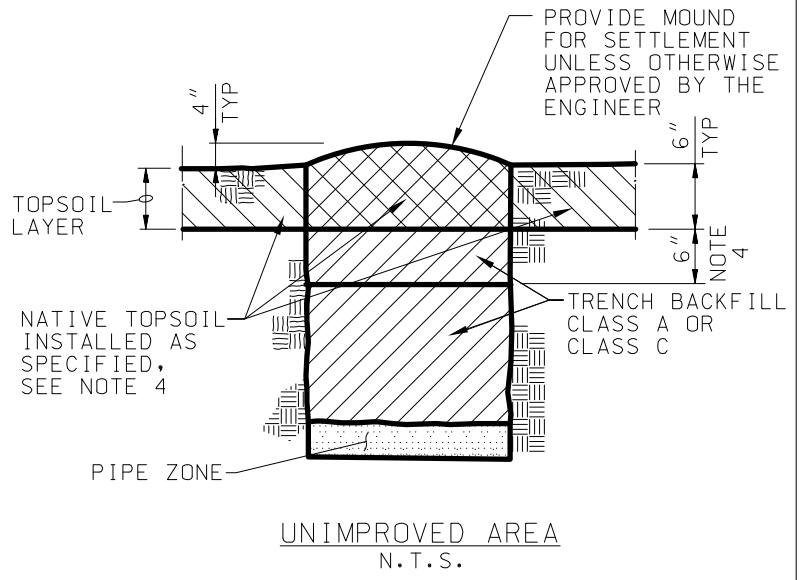
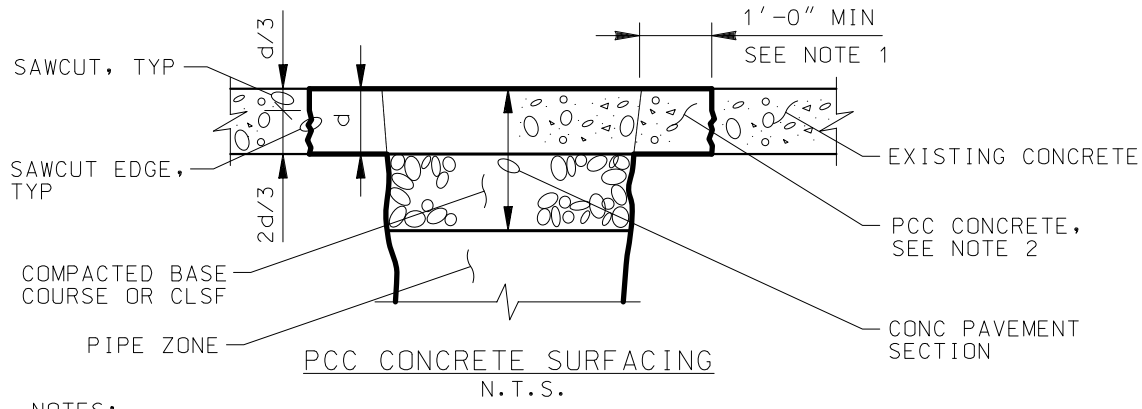
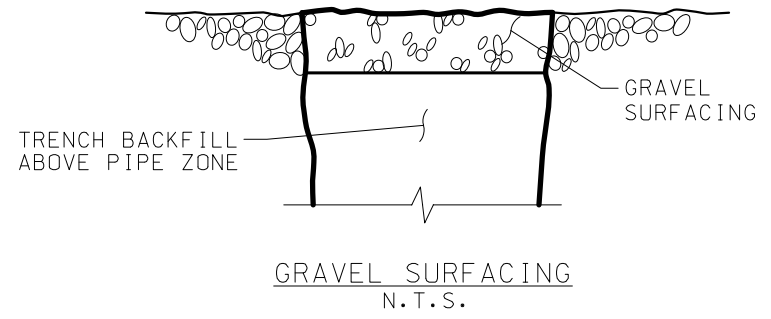
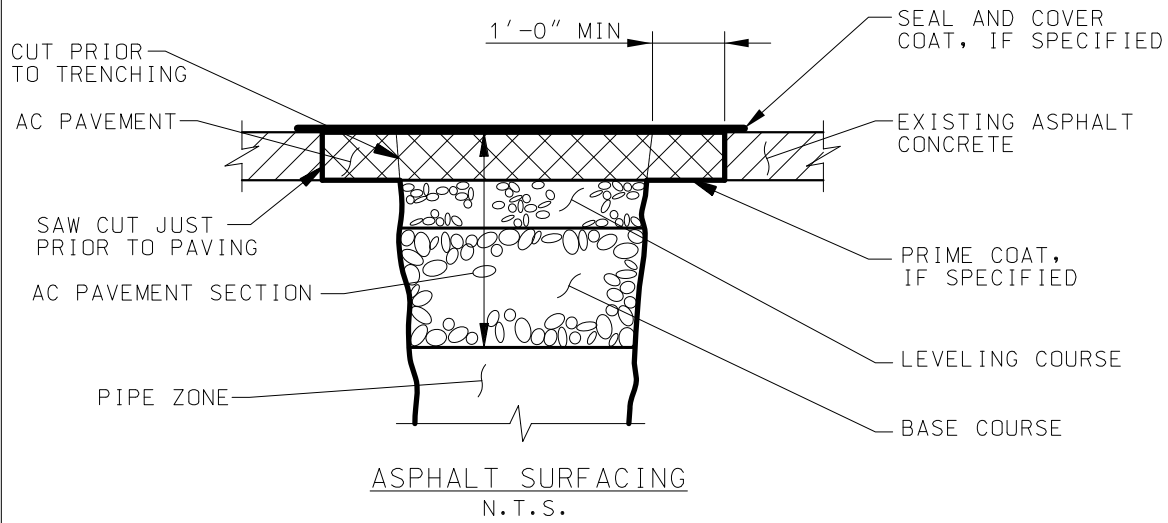
DWG NO.	TITLE
3305-001	TYPICAL TRENCH
3305-002	SURFACE RESTORATION
3305-710	TYPICAL BUILDING AND BASE MOUNTED SELF PRIMING PUMPING STATION WITH STANDBY ENGINE SECTIONAL ELEVATION
3305-715	THRUST BLOCK NOTES AND DETAILS
3305-720	AIR AND VACUUM VALVE ASSEMBLY
3305-725	TYPICAL ACCESS ROAD
3305-730	REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTOR
3305-735	CHAIN LINK FENCE
3305-740	YARD HOSE BIBB DETAILS
3305-745	ILLUSTRATION OF NUMBER OF SERVICE LINES REQUIRED FOR HOUSE, GARDEN HOME, TOWN HOUSE, PATIO HOME OR DUPLEX
3305-750	PRESSURE GAUGE MOUNTING DETAIL
3305-760A	CONTROL PANEL MOUNTING DETAIL
3305-760B	CONTROL PANEL MOUNTING DETAIL
3305-765A	WASTE WATER SUBMERSIBLE LIFT STATION TOP PLAN
3305-765B	WASTE WATER SUBMERSIBLE LIFT STATION FOUNDATION PLAN
3305-765C	WASTE WATER SUBMERSIBLE LIFT STATION SECTION



**NOTES:**

1. CONTRACTOR SHALL SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION AND SAFETY AND IN ACCORDANCE WITH CURRENT OSHA REQUIREMENTS.
2. FOUNDATION STABILIZATION MATERIAL SHALL BE INSTALLED ONLY AS APPROVED AND DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATION.
3. SEE SPECIFICATION SECTION 31 23 16 EXCAVATION AND 31 23 23 TRENCH BACKFILL.
4. COORDINATE LOCATION OF MARKING TAPE WITH SPECIFICATIONS. PROVIDE NEW SURFACING AS SHOWN ON THE DRAWINGS.
5. WHERE TRENCHES ARE IN AREAS NOT DESIGNATED TO RECEIVE NEW ASPHALT, GRAVEL OR PCC CONCRETE SURFACING, RESTORE EXISTING SURFACE USING SEED OR SOD AS DIRECTED.
6. MINIMUM DEPTH OVER PIPE IS BY SIZE AND SERVICE AS FOLLOWS:
  - a. 4" AND 6" GRAVITY SERVICE: 6" MIN.
  - b. 8" GRAVITY SERVICE AND LARGER AND ALL FORCE MAINS: 12" MIN.
7. PROVIDE TRACER WIRE PER SPECIFICATION FOR ALL FORCE MAINS.

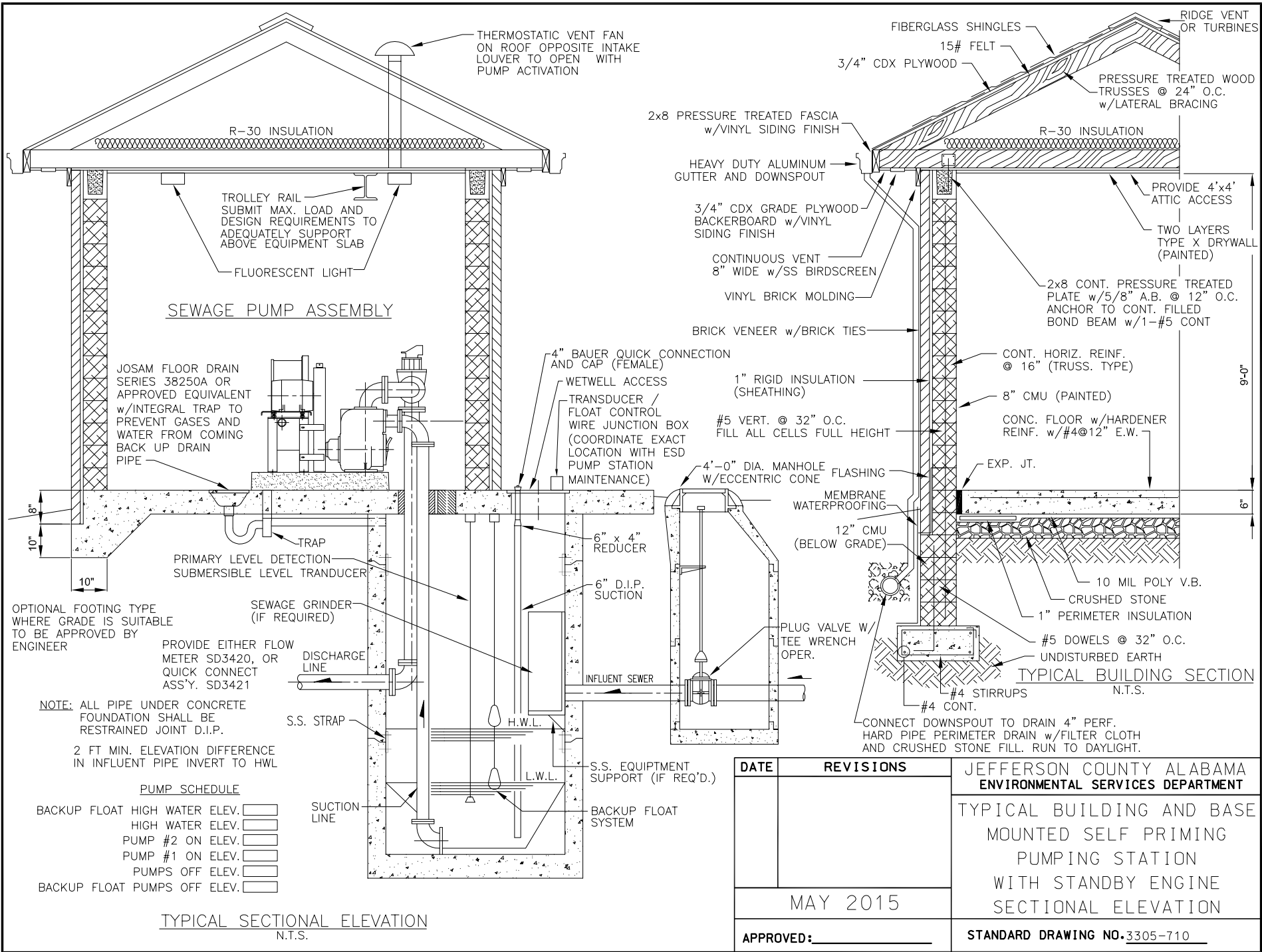
DATE		REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15		TEXT UPDATE	
MAY 2015			TYPICAL TRENCH
APPROVED: _____		STANDARD DRAWING NO. <u>3305-001</u>	



**NOTES:**

1. IF LOCATION OF TRENCH SAW CUT IS WITHIN 2 FEET OF AN EXISTING JOINT OR EDGE OF CONCRETE, REPLACE ENTIRE CONCRETE SECTION TO THE JOINT OR EDGE.
2. CONSTRUCT JOINTS ACROSS NEW CONCRETE TO MATCH EXISTING JOINT TYPES AND LOCATIONS.
3. SURFACE RESTORATION MUST BE COMPATIBLE WITH TYPE OF BACKFILL USED. COMPACTED CRUSHED ROCK AND LEVELING COURSE BASE SHOULD NOT BE PLACED ON NATIVE MATERIAL.
4. THE TOP 6" OF TRENCH BACKFILL, BENEATH THE TOPSOIL LAYER, SHOULD BE INSTALLED, SMOOTHED, BUT LEFT UN-COMPACTED.
5. TOPSOIL SHALL EXTEND BEYOND TOP OF TRENCH A MINIMUM OF 12".
6. SOD OR SEED AS DIRECTED.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
01/15	TEXT UPDATE	SURFACE RESTORATION
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. <u>3305-002</u>



TYPICAL SECTIONAL ELEVATION  
N.T.S.

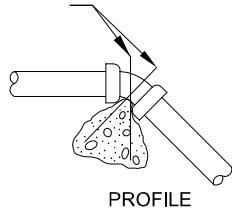
DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		TYPICAL BUILDING AND BASE MOUNTED SELF PRIMING PUMPING STATION WITH STANDBY ENGINE SECTIONAL ELEVATION
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-710

FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"

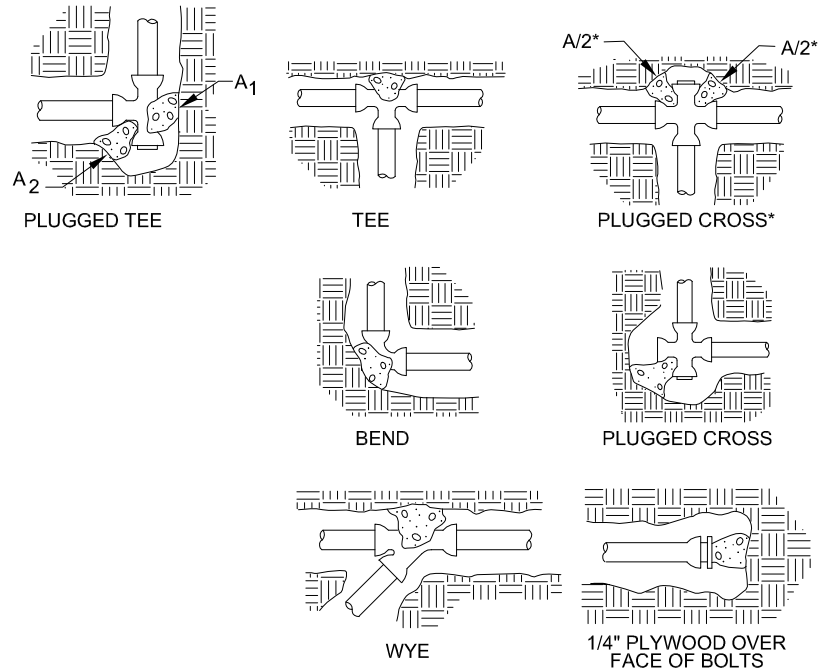
BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)								
FITTING SIZE	TEE, WYE, PLUG, OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED RUN		BEND ANGLE			
			A 1	A 2	45°	22 1/2°	11 1/4°	
4	1.0	1.4	1.9	1.4	1.0	-	-	
6	2.1	3.0	4.3	3.0	1.6	1.0	-	
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0	
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2	
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7	

(VERTICAL BENDS)			
FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.6
10	6.0	2.3	0.9
12	8.5	3.2	1.3

GALVANIZED RODS OVER FITTING AND EMBEDDED IN CONCRETE (SEE TABLE FOR SIZES)



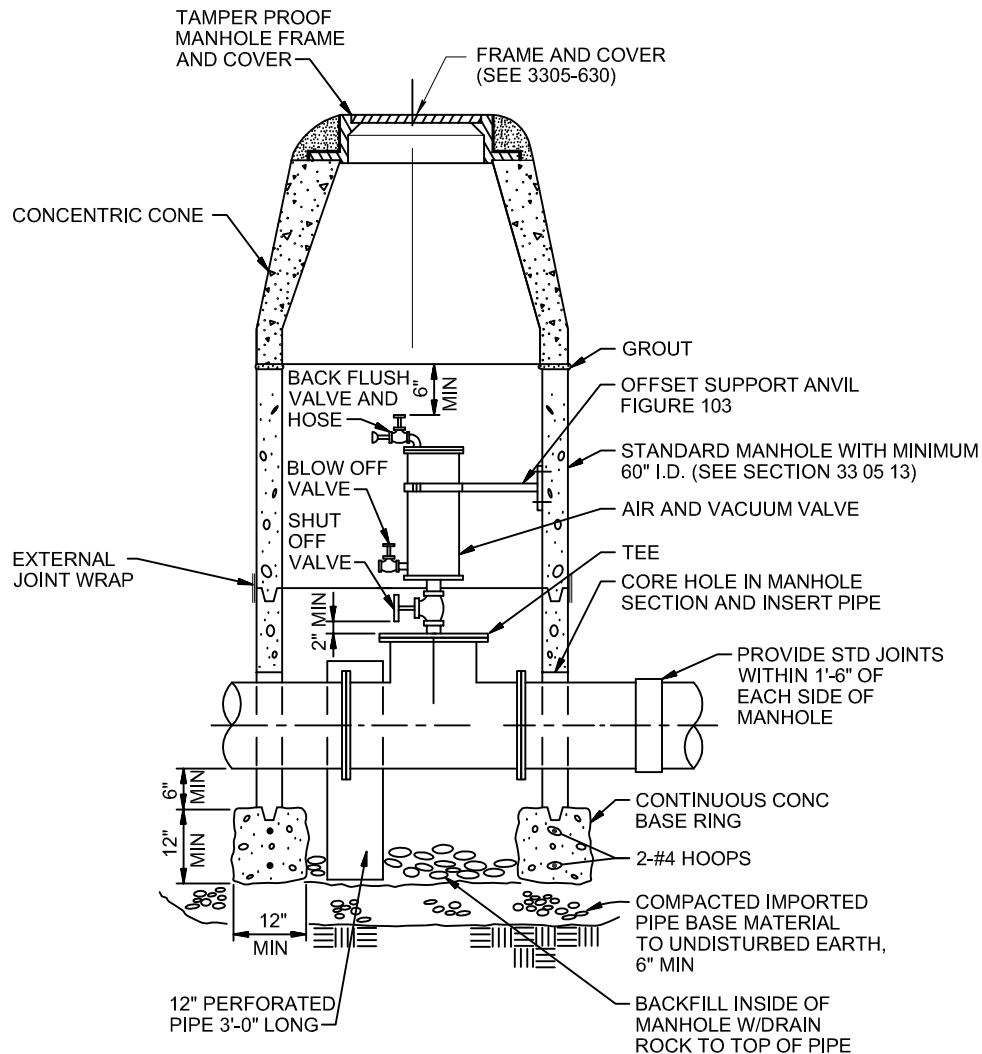
\* EACH AREA (A/2) IS 1/2 OF TABULATED TOTAL AREA



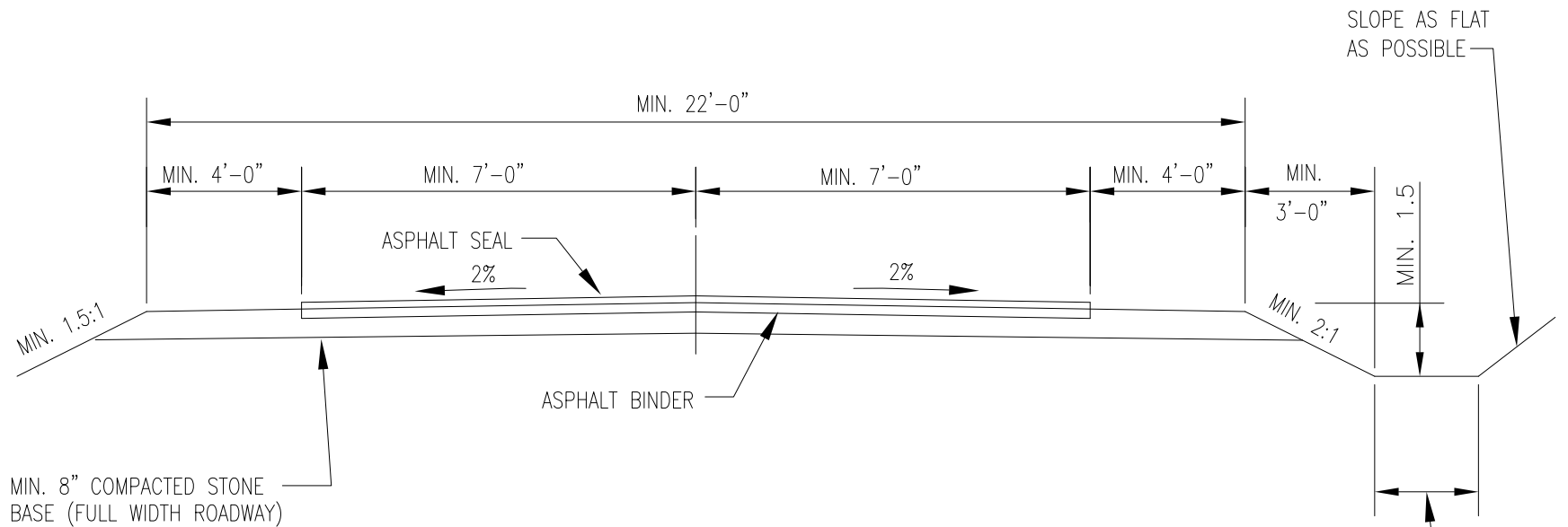
THRUST BLOCK NOTES

- KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES.
- CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
- REQUIRED VOLUMES OR BEARING AREAS AT FITTINGS SHALL BE AS INDICATED BELOW, ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.
- THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE = 4050 LBS/CU YD. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESS./150) x (TABLE VALUE).
- BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS/SQ FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, MULTIPLY TABLE VALUES BY THE FACTOR  $(13.33)(P'/S'_b)$ , WHERE:  
  
 $P'$  = ACTUAL TEST PRESSURE, PSIG  
 $S'_b$  = ACTUAL SOIL BEARING PRESSURE, PSF.
- THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUSTS SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
- BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD
- BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SQ FT.
- VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS FOR VOLUMES SHOWN TO LEFT OF SOLID LINE IN TABLE.
- TEST PRESSURES ARE SHOWN IN THE PIPING SCHEDULE.
- ALLOWABLE SOIL BEARING STRESS IS 2000 LBS/SQ FT

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		THRUST BLOCK NOTES AND DETAILS
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-715



DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		AIR AND VACUUM VALVE ASSEMBLY
	MAY 2015	
	APPROVED: _____	STANDARD DRAWING NO. 3305-720



TYPICAL ACCESS ROAD SECTION- FLEXIBLE PAVEMENT

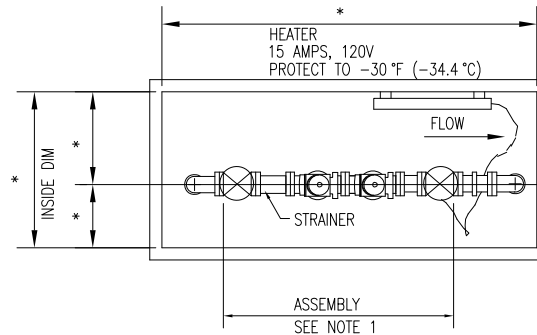
N.T.S.

NOTE:  
WIDTH OF FLAT BOTTOM  
DITCH SHALL BE GOVERNED  
BY DRAINAGE CONDITIONS

NOTES:

1. SEE SPECIFICATION SECTION 32 12 16 FOR PAVING REQUIREMENTS.
2. ROAD MAY ALSO BE CONCRETE. DESIGN SHALL BE APPROVED BY THE ENVIRONMENTAL SERVICES DEPARTMENT.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		TYPICAL ACCESS ROAD SECTION
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. 3305-725

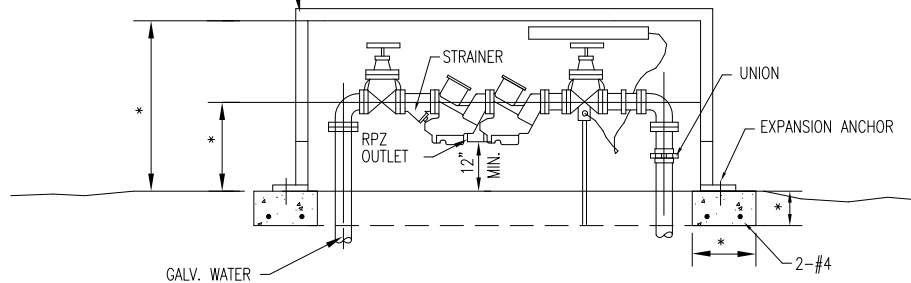


PLAN  
N.T.S.

NOTES:

1. WATTS REDUCED PRESSURE DETECTOR ASSEMBLY SERIES 909QT-S, OR APPROVED EQUIVALENT.
2. ELECTRICAL OUTLET(S) SHALL BE FOR OUTDOOR USE & INSTALLED ON A GFCI OUTLET MOUNTED A MIN. OF 2" OFF THE FLANGE FACE & 6" ABOVE THE HIGHEST POINT OF DISCHARGE.
3. INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH LOCAL UTILITY & AWWA STANDARDS

#2 INSULATED "HOT BOX" W/ HEAT STRIPS, DRAIN HOLES, LOCKING ACCESS; CDR SYSTEMS, INC. HOTBOX® OR APPROVED EQUIVALENT

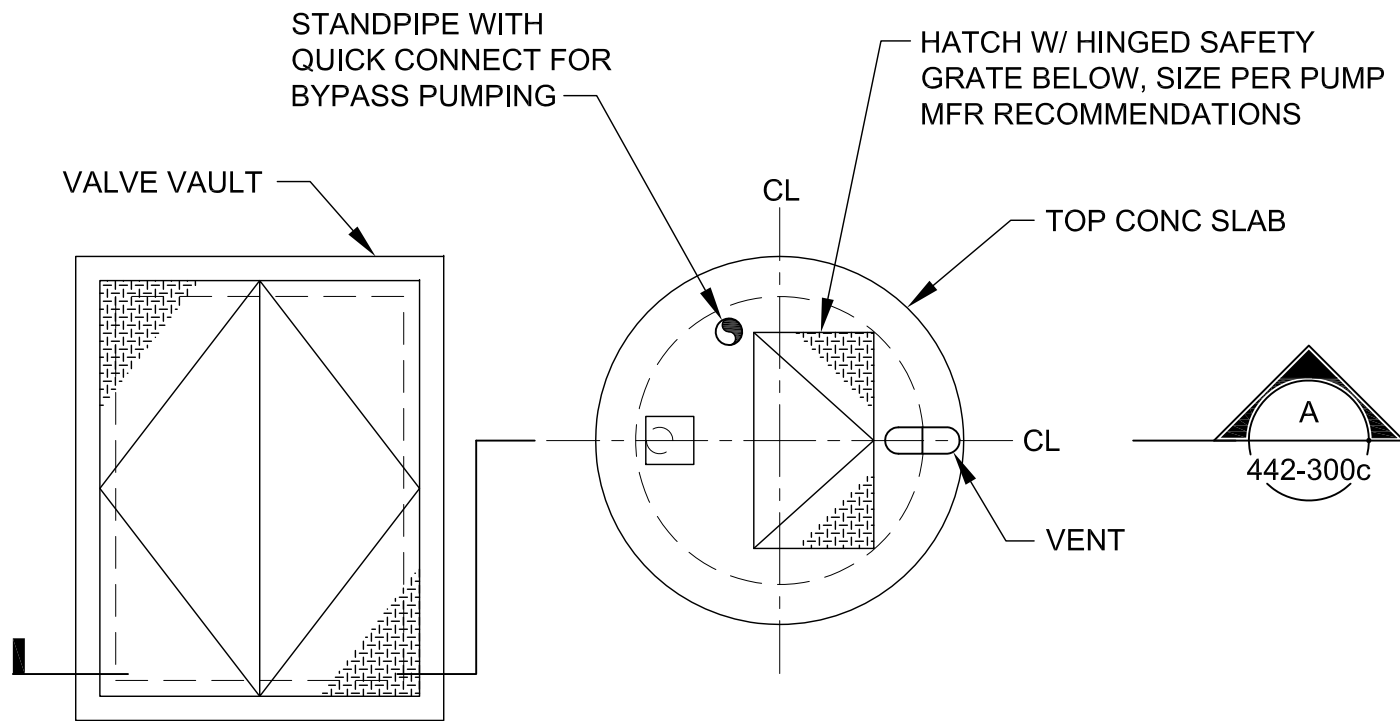


ELEVATION  
N.T.S.

\* SIZE TO ACCOMMODATE BACKFLOW PREVENTER

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER
MAY 2015		
APPROVED: _____		STANDARD DRAWING NO. <u>3305-730</u>

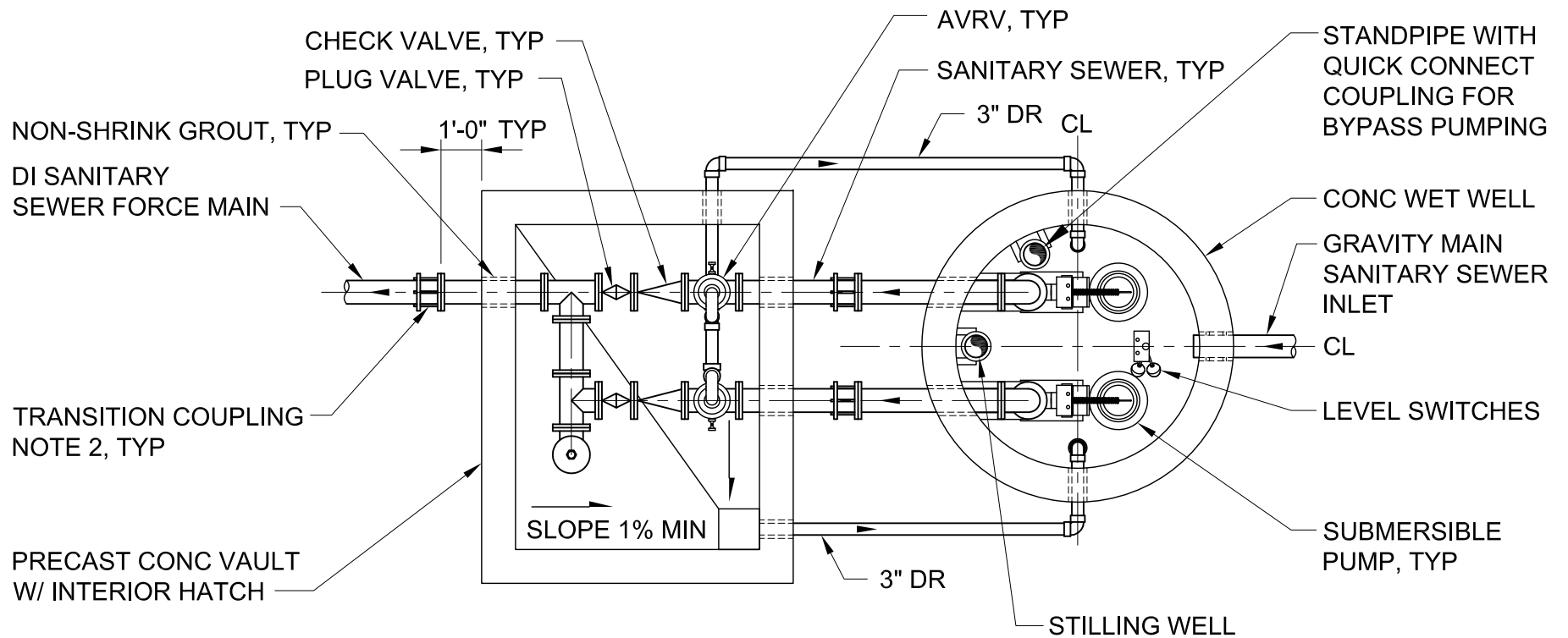




# TOP PLAN

1/4"=1'-0"

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		WASTE WATER SUBMERSIBLE LIFT STATION TOP PLAN
	OCT 2013	
	APPROVED: _____	STANDARD DRAWING NO. 3305-765A



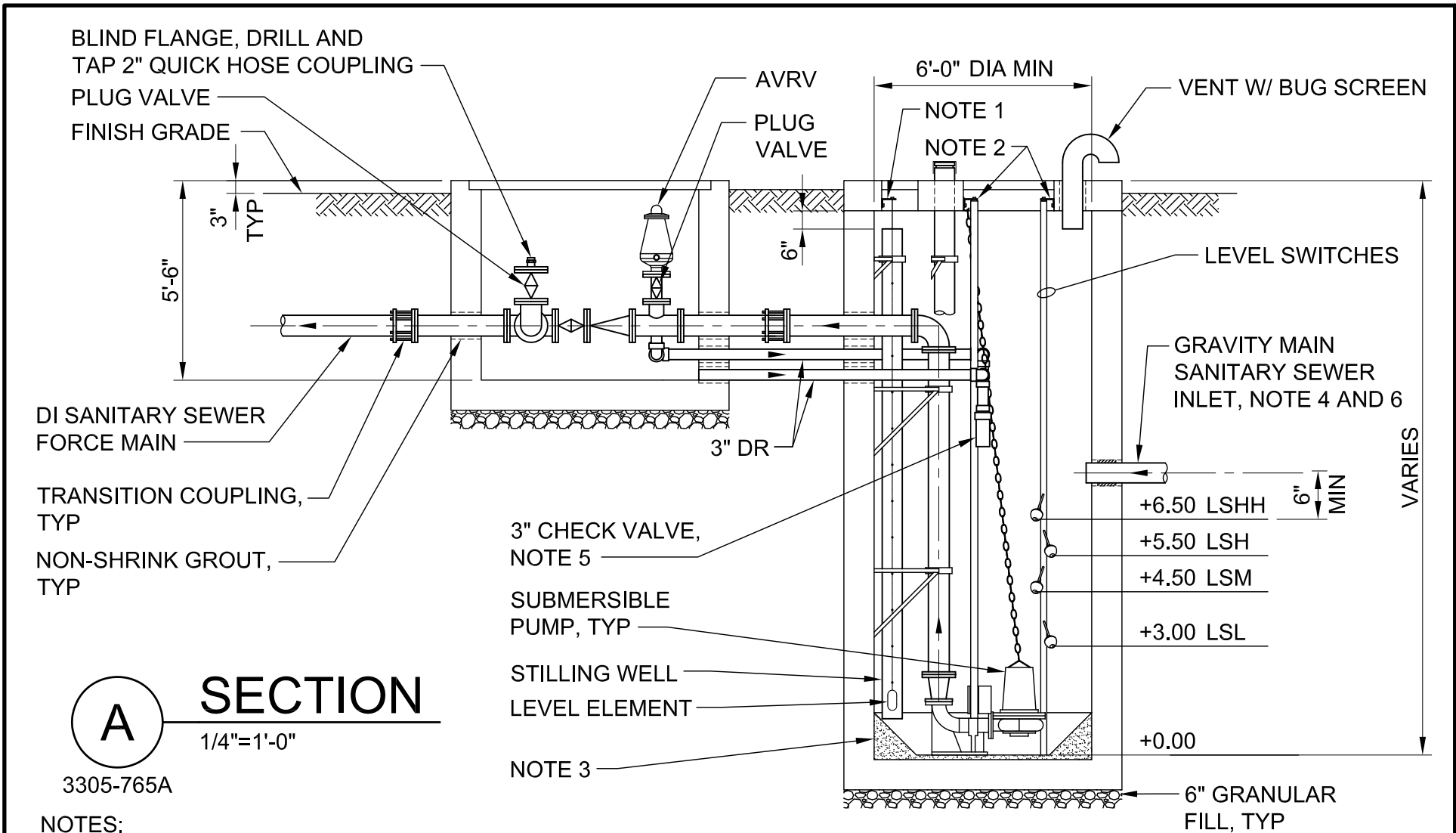
## FOUNDATION PLAN

1/4"=1'-0"

### NOTES:

1. THIS IS A TYPICAL DETAIL FOR A SUBMERSIBLE TYPE PUMP LIFT STATION TO BE USED AS A DESIGN GUIDE ALONG WITH THE SPECIFICATIONS. SITE OF STRUCTURES AND PIPING WILL VARY BY LOCATION AND DESIGN / OPERATING CONDITIONS.
2. TRANSITION COUPLING WITH RESTRAINING RODS AND CLAMPS, ROMAC SERIES 600 OR EQUAL.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
		WASTE WATER SUBMERSIBLE LIFT STATION FOUNDATION PLAN
	OCT 2013	
APPROVED: _____		STANDARD DRAWING NO. 3305-765B



**A SECTION**  
1/4"=1'-0"

3305-765A

**NOTES:**

1. CABLE HOLDER TYP
2. MOUNTING BRACKET PER MANUFACTURER.
3. LOCATE PUMP BASES AND PLACE SHAPED CONC AS RECOMMENDED BY PUMP MANUFACTURER.
4. SEAL PIPE PENETRATION WITH PIPE SLEEVE AND LINK SEAL.
5. DUCK BILL CHECK VALVE, RED VALVE TIDEFLEX SERIES TF-1.
6. WITHIN 50-FEET UPSTREAM OF MANHOLE PROVIDE ISOLATION VALVE INSTALLED IN A MANHOLE ALONG INFLUENT MAIN SEWER TO ALLOW FULL ISOLATION OF WET WELL.

DATE	REVISIONS	JEFFERSON COUNTY ALABAMA ENVIRONMENTAL SERVICES DEPARTMENT
NOV 2015		STANDARD DRAWING NO. 3305-765C
APPROVED: _____		