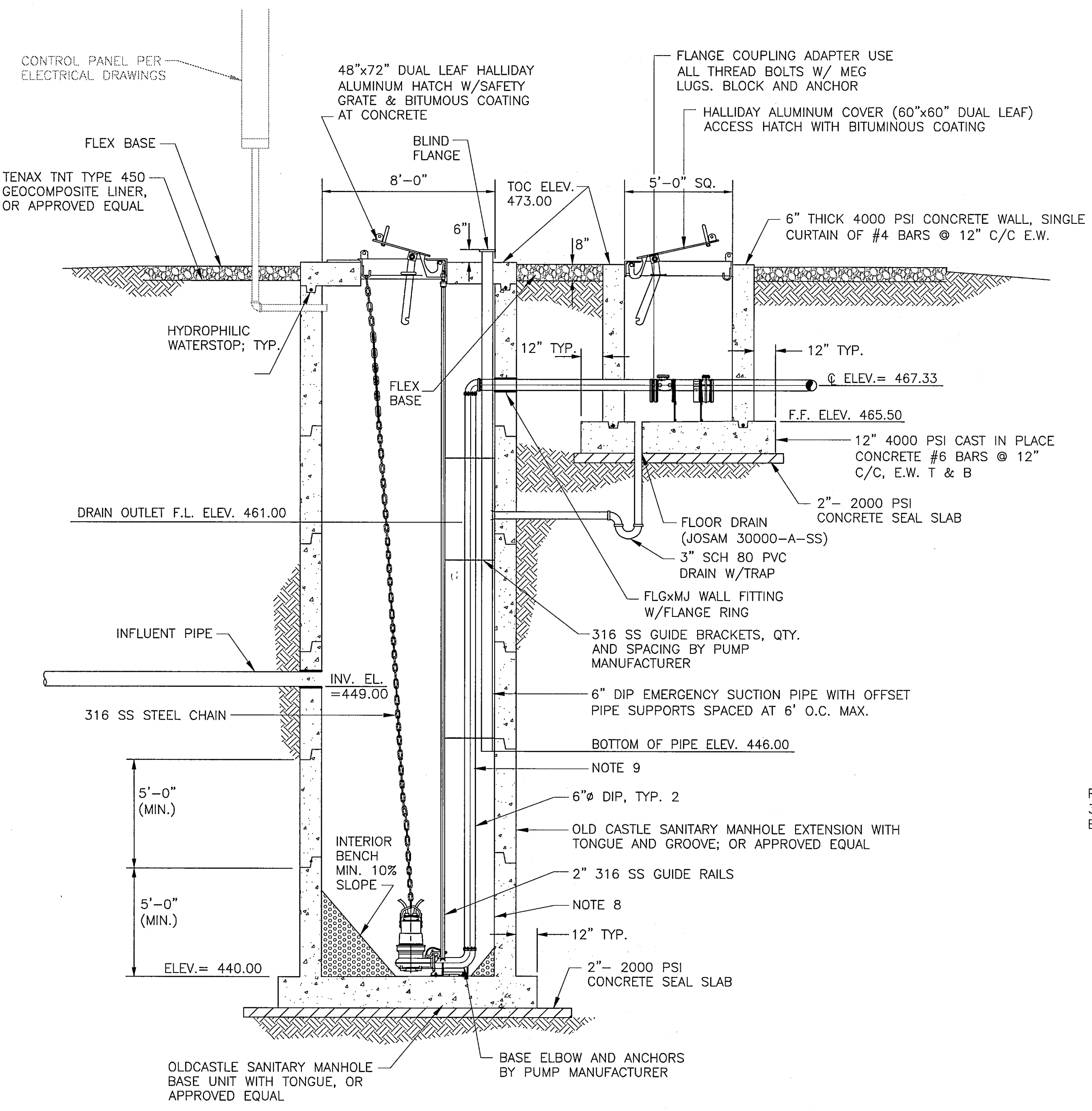


NOTES:

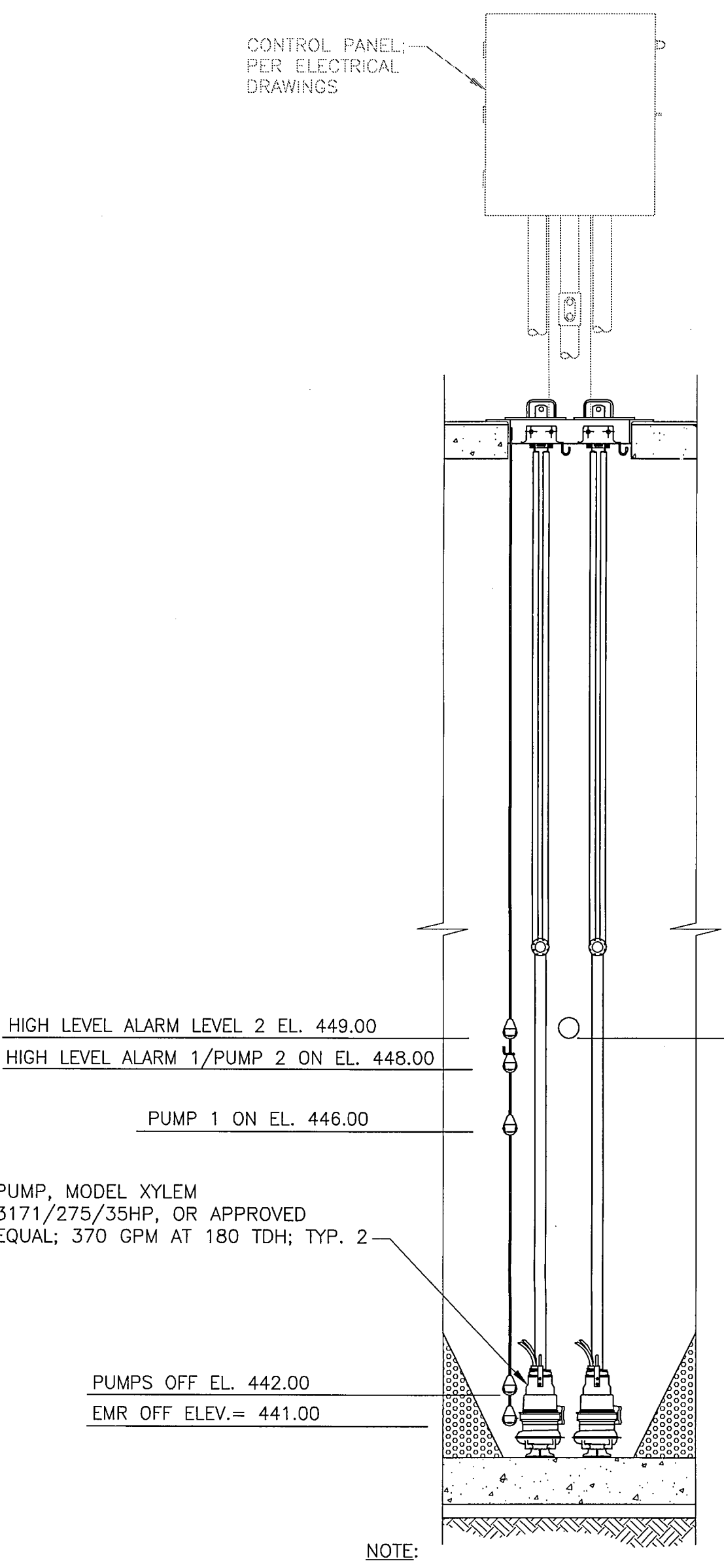
- ALL ITEMS IN VALVE BOX SHALL BE BLOCKED AND SUPPORTED AS NECESSARY.
- PUMP STATION SHALL BE MANUFACTURED FROM TYPE V PORTLAND CEMENT. ALL OTHER CONCRETE SHALL BE MANUFACTURED FROM TYPE I/II PORTLAND CEMENT.
- STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60 DEFORMED EXCEPT AT MANHOLE SECTIONS.
- MANHOLE SECTIONS:
 - MANHOLE MANUFACTURER SHALL DESIGN WALL THICKNESS AND REINFORCEMENT FOR THE SITE CONDITIONS.
 - RISER SECTION SHALL BE PER ASTM C478 (TYPE V PORTLAND CEMENT).
 - GASKETS AT JOINTS SHALL BE ASTM C443 O-RING.
 - CONNECTIONS TO GRAVITY SEWER LINE(S) SHALL CONFORM TO ASTM C923 WITH 316SS CLAMPS.
 - INTERIOR BENCH (FILLET SLOPE) SHALL BE CONSTRUCTED WITH 2000 PSI CONCRETE USING TYPE V PORTLAND CEMENT.

- BACKFILL AND COMPACTION: BACKFILL SHALL BE CONSTRUCTED OF ON-SITE CLAY SOILS PLACED IN MAXIMUM LIFTS OF 8 INCHES AND COMPACTED TO +5 TO +7% ABOVE OPTIMUM TO 92% OF STANDARD PROCTOR DENSITY. BROWN AND TAN CLAY AND MARLY CLAY SHALL BE COMPACTED AT +5 TO +7% ABOVE OPTIMUM TO 93% ASTM D698. WEATHERED MARL SHALL BE COMPACTED AT +3 TO +6% OF OPTIMUM TO 94% ASTM D98. DEEPER FILL (OVER 8 FEET BELOW FINISHED GRADE) SHALL BE COMPACTED TO +2 TO +5% ABOVE STANDARD PROCTOR DENSITY REGARDLESS OF SOIL TYPE. IF SOIL CONDITIONS DIFFER FROM THOSE EXPECTED, CONTACT ENGINEER FOR COORDINATION.
- CHECK VALVES SHALL BE AMERICAN (ACIPCO) SERIES 600 WITH LEVER AND COUNTERWEIGHT.
- PIPE SUPPORTS SHALL BE STANDON MODEL S89 OR EQUAL FLANGED PIPE SUPPORT, OR SHALL BE PER FLANGED PIPE SUPPORT DETAIL.
- AT THE CONTRACTOR'S OPTION, ALL CONCRETE COMPONENTS OF SUMP SHALL EITHER BE CAST USING CON-SHIELD ADDITIVE OR CONTRACTOR MAY COAT ALL INTERIOR EXPOSED CONCRETE AND GROUT SURFACES OF WET WELL PER NOTE ON SHEET LS-3.

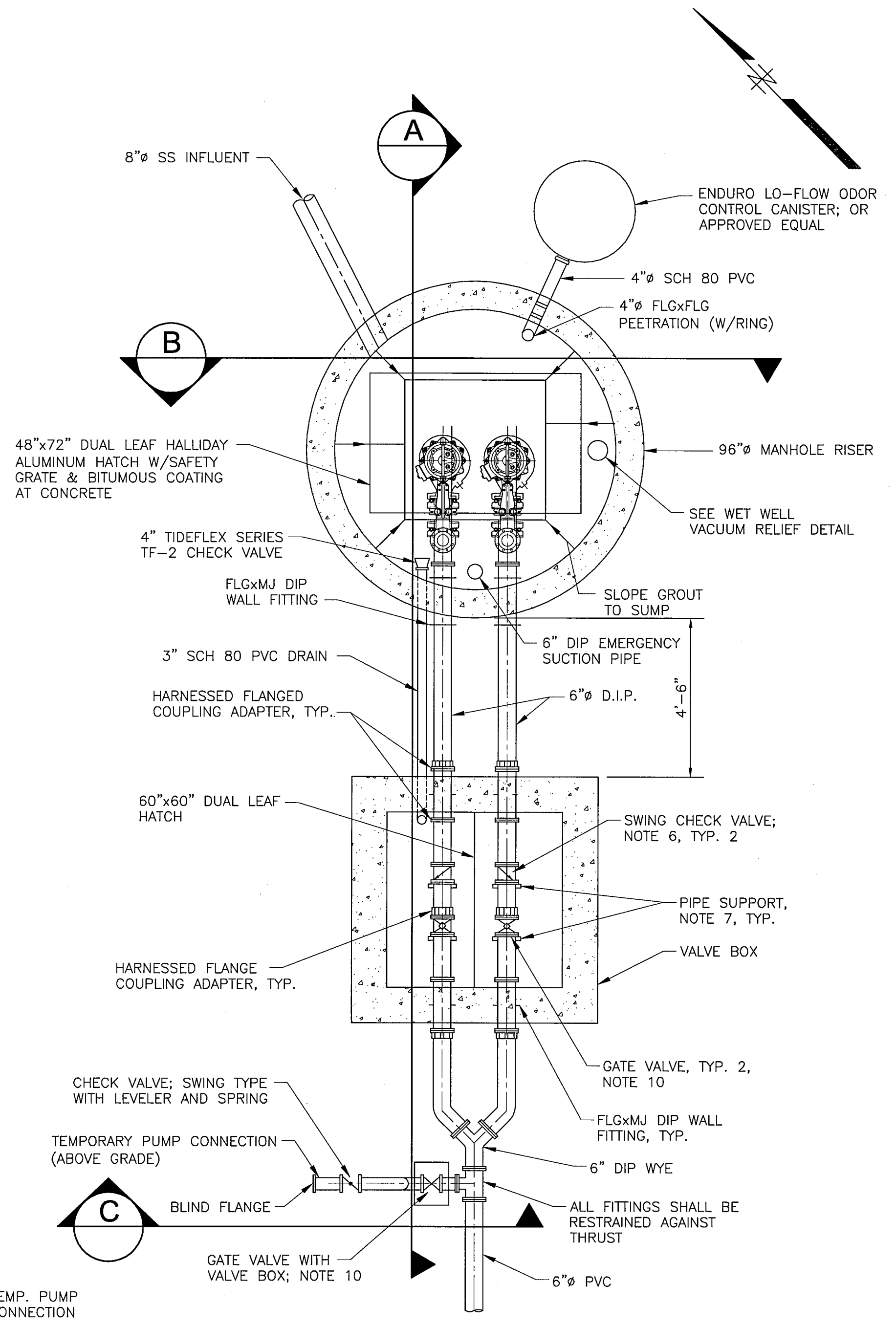
- ALL DIP PIPE WITHIN THE WET WELL AND VALVE VAULT SHALL BE COATED WITH 2 EA. LAYERS OF 6 MIL. OFT DEVOE BAR-RUST 233H HIGH PERFORMANCE EPOXY, OR APPROVED EQUAL. D.I.P. SHALL BE BE EPOXY LINED.
- INSTALL GATE VALVES WITH SHAFTS HORIZONTAL. PROVIDE HORIZONTAL TO VERTICAL GEARED OPERATOR WITH 2" OPERATOR NUT.
- ALL BOLTS, NUTS, WASHERS, ANCHOR BOLTS, FASTENERS, AND RELIEF STRAIN GRIPS SHALL BE 316SS. ANCHOR BOLT SYSTEMS SHALL BE EPOXY OR ADHESIVE TYPE BY HILTI, OR APPROVED EQUAL.



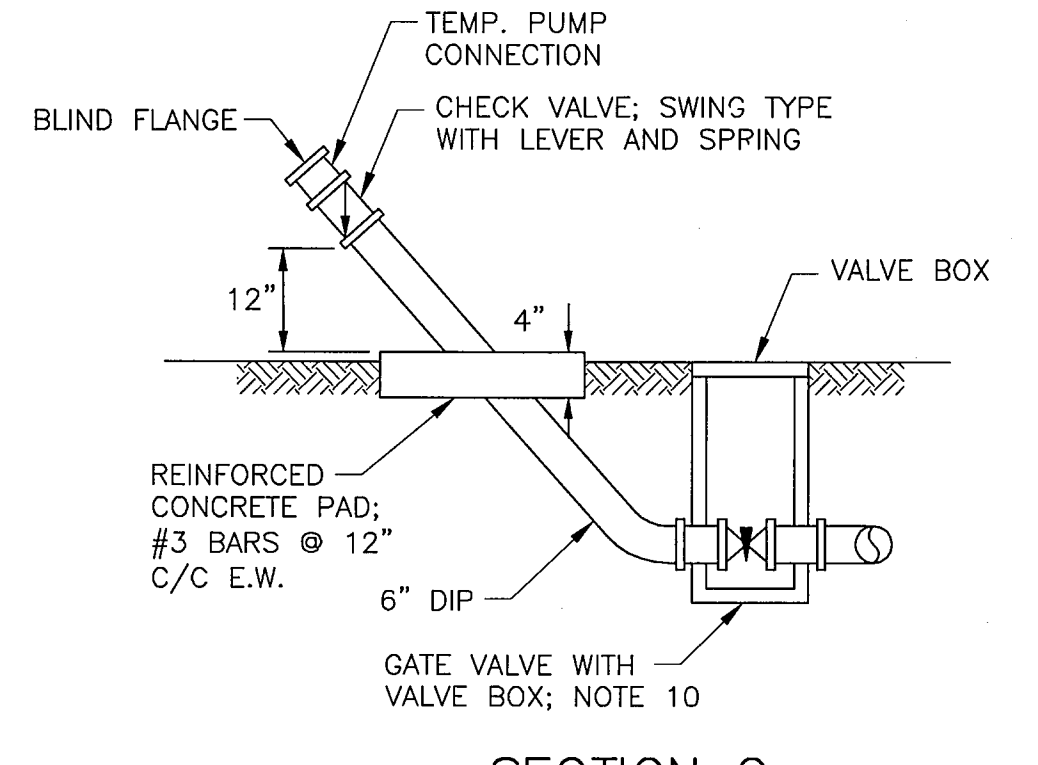
REPRESENTATIVE SECTION A
SCALE: 1/4"=1'-0"



PARTIAL SECTION B
SCALE: 1/4"=1'-0"



REPRESENTATIVE PIPING PLAN
SCALE: 3/8"=1'-0"



SECTION C
N.T.S.

BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.
ONE INCH

AS-BUILT APRIL 2014
INFORMATION PROVIDED BY CONTRACTORS
(NOT FIELD VERIFIED)

6/21/13
Professional Engineer Seal for Mark A. Perkins, No. 60329, State of Texas.

PERKINS ENGINEERING CONSULTANTS, INC.
TBPCE REGISTRATION NO. F-8699

DEVELOPMENT PLANS FOR
BREEZY HILL PHASE I
ROCKWALL, TEXAS

LIFT STATION PLAN AND SECTIONS

DRAWN BY SRG	DESIGNED BY MAP	CHECKED BY MAP	SHEET NO. LS-2
JOB NUMBER COR 12-001	DATE JUNE 2013	SCALE NOTED	