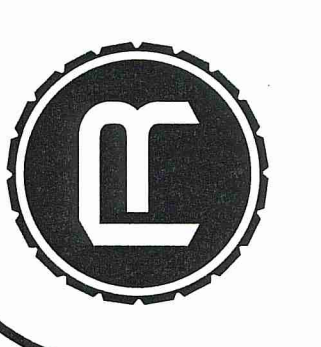




RESOURCECONSULTING
CIVIL ENGINEERING
6700 Jefferson Highway - Resource Suite 4A
Baton Rouge, Louisiana 70806
ResourceConsulting@hotmail.com
Tel: (225) 761-9909, Fax: (225) 766-6672



NICHOLSON WATER AND SEWER ASSOCIATION
INTERSTATE 59 EXIT 1 @ MS HWY 607
PEARL RIVER COUNTY, MISSISSIPPI

- NOTES:**
- ACCESS HATCH ORIENTATION SHALL BE VERIFIED WITH ENGINEER AND OWNER PRIOR TO INSTALLATION.
 - SHOP DRAWINGS TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
 - WASHED ROCK SHALL COVER ENTIRE AREA INSIDE FENCE.
 - THERE SHALL BE NO ELECTRICAL JUNCTIONS WITHIN THE WET WELL.
 - LEVEL SENSORS SHALL HAVE SUFFICIENT CABLE LENGTH TO EXTEND WITHIN 2 FEET OF WET WELL FLOOR TO ALLOW FOR FUTURE PROBE ELEVATION CHANGES. EXACT LEVEL SETTINGS WILL BE DETERMINED BY THE ENGINEER.
 - PRECAST MANHOLE AND WET WELL RING SECTIONS, BASE SECTIONS, AND FLATTOP SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478.
 - ALL ELECTRICAL PANELS/BOXES SHALL BE NEMA 4X STAINLESS STEEL.
 - CONTRACTOR SHALL PROVIDE NECESSARY SEALS IN ELECTRIC CONDUIT/WIRING TO PREVENT SEWER GAS ESCAPE INTO PANEL.
 - ALL SUPPORT BRACKETS AND ANCHOR/ASSEMBLY BOLTS INSIDE WET WELL SHALL BE 316 STAINLESS STEEL, UNLESS NOTED OTHERWISE.
 - ALL FORCE MAIN PIPE FITTINGS SHALL HAVE CONCRETE THRUST BLOCKING PER DETAIL ON UTILITY DETAIL I.
 - FLOAT SWITCHES WILL BE PRIMARY PUMP CONTROL.
 - ALL SECTIONS/JOINTS SHALL BE GROUT SEALED ON THE EXTERIOR AND INTERIOR.
 - SEE ELECTRICAL DETAILS FOR LIGHTING, PANELS, ETC.
 - CHECK VALVES SHALL BE APOLLO MODEL 61Y-210-01 OR APPROVED EQUAL.
 - THE CONTRACTOR SHALL VERIFY HATCH DIMENSIONS AND EQUIPMENT CLEARANCES PRIOR TO ORDERING ACCESS HATCHES.
 - COMBINATION AIR RELEASE/VACUUM VALVE SHALL BE MODEL D-025L AS MANUFACTURED BY ARI USA, INC, WITH REINFORCED NYLON BODY OR APPROVED EQUAL.
 - SEAL ALL PENETRATIONS PER ASTM C923.
 - CONTRACTOR SHALL COAT ALL INTERNAL SURFACES OF WET WELL AND CHANNEL GRINDER MANHOLE PER ASTM D7234 (RAVEN 405 LINING SYSTEM OR APPROVED EQUAL).
 - IN THE EVENT OF A POWER OUTAGE, THE OWNER WILL PROVIDE EMERGENCY BYPASS PUMPING.

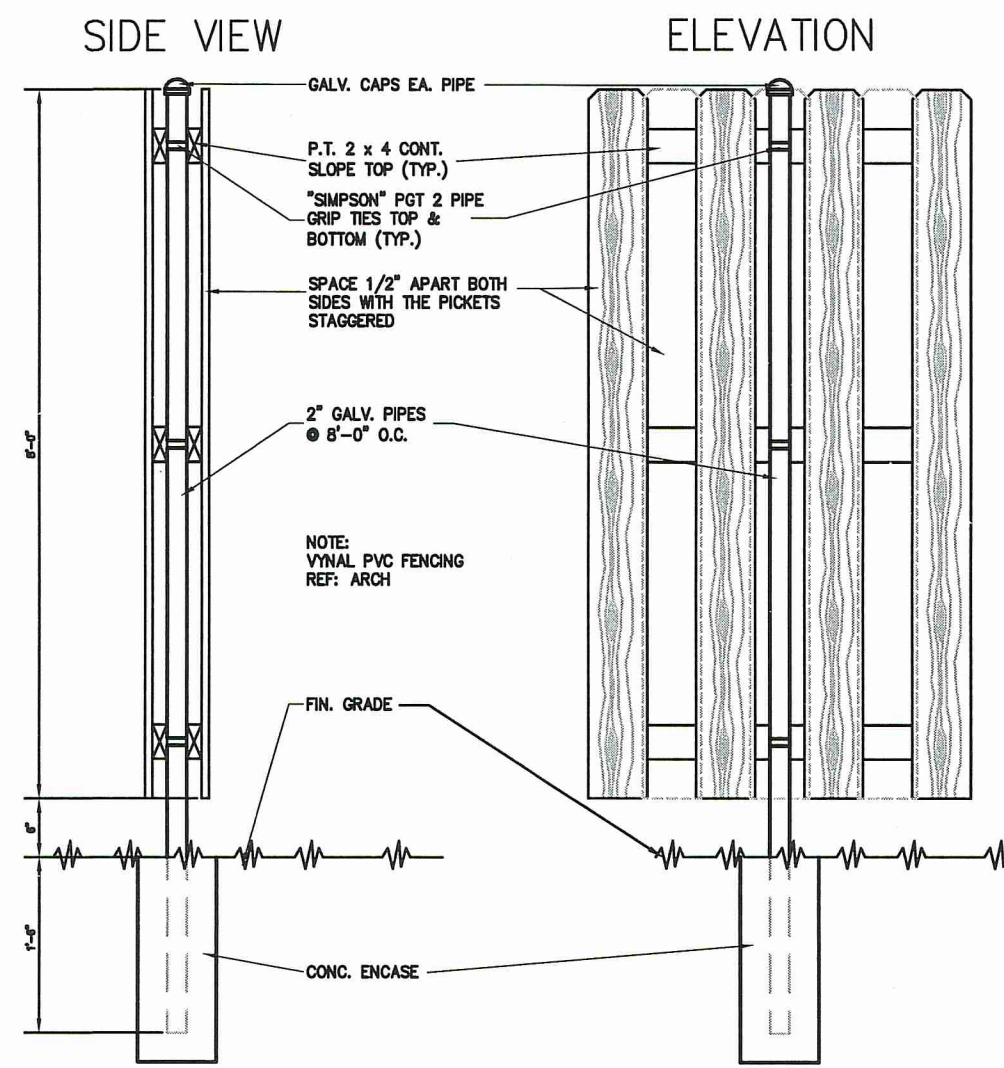
- CHOPPER PUMP STATION: ITEMS PROVIDED BY LOVES**
- TWO (2) ENGINEERED PUMP LLC SUBMERSIBLE CHOPPER PUMPS HP, RPM 208/3/60 WITH 35' POWER/CONTROL CABLE AND " DISCHARGE
 - TWO (2) " PUMP BASE ELBOWS WITH 4"x3" FL ECCENTRIC REDUCERS
 - TWO (2) 304SS UPPER GUIDE RAIL BRACKETS
 - TWO (2) PUMP LIFT CHAINS 304SS
 - ONE (1) NEMA 4 DUPLEX PLC CONTROL PANEL WITH REQUIRED STANDARDIZED COMPONENTS TO INCLUDE BUT NOT BE LIMITED TO DEAD FRONT WITH INNER SWING DOOR, NEMA STARTERS/OVERLOADS WITH RESET PUSHBUTTONS, CIRCUIT BREAKERS/DISCONNECTS, REQUIRED ETHERNET PLC, LIGHTNING ARRESTOR, PHASE MONITOR, HOA SWITCHES, ELAPSED TIME METERS, ALARM LIGHT/HORN ASSEMBLY WITH ALARM SILENCE PUSHBUTTON, DUPLEX RECEPTACLE, PUMP ALTERNATION SWITCH, REQUIRED RELAYS, LABELS, ETC.
 - FOUR (4) FLOAT SWITCHES WITH TRANSDUCER BACKUP SYSTEM
 - PLC BASED CONTROLLER WITH WIFI ALARM SERVICE

- ITEMS PROVIDED BY GC (BUT ARE NOT LIMITED TO):**
- PIPING/VALVES/FITTINGS
 - SS ANCHOR BOLTS
 - GRINDER PUMP GUIDE RAILS. REQUIRED GUIDE RAILS TO BE 1.5" SCH40 304SS
 - CONTROL PANEL MOUNT RACK/POLE
 - WIRE/CONDUIT/JUNCTION BOXES/EXTERNAL DISCONNECTS
 - GENERATORS/AUTOMATIC TRANSFER SWITCH IF APPLICABLE
 - CONCRETE WETWELL
 - INSTALLATION
 - ACCESS HATCHES/LADDERS
 - PORTABLE PUMP BYPASS CONNECTION

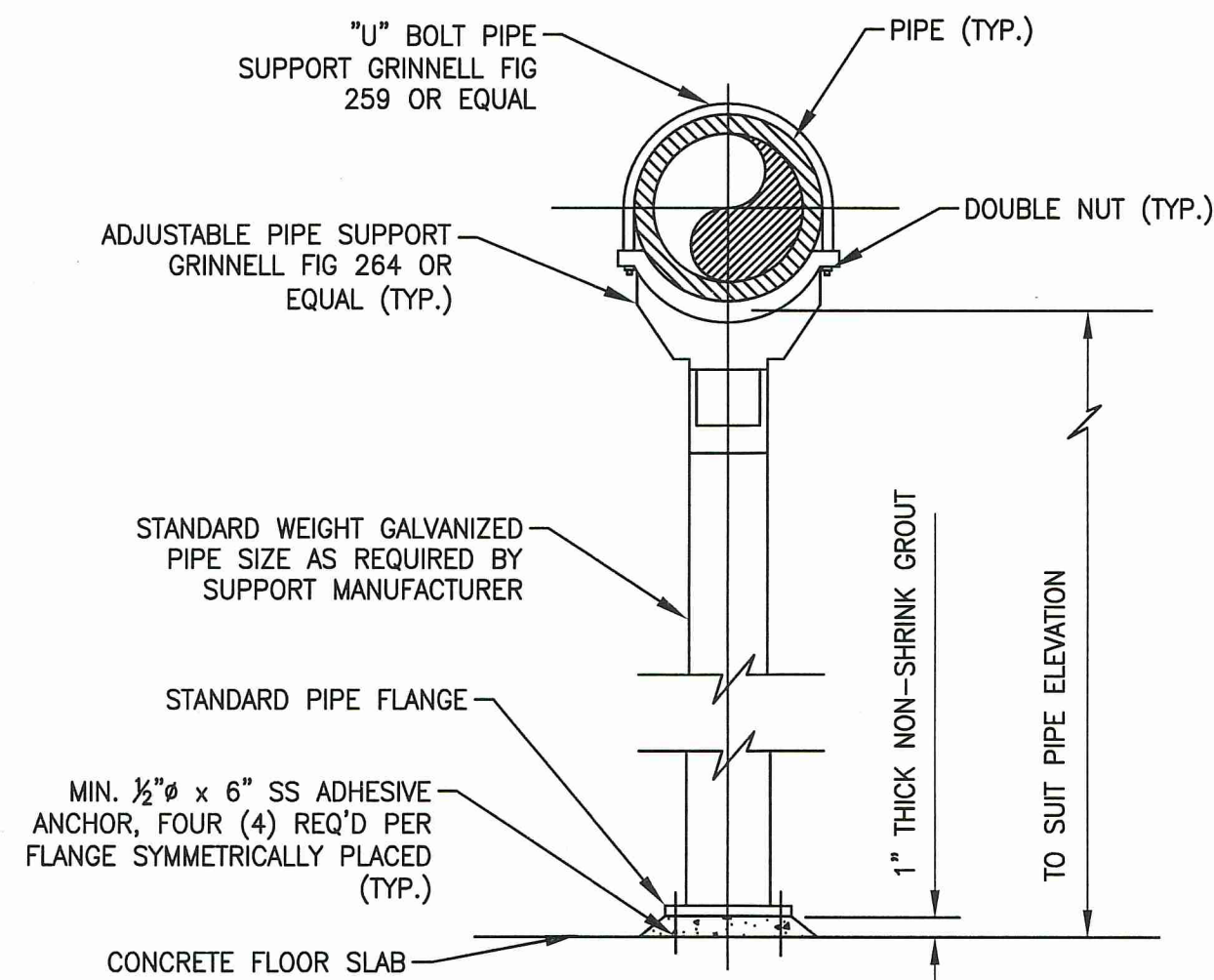
- CONSTRUCTION SEQUENCE/ PRE START UP CHECK LIST:**
- EXCAVATE & SET ALL CONCRETE STRUCTURES INCLUDING WETWELL, VALVE VAULT, MANHOLE, AND STRUCTURE LIDS W/ REQUIRED ACCESS HATCHES.
 - INSTALL ALL REQUIRED PIPING/ VALVES/ FITTINGS INSIDE WETWELL, VALVE VAULT, AND BETWEEN CONCRETE STRUCTURES.
 - CONNECT SUCTION AND DISCHARGE LINES TO/ FROM STATION.
 - INSTALL SUBMERSIBLE PUMP (S) GUIDE RAILS SYSTEMS INCLUDING BASE ELBOWS, UPPER GUIDE RAIL BRACKETS, AND GUIDE RAILS.
 - MOUNT PUMP CONTROL PANELS ON AN ELECTRICAL RACK OR POLE
 - MOUNT REQUIRED DISCONNECTS AND POWER DISTRIBUTION PANEL.
 - WIRE AND CONDUIT SITE POWER TO THE DISTRIBUTION PANEL. WIRE AND CONDUIT BETWEEN THE ELECT. PANELS AS REQUIRED.
 - SET PUMPS AND SEWER CHEWER. WIRE TO THE RESPECTIVE CONTROL PANELS. CONDUIT SIZE FOR PUMP CABLES IS MIN. 1" PER PUMP. CONDUIT SIZE FOR CHANNEL GRINDER IS MIN. 1"
 - SET PUMP FLOAT SWITCHES. WIRE TO THE RESPECTIVE CONTROL PANEL. CONDUIT SIZE FOR ALL FLOAT SWITCHES IS MIN. 1"
 - VERIFY WATER IS AVAILABLE SO EACH PUMP CAN BE RUN/ TESTED.
 - SCHEDULE SYSTEM START UP AND COMMISSIONING WITH FACTORY REP.
 - REQUIRE A MINIMUM OF 10 DAY NOTICE IN ORDER TO COORDINATE BEING ON SITE.
- CALL FOR START UP:**
ENGINEERED PUMPS LLC
586 741 9128 24/7
800 528 4154

EQUIPMENT SCHEDULE	
1	3" SCH. 80 PVC 90° BEND
2	3" SCH. 80 PVC NPT TEE
3	3" PLUG VALVE
4	3" NPT CHECK VALVE (SEE NOTE 14)
5	3" x 1 1/2" SCH. 80 PVC REDUCER
6	3" FNPT x M QUICK DISCONNECT ADAPTER
7	3" NPT AIR RELEASE VALVE (SEE NOTE 16)
8	3" SCH. 40 PVC 90° BEND
9	3" x 4" SDR 26 PVC REDUCER
10	4" PVC SDR 26

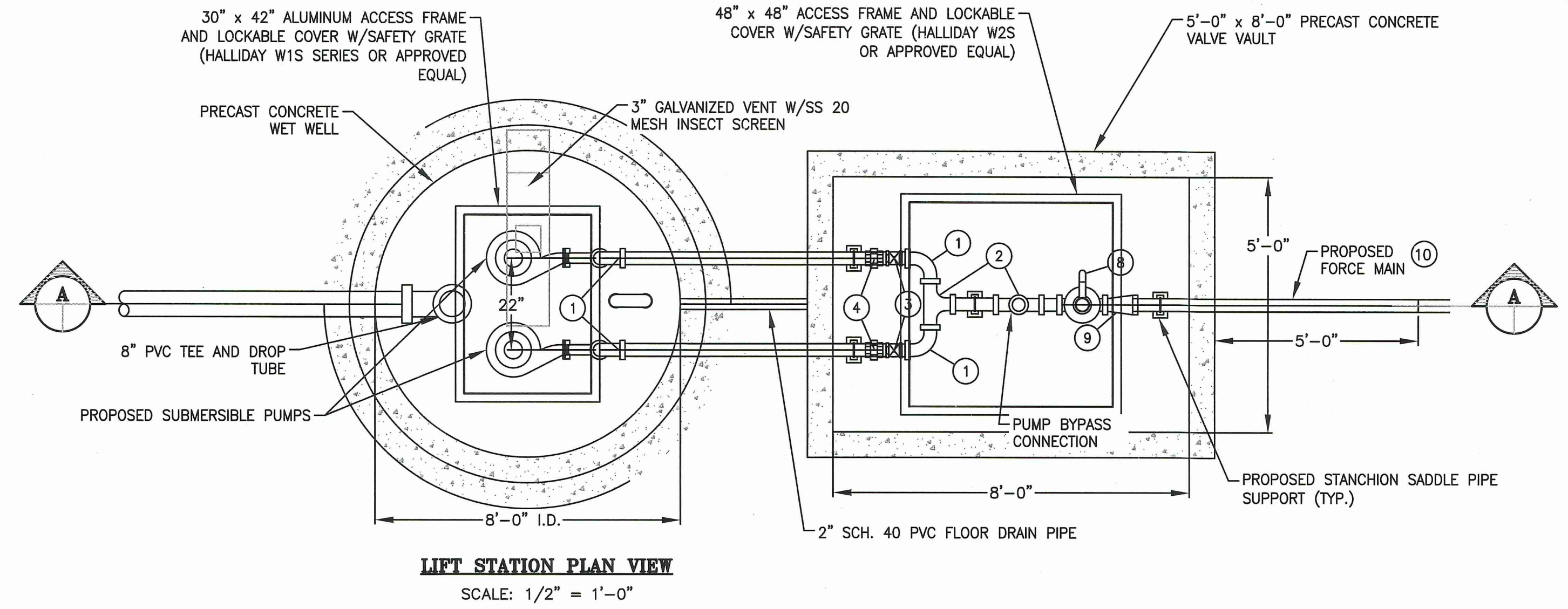
ELEVATIONS CONTROLS	
11	TOP OF MANHOLE, WET WELL, AND VALVE BOX ELEVATION = 35.25
12	FORCE MAIN INVERT OUT OF WET WELL ELEVATION = 29.33
13	SAN SEWER INVERT INTO WET WELL ELEVATION = 29.00
14	ALARM ELEVATION = 27.50
15	LAG PUMP ON ELEVATION = 27.00
16	LEAD PUMP ON ELEVATION = 26.50
17	ALL PUMPS OFF ELEVATION = 19.36
18	BASE INVERT ELEVATION = 16.86
19	STATION HEIGHT = 18.39



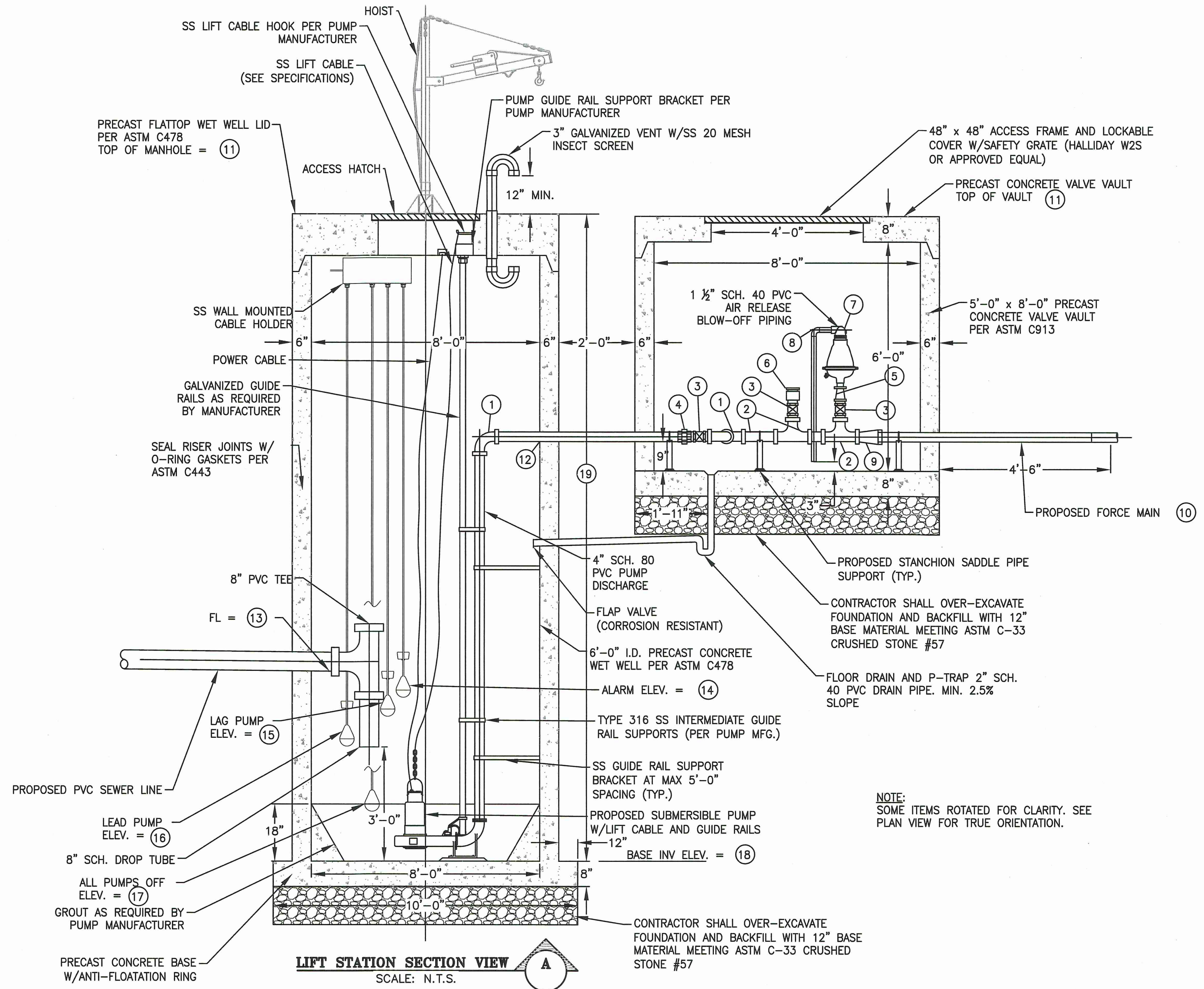
PVC VINYL FENCE DETAIL
SCALE: N.T.S.



STANCHION SADDLE PIPE SUPPORT DETAIL
SCALE: N.T.S.



LIFT STATION PLAN VIEW
SCALE: 1/2" = 1'-0"



LIFT STATION SECTION VIEW
SCALE: N.T.S.



THIS DRAWING IS NOT VALID WITHOUT AN ORIGINAL BLUE INK SIGNATURE AND ORIGINAL HANDWRITTEN DATE OF A LICENSED PROFESSIONAL ENGINEER.

LIFT STATION DETAILS

U3.2



Know what's below.
Call before you dig.