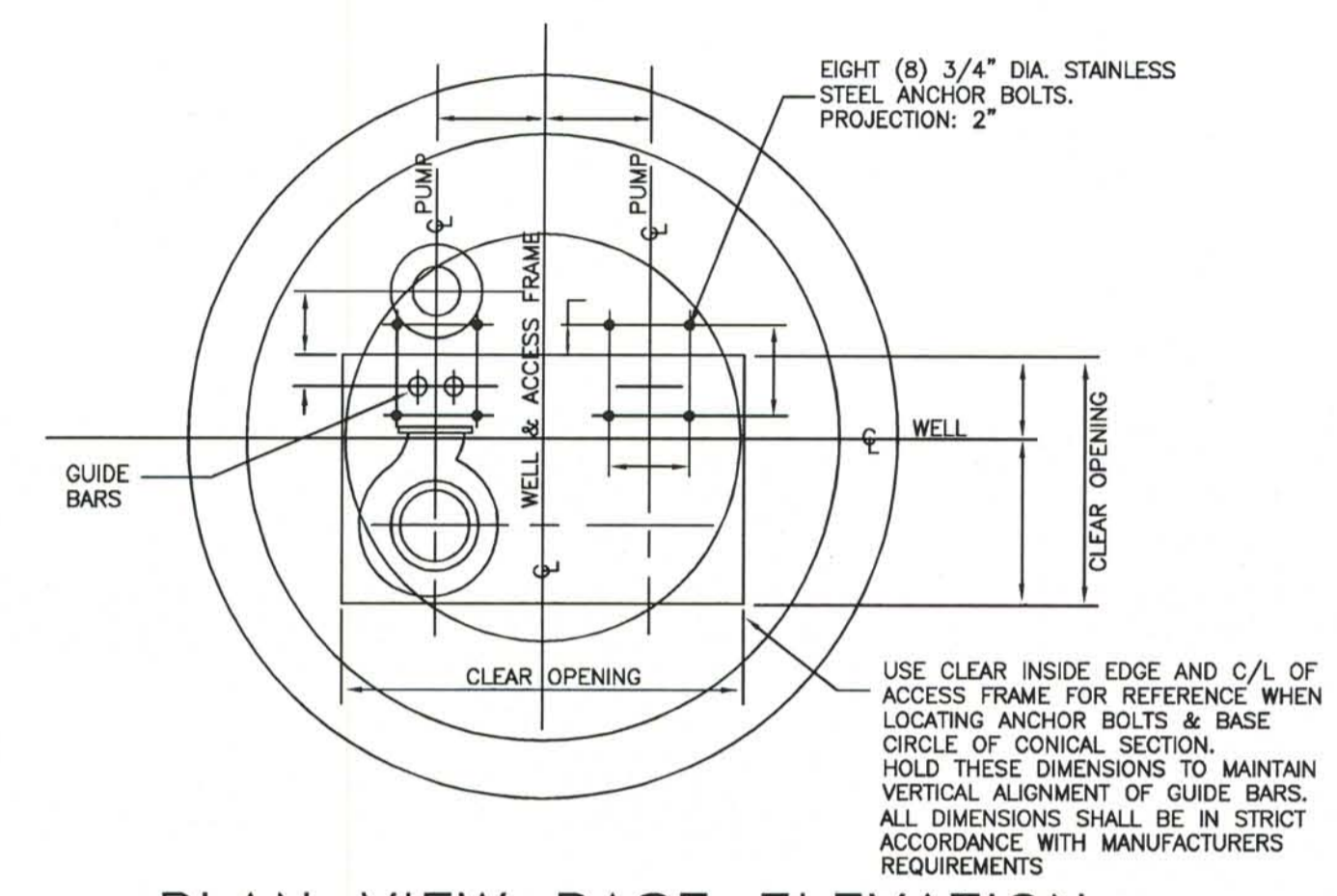
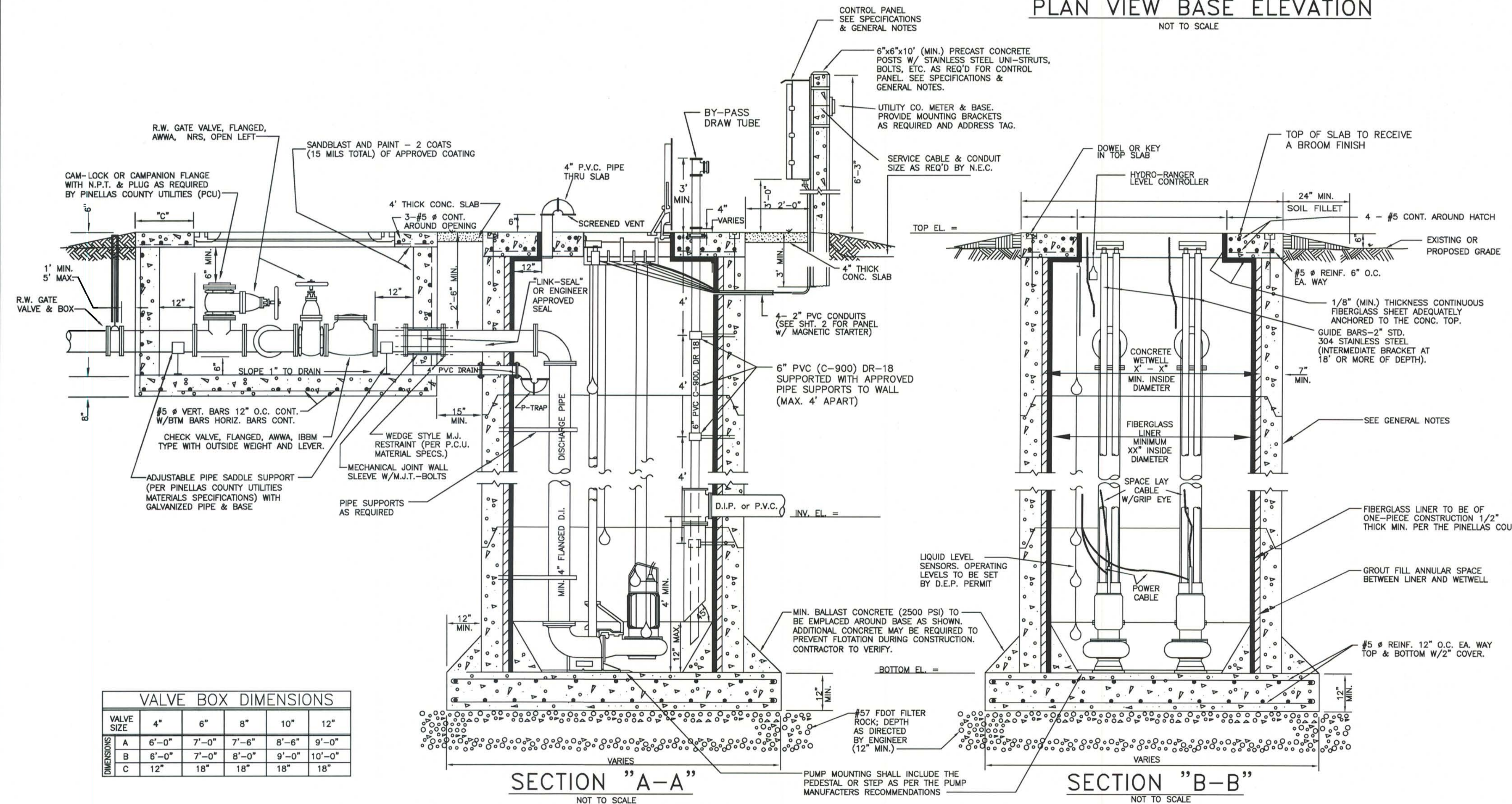


PLAN VIEW GRADE ELEVATION
NOT TO SCALE

PUMP STATION EQUIPMENT									
STATION NO.	PUMP H.P.	NO. OF PUMPS	VOLTS	PUMP AMPS	TOTAL AMPS	MANUFACTURER CATALOG NUMBER	IMPELLER NUMBER	G.P.M.	T.D.H.



PLAN VIEW BASE ELEVATION
NOT TO SCALE



VALVE BOX DIMENSIONS					
VALVE SIZE	4"	6"	8"	10"	12"
A	6'-0"	7'-0"	7'-6"	8'-6"	9'-0"
B	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
C	12"	18"	18"	18"	18"

NOTES OF ULTRASONIC LEVEL CONTROLLER (DUPLEX)

- BY USING ULC CONTACTS IN PARALLEL WITH FLOATS, THE RELAY LOGIC IN THE PANEL WILL PROVIDE LATCHING CIRCUITS FOR PUMPING LEVEL RANGE.
- THE PUMPS WILL ALTERNATE BY MEANS OF THE RELAY LOGIC AND PANEL ALTERNATOR.
1. THE LEAD PUMP IS CALLED TO RUN BY OUTPUT ULC-2, WHICH IS IN PARALLEL WITH THE LEAD FLOAT.
 2. THE LAG PUMP IS CALLED TO RUN BY OUTPUT ULC-3, WHICH IS IN PARALLEL WITH THE LEAD FLOAT.
 3. BOTH PUMPS WILL SHUT OFF WHEN OUTPUT ULC-1 IS DE-ENERGIZED. ULC-1 IS IN PARALLEL WITH THE OFF FLOAT.
 4. THE LEVEL ALARM IS ACTIVATED BY OUTPUT ULC-4, WHICH IS IN PARALLEL WITH THE ALARM FLOAT.

NOTES OF ULTRASONIC LEVEL CONTROLLER (TRIPLEX)

1. FOR NORMAL OPERATION, ONLY TWO OF THE THREE PUMPS WILL EVER OPERATE AT ONE TIME.
2. THE LEAD PUMP IS CALLED TO RUN BY INPUT ULC-2, WHICH IS A DIRECT INPUT TO THE THREE PUMP ALTERNATOR.
3. ALTHOUGH ONLY TWO PUMPS CAN RUN AT ANY GIVEN TIME, THE CONTROL PANEL WILL BE DEVELOPED TO ALTERNATE THROUGH ALL THREE PUMPS.
4. THE LAG TIME IS CALLED BY OUTPUT ULC-3, WHICH IS FED BY TIME DELAY RELAY TDR-1.
5. TDR-1 GIVES THE LAG PUMP THE TIME DELAY BETWEEN STARTING OF THE LEAD AND LAG PUMPS, AND TDR-1 HAS A SETTING TO BE SET AT START-UP TIME.

GENERAL NOTES

1. CONTROL PANEL SHALL BE LOCATED ADJACENT TO WET WELL RAISED HATCH DOOR.
2. WATER SERVICE SHALL BE PROVIDED AND LOCATED AT THE CONTROL PANEL WITH A HOSE BIB AND BACKFLOW PREVENTOR.
3. A REMOVABLE GAS SEAL SHALL BE INSTALLED IN WIRING CONDUIT AT WETWELL AND TERMINAL STRIP JUNCTION BOX. CONDUIT FROM JUNCTION BOX TO CONTROL PANEL SHALL BE COMPLETELY SEALED.
4. ALL NUTS AND BOLTS ON PIPING WITHIN VALVE BOX AND WETWELL SHALL BE 304 STAINLESS STEEL.
5. ALL WETWELL PIPING SHALL BE 1 PIECE FLANGED DUCTILE IRON PIPE.
6. FOR EXCAVATIONS GREATER THAN 20 FEET DEPTH, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AN "EXCAVATION DESIGN" PREPARED BY A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH FLORIDA'S "TRENCH SAFETY ACT".
7. TOP AND BOTTOM SLAB AND REINFORCEMENT TO BE PER THE ENGINEER.
8. REINFORCED CONCRETE PIPE ASTM TABLE II, WALL B, TO HAVE TONGUE AND GROOVE JOINTS. ALL JOINTS TO BE SEALED WITH JOINT SEALING COMPOUND SUCH AS RAM-NECK INCLUDING A DRIED COAT OF PRIMER, DO NOT APPLY MORTAR RAM-NECK PRIMER.
9. A STILLING WELL SHALL BE UTILIZED, AS DETERMINED BY THE ENGINEER & PINELLAS COUNTY UTILITIES ENGINEERING, WHEN THE INFLUENT FLOW DISRUPTS PROPER PUMP OPERATION.

