

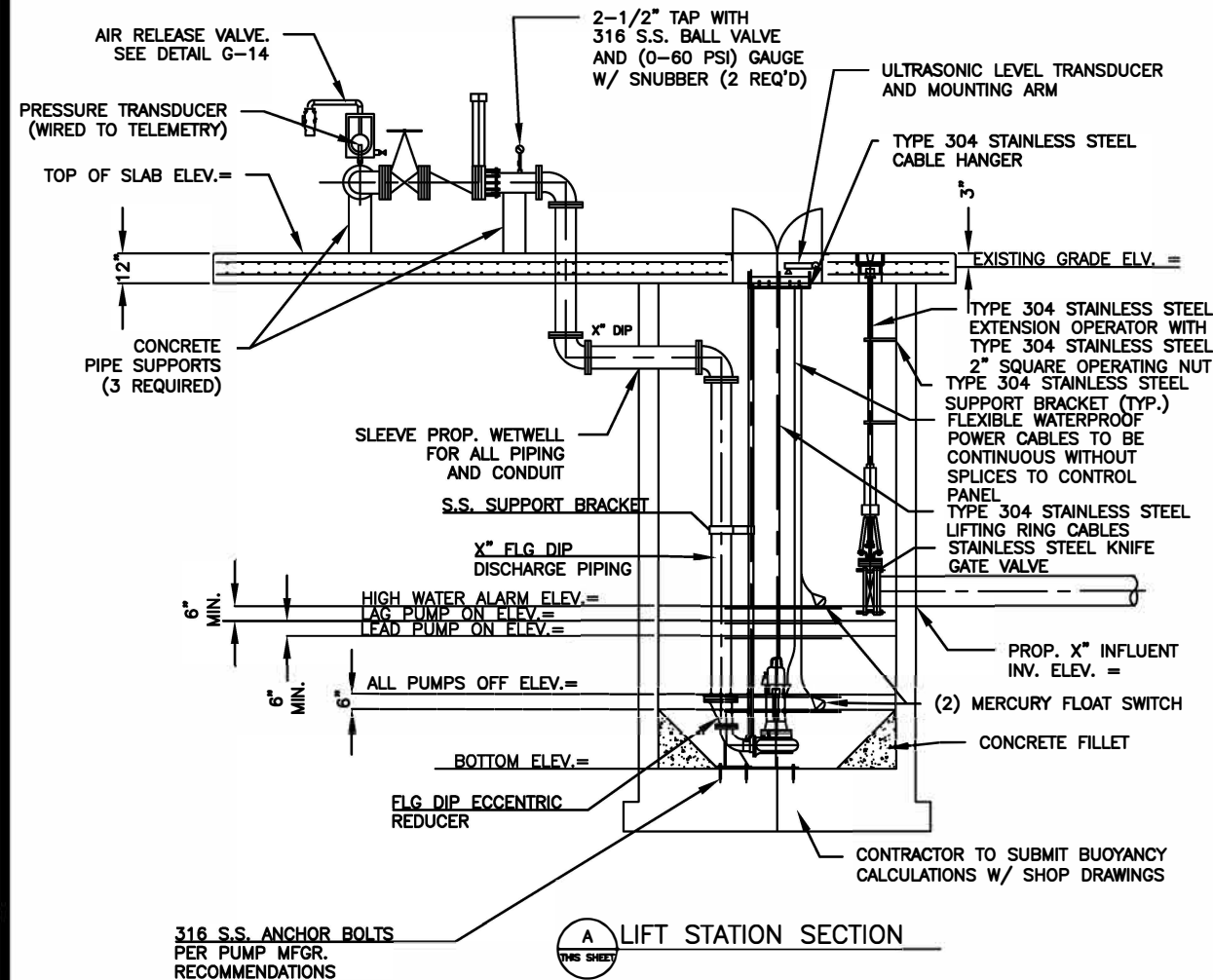
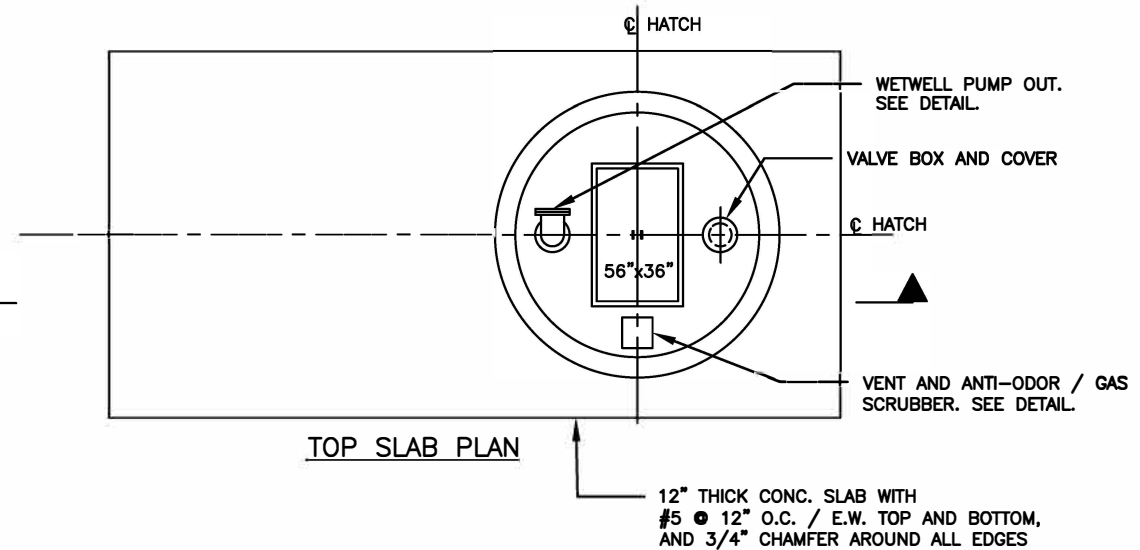
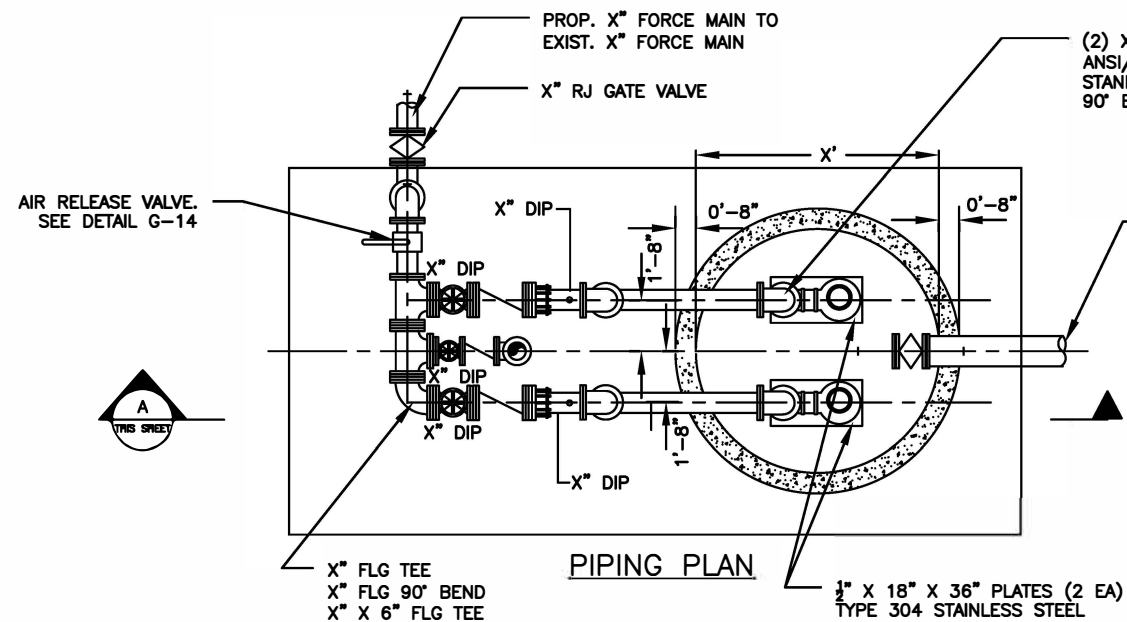


DATE: 08/24

DRAWN: KHA

STANDARD LIFT STATION
WETWELL AND VALVE VAULT

M-1



GENERAL NOTES:

PIPE DIAMETERS, STRUCTURE SIZES, SLAB DIMENSIONS, HATCH SIZES, ETC. ON THE DETAIL MUST BE ADJUSTED ON A PROJECT-BY-PROJECT BASIS.

1. ALL CONSTRUCTION SHALL CONFORM TO THE FLORIDA BUILDING CODE, LATEST REVISION.
2. THE CONTRACTOR SHALL VERIFY ALL INFORMATION SHOWN PRIOR TO CONSTRUCTION AND ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
3. CONCRETE SHALL NOT HAVE LESS THAN 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. PRECAST CONCRTE SHALL BE 4000 PSI CLASS II MINIMUM. REINFORCING STEEL SHALL CONFORM TO ASTM SPEC. A-615 AND SHALL BE DEFORMED ACCORDING TO ASTM SPEC. 305. ALL PIPE OPENINGS SHALL BE CAST AT TIME OF FABRICATION.
4. DUCTILE IRON PIPE SHALL BE AWWA C151, CLASS 350, CERAMIC EPOXY COATED WITH PROTECTO 401 CERAMIC EPOXY LINING.
5. DUCTILE IRON FITTINGS SHALL BE AWWA C110/C153, FLANGED JOINTS, OR RESTRAINED JOINTS WITH MEGALUGS, CERAMIC COATED WITH PROTECTO 401 CERAMIC EPOXY LINING.
6. FOLLOW ALL PROCEDURES FOR SEALING CUT ENDS AND REPAIRING FIELD DAMAGED AREAS OF PROTECTO 401 CERAMIC EPOXY LINED PIPES AND FITTINGS.
7. SEWAGE PUMPS SHALL BE DUPLEX SUBMERSIBLE.
8. SHOP DRAWINGS FOR THE COMPLETE LIFT STATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO DELIVERY TO THE JOB SITE.
9. FOUR (4) HARD COPIES AND DIGITAL COPY OF OPERATION AND MAINTENANCE MANUAL ARE TO BE SUBMITTED TO THE CITY AFTER ENGINEER'S APPROVAL.
10. OPENINGS AROUND ALL PIPES SHALL BE SEALED WITH EMBECO MORTAR.
11. ALL UNSUITABLE MATERIAL SHALL BE REMOVED WITHIN THE LIMITS OF CONSTRUCTION.
12. OUTSIDE OF NEW WETWELL AND NEW VALVE BOX SHALL BE COATED WITH COAL TAR EPOXY.
13. INSIDE OF WETWELL, AND VALVE BOX SHALL BE COATED WITH APPROVED COATING SYSTEM.
14. GATE VALVES SHALL BE RESILIENT SEAT, EPOXY COATED.
15. CHECK VALVES SHALL BE IRON BODY, EPOXY COATED, BRONZE MOUNTED, SWING CHECK, LEVER AND WEIGHT.
16. ELECTRICAL PANEL SHALL BE A NEMA 4X STAINLESS STEEL ENCLOSURE, UL LABEL. ALL CONTROL WIRING TO HAVE WIRE NUMBERS. (CITY WILL PROVIDE MANUFACTURER SPECIFICATIONS FOR THE ELECTRICAL PANEL AND TELEMTRY)
17. MOTOR STARTERS, CIRCUIT BREAKERS, AND ELECTRICAL CONTROL DEVICES SHALL BE SIZED PER NEC CODE. (CITY WILL PROVIDE MANUFACTURER SPECIFICATIONS FOR THE ELECTRICAL PANEL AND TELEMTRY)
18. ELECTRICAL PANEL MUST HAVE A STORAGE COMPARTMENT INSIDE PANEL DOOR FOR OPERATION AND MAINTENANCE MANUAL.
19. ELECTRICAL SYSTEM SHALL BE PROTECTED BY A LIGHTNING ARRESTOR AND SURGE CAPACITOR.
20. POWER TOOL OUTLET TO BE MOUNTED IN DEAD FRONT AND MUST BE A GFI RECEPTACLE.
21. SEAL-OFFS TO BE PROVIDED ON ALL ELECTRICAL CONDUITS ENTERING CONTROL PANEL FROM WETWELL.
22. ALL PIPE SUPPORTS, CLAMPS, AND FASTENERS IN THE WETWELL AND VALVE BOX SHALL BE TYPE 304 STAINLESS STEEL. ALL BOLTS, NUTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL (UNLESS OTHERWISE NOTED).
23. PUMPS TO HAVE STAINLESS STEEL PLATE IDENTIFICATION.
24. ALL CABLES, WIRES, CORDS, ETC. IN WETWELL SHALL BE PROTECTED BY STAINLESS STEEL BRAIDED SLEEVING FOR THEIR ENTIRE LENGTH. SLEEVING SHALL ACHIEVE ASTM G-21 RATING 0 OR 1 AND HAVE A TENSILE STRENGTH OF 125,000 PSI OR GREATER PER ASTM D-2256.
25. WHEN DESIGNING FUTURE STATIONS, WET WELL SHOULD BE IN LINE WITH GATE FOR QUICK CRANE ACCESS TO PULL PUMPS OUT.
26. JUNCTION BOXES (2) SHALL BE ADDED BETWEEN WET WELL AND CONTROL PANEL. (1) FOR POWER AND (1) FOR CONTROLS.
27. ALL WET WELLS SHALL HAVE FALL PROTECTION SYSTEMS INSTALLED INCLUDING GRATING, POLES, RAILING, ETC.

LIFT STATION DATA TABLE

PUMP MANUFACTURER	
PUMP MODEL NUMBER	
PUMP IMPELLER, DIA. IN.	
QUANT OF PUMPS PER STATION	
DESIGN FLOW, G.P.M.	
DESIGN TDH, FEET	
MAX DESIGN FLOW, G.P.M.	
MAX DESIGN TDH, FEET	
SHUT OFF HEAD, FEET	
MOTOR MODEL NUMBER	
MAX MOTOR SPEED, R.P.M	
MIN MOTOR HORSEPOWER, H.P.	
MIN MOTOR SERVICE FACTOR	
ELECTRICAL SERVICE	