

PUMP STATION GENERAL NOTES

1. Contractor shall take necessary precautions against floatation of wet well until all backfill is in place.
2. All concrete shall be class A-A (4,000 PSI for precast and 3,000 PSI for cast-in-place) unless otherwise specified.
3. Reinforcing steel shall be grade 60 fabricated and placed in accordance with ACI code splices and shall be six (6) times the bar diameter number size or 18" minimum unless otherwise noted (STAG. SPL., TYP).
4. All backfill around the pump station site shall be compacted @ 98% of maximum density, per AASHTO-T-180.
5. Chamfer exposed concrete edges 3/4" (TYP).
6. Wetwell wall shall contain a minimum of .022 sq in/linear foot reinforcement, each way top to bottom.
7. All piping at the pump station site shall be restrained.
8. All Pumps and Pumping Equipment - See IRCDUS Approved Manufacturers' Product List.
9. Stainless steel (316) cable holder shall be located on opposite side of wetwell from the influent pipe.
10. Buoyancy calculations shall be required for all pump stations along with the required pump station calculations.
11. No uni-flange pipe connections allowed.
12. Maintain minimum of 6" between any piping, fittings etc. and precast concrete.
13. Fiberglass liners shall be installed on all pump station wetwells and manholes receiving pumped sewage, plus 5 manholes in each direction.
14. All new manholes shall be coated per IRCDUS Approved Manufacturers' Product List.
15. Pump station control panel shall be provided with appropriate lightning arrestor. Verify all driven grounding grids per N.E.C. 250.56 and SCADA (latest standards).
16. An access drive shall be provided to all IRCDUS maintained lift stations. All access drives shall be a minimum of 12' wide. If fence is installed, gate shall have a 12' opening.
17. All proposed private station owners are to sign an agreement acknowledging station is to remain private unless subject station is constructed to IRCDUS standards.
18. Pumps shall be designed to provide a minimum pump run time equal to half the cycle time.
19. Pumps shall be designed to provide a maximum clearance of ten feet outside of lift station wetwell for future maintenance.
20. All re-pump stations shall have bio-cube odor control systems as required by manufacturer, and approved by IRCDUS.
21. Lift Station is to be located in a dedicated utility easement, 200' away from homes, cul-de-sacs and surface body water.
22. A safety grate with stainless steel (316) hardware is required for all wetwells.
23. Contractor to install permanent signage with contact information and phone number at all IRCDUS and private lift stations. Contractor to provide security for private lift stations per IRCDUS plans review. Security to include, but not limited to, lockable hatch cover lids for the wetwell and valve pit.
24. Contractor to contact IRCDUS inspector prior to pump station construction.
25. See Drawing S-14 Plan View and S-15 Typical Pumping Station cross section. See Drawing S-16 for Typical Pumping Station general layout and driveway. See S-17, S-18 and S-19 for electrical details.
26. Structure dimensions may vary upon approval by the IRCDUS due to buoyancy compensation or other requirements.
27. Gate valve to be located at force main junction.
28. Stainless steel (316) lifting bails shall be used for pumps in lift stations.
29. Grinder pumps shall be a maximum of 5.0 HP unless otherwise approved by IRCDUS.
30. Electrical control panel shall conform to pump manufacturers' & SCADA system requirements.
31. Liner for all wet wells shall be HDPE or fiberglass.
32. All wet wells 15' deep or greater than 10' diameter must be approved by IRCDUS engineering.
33. Outside walls and underside of wetwell top slab and valve box shall be painted with (2) two coats of water base epoxy.
34. All hardware to be 316 stainless steel.
35. Pump station power supply from Florida Power & Light and City of Vero Beach electric power pole or transformer to the pump station electric panel shall be included on the Record Drawing.
36. Paint outside of walls, underside of wetwell top slab and valve vault with two coats of water base epoxy.

REFER TO SECTION 10
SUBMERSIBLE WASTEWATER
PUMPING STATION

-ART-

INDIAN RIVER COUNTY
DEPARTMENT OF
UTILITY SERVICES



TYPICAL WASTEWATER
PUMPING STATION
GENERAL NOTES

MARCH 2018

DRAWING
NO.

S-20