



APPENDIX D: PUMP STATION CONTROL AND SCADA REQUIREMENTS



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I PURPOSE

To establish the requirements for the Pumping Station Controls, SCADA requirements, and the associated Control Cabinet.

II PRE-APPROVED PRODUCTS

A. Cabinets, SCADA Control, and Instrumentation

The Hillsborough County Standard Pump Station Electrical and Mechanical drawings found on the Hillsborough County website ([Hillsborough County, FL - Official Website - Standard Pump Station Drawings](#)) must be used when designing a Hillsborough County Pump Station.

B. Control and Instrumentation Appurtenances

For items not listed on the pre-approved products list found in Appendix B or on the Electrical Bill of materials use the following pre-approved products.

1. Level Detection Float Switches (hermetically sealed with extra hard usage flexible cords) L1, L2, L3 and L4 (as specified): Anchor Scientific type S (N.O.)
2. Diaphragm Seals for pressure measuring systems
 - a. Pressure Gauge diaphragm seals: Ashcroft – 50-310SS-02T-XCK (see Appendix B for a listing of pre-approved gauges)
 - b. Pressure transmitter diaphragm seal: Ashcroft series 200
3. Area Light (21W, LED Area Light): Lithonia - #TDD LED 1 40K 120 PE
4. Variable Frequency Drives (VFD's): Yaskawa
5. Reduced Voltage Soft Starts (RVSS): Magnetek/Solcon RVS-DX series
6. Flow Monitor/meter (as required)
 - a. Siemens Mag 5100W (for use with VFD's, and on all Master & Super Stations)
 - b. Endress & Hauser (for use with VFD's)
7. Level Control/Measuring (wet well): For sites where cables lengths greater than 60 ft. are required): Endress Hauser: Waterpilot FMX21-FE-2-2-1H-G-K-45(specify cable length)-A-PO-PS; K-parameters: Empty pressure: 0 ft. H₂O and Empty calibration: 0 ft.; Full pressure: 30 ft. H₂O; Full calibration: 30 ft.; Damping (s): 2
8. Rain Gauge: Nexsen G2-Rain Alert System: Rain Gauge Unit with Lithium Battery, (1) one year cellular.