

SECTION 11315 – WASTEWATER PUMP STATIONS**PART 1 GENERAL****1.1 REFERENCES**

1. General: The work shall comply with the most recent standards or tentative standards as published at the date of the contract and as listed in this specification using the abbreviation shown.
2. American Society for Testing and Materials (ASTM):
 - 1) A 48 Standard Specification for Gray Iron Castings
 - 2) A 536 Standard Specification for Ductile Iron Castings
3. American National Standards Institute (ANSI)/National Fire Protection Association (NFPA):
 - 1) 70 National Electrical Code

1.2 GENERAL REQUIREMENTS

1. Pumps: All pumps to be installed by the Contractor shall be supplied by a single manufacturer.

1.3 QUALITY ASSURANCE

1. Start Up Service: The Contractor shall provide and coordinate the services of the equipment manufacturer's field service technician for a minimum period of 2 trips and 2 days for each piece of equipment. This service shall be for the purposes of check-out, initial start-up, certification, verification of actual pumping rate, verification of pressure settings, and instruction of the Authority's personnel. A written report covering technician's findings and installation approval shall be submitted to the Authority covering all inspections and outline in detail any deficiencies noted. The Contractor shall provide the Authority within 10 days of start-up, a letter from the manufacturer of each item of equipment stating that the equipment has been properly installed and started and that nothing has been done that may violate the warranty.
2. Factory Tests: Pumps shall be tested by the manufacturer or a nationally recognized testing agency in compliance with Hydraulic Institute Standards. Where two or more identical pumps are specified, only one representative pump shall be tested. Certified test results shall be submitted to the Authority's Representative.
3. Performance Test Reports: Upon completion and testing of the installed system, test reports shall be submitted in booklet form for incorporation into the O & M Manual showing all field tests performed to adjust each component and all field tests performed to prove compliance with the specified performance criteria.
4. Pump Characteristics Curves: Pump characteristic curves showing capacity in gpm, head, efficiency and pumping horsepower should be submitted with the shop plans and contained in the O & M Manual.
5. Spare Parts and Lubrication: Contractor/Developer shall provide the Authority with an adequate supply of spare parts and lubricants to last the duration of the 1 year warranty period. Spare parts shall include all bearings, gaskets, etc. recommended by the equipment manufacturer. An adequate supply shall be defined as the quantity, type, and grade recommended by the manufacturers who will provide the equipment contained in this section. Any special lubricants that may be required during the equipment break-in period shall also be provided.

6. **Name Plates:** Pumps and motors shall have the manufacturer's name, address, type or style, model or serial number, and catalog number on a plate secured to the item of equipment.
7. **Verification of Dimensions:** The Contractor shall become familiar with all details of the work, verify all dimensions in the field, and shall advise the Authority's Representative of any discrepancy before performing the work.
8. **Warranty:** All pumps provided to the Authority shall carry a five year warranty.

PART 2 PRODUCTS

2.1 PUMP STATION EQUIPMENT

1. **General:** Products for wastewater pump stations shall be selected and designed specific to individual projects. The designer shall prepare construction specifications for individual projects and shall submit them for approval in accordance with the Design and Construction Standards. The approved specifications, in addition to the Design and Construction Standards, shall be used by the Contractor during the construction phase.
2. Pump station products shall be in accordance with the Authority's Approved Products List as applicable. Products not listed shall be approved at the discretion of the Authority.

PART 3 EXECUTION

3.1 INSTALLATION

1. **General:** The Contractor shall install all equipment in strict accordance with the manufacturer's recommendations. The Contractor shall supply all equipment and accessories not specifically provided by the manufacturer but required for satisfactory installation and operation. All anchor bolts shall be plated steel while all other miscellaneous fasteners shall be stainless steel. All bolts shall be of ample size for the purpose intended.
2. **Startup:** The Contractor shall coordinate startup services of the equipment manufacturer's field service technician with the Authority's Representative.

END OF SECTION