

## 213000 Fire Pumps

### **Sections Included In This Standard:**

- 1.1 Flow Tests
- 1.2 Power Source
- 1.3 Pump Room
- 1.4 Gauges
- 1.5 Suction Piping
- 1.6 Valves
- 1.7 Variable Speed Drive
- 1.8 Test Hydrants and Headers
- 1.9 Sensing Lines
- 1.10 Local Alarm Bell
- 1.11 Backflow Prevention

#### **1.1 FLOW TESTS**

Have a flow test performed prior to the start of any design work. The test is conducted free of charge by PPD. The project Architect/Engineer shall coordinate this test and the responsible design engineer shall be present for the fire flow test.

#### **1.2 POWER SOURCE**

- A. General: Power shall be electricity from a reliable, protected source.
- B. Emergency Generators: An emergency generator is not required.

#### **1.3 PUMP ROOM**

- A. Working Space: Provide adequate space for complete servicing around and above fire pumps.
- B. Emergency Lighting: Provide emergency lighting in the pump room.
- C. HVAC: Provide adequate ventilation in the pump room and maintain a minimum air temperature of 40°F.
- D. Provide a floor drain.

#### ~~1.4. CONFIGURATION~~

~~Horizontal and Mechanical Packaging.~~

#### **1.4 GAUGES**

- A. Provide a pressure gauge on discharge side of pump.
- B. Provide a compound pressure and vacuum gauge on the suction side of the pump.
- C. Provide a pressure gauge & compound pressure/vacuum gauge on the jockey pump.
- D. Gauges shall be stamped by the manufacturer to indicate the year installed.

**1.5 SUCTION PIPING**

Shall be Schedule 40, galvanized, type with threaded, flanged, or grooved connections.

**1.6 VALVES**

Circulation Relief Valve; discharge to drain.

**1.7 VARIABLE SPEED DRIVE**

Not required or desired.

**1.8 TEST HYDRANTS AND HEADERS**

- A. ~~Provide access to storm drainage.~~ Locate test header so as to be capable of discharging to a safe location.
- B. Locate test hydrants so as to not wash out landscaping or undermine footings, and require the installing contractor to furnish a fire hose of appropriate length to direct water away from the building.

**1.9 SENSING LINES**

- A. Separate sensing lines are required for the Jockey Pump and Main Pump Controllers.
- B. Sensing lines shall be of brass, copper, or #300 stainless steel.

~~**1.10 CONNECTIONS**~~ (relocated to 211000)

**1.10 LOCAL ALARM BELL**

- A. Provide a restricted access disconnect for the local alarm bell.
- ~~B. The local alarm bell shall be connected to the Fire Alarm Control Panel.~~

**1.11 BACKFLOW PREVENTION**

Backflow preventers are required. Refer to Section 331000.

END OF SECTION