#### **MU CAMPUS ONLY**

#### **GENERAL:**

The scope of this document is to provide instruction for the installation and testing of a fire hydrant installed at the University of Missouri - Columbia.

#### **DESIGN GUIDELINES:**

#### 1. Materials

1.1. University fire hydrants shall be lead free Super Centurion Fire Hydrants, Model 250, Number A-423, as manufactured by Mueller Water Products, Decatur IL. <u>No substitutions will be allowed</u>.

1.2. Fire hydrants shall be painted in the following manner using Sign Painters' 1 Shot Lettering Enamel or approved equal:

- 1.2.1. University water: Barrel Metallic Gold, Caps Black, Bonnet Blue.
- 1.2.2. City water, University maintained fire system: Barrel Metallic Gold, Caps Blue, Bonnet <u>Blue</u>.
- 1.2.3. MU may modify final hydrant bonnet color based on measured flow.
- 1.3. Tracer Wire
  - 1.3.1. Tracer wire shall be #14 AWG Solid, steel core soft drawn high strength tracer wire, 250# average tensile break load, 30 mil high molecular weight-high density blue polyethylene jacket complying with ASTM-D-1248, 30 volt rating. No THHN insulated wire shall be allowed. Tracer wire shall be Copperhead Industries HS-CCS or approved equal.
  - 1.3.2. Tracer wire shall have moisture resistant splices for direct bury applications. Splices shall be Copperhead Industries Snakebite or 3M DBR or approved equal.
  - 1.3.3. Tracer wire test stations shall be designed to be easily detected by magnetic and electronic locators. A magnet shall be securely attached at the top of the upper tube of the box for locating purposes. Lid shall be blue and have a brass terminal for attaching locating equipment and a brass 5 sided nut for removing cap. Tracer wire test station shall be Copperhead Industries Snake Pit or approved equal.

### 2. Installation

- 2.1. The location of new fire hydrants shall be determined by a collaboration of system owner, City of Columbia Fire Department and the design engineers.
- 2.2. Installation of fire hydrants maintained by the University shall be installed per "Fire Hydrant Detail" and in strict accordance with manufacturer's written instructions.
- 2.3. Installation of fire hydrants maintained by the City of Columbia shall be in strict accordance with Columbia Water and Light Specifications as last revised.
- 2.4. The pumper nozzle shall be installed pointing to the street and/or away from the building.

331219 Water Utilities Distribution Fire Hydrants

# 3. Testing

3.1. Newly installed fire hydrants shall be cleaned and pressure tested in accordance with standards set forth in section 331300 - Disinfecting of Water Utility Distribution, and will be flow tested by system owner.

## 4. COMMISSIONING

- 4.1. Water will be turned on to the hydrant by Campus Facilities Energy Management Utility Distribution personnel.
- 4.2. Hydrant will be flow tested by owner.

### REFERENCES

331219 Detail – Fire Hydrant.dwg Section 331300 - Disinfecting of Water Utility Distribution.