

**SECTION 33 11 11**  
**RELOCATE WATER METERS AND FIRE HYDRANTS**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Relocate existing water meters or fire hydrants which may be necessary because of changes in grade or installation of new improvements which conflict with existing meter and hydrant locations.

**1.2 REFERENCES**

- A. AWWA C203: AWWA Standard for Coal-Tar Protective Coatings and Linings for Steel Water Pipelines -Enamel and Tape -Hot-Applied.
- B. AWWA C502: AWWA Standard for Dry-Barrel Fire Hydrants.

**1.3 JOB CONDITIONS**

- A. Secure utility company permit to do relocation work and pay applicable fees.
- B. Secure utility company approval of joints, connections, and pipe installations prior to commencing backfill operations.

**PART 2 PRODUCTS**

**2.1 HYDRANTS**

- A. Use existing hydrant unless Contract Documents specify OWNER or CONTRACTOR will provide a new unit.
- B. Use the same type of pipe material as used for existing hydrant piping unless indicated otherwise.
- C. Use mechanical and flange joint fittings unless indicated otherwise. Use only new tees, fittings, and bends.
- D. Coat all weld connections and damaged areas of metal piping with coal tar enamel. Follow AWWA C203 requirements. Tape wrap coatings.

**2.2 WATER SERVICE METERS**

- A. Use existing water meter and yoke unless Contract Documents specify OWNER or CONTRACTOR will provide a new unit.
- B. When relocating meters, use Type K copper pipe (Section 33 05 03) or polyethylene pipe (Section 33 05 06) from main to meter yoke.

**2.3 CONCRETE**

- A. Cast-in-place: Class 3000 or 4000, Section 03 30 04.

**PART 3 EXECUTION**

### **3.1 PREPARATION**

- A. Before commencing work, coordinate location and shutdown of utility lines with utility company and residents; Section 01 31 13.
- B. Protect existing hydrants and meters from damage.
- C. Control ground water, surface water, and storm water.
- D. Control pedestrian and vehicular traffic, Section 01 55 26.
- E. Provide all excavation backfill, compaction, connections, testing, and surface restorations to made the installation complete.

### **3.2 MOVING EXISTING HYDRANTS**

- A. Relocate to locations indicated.
- B. Do not disturb location of hydrant lateral tee at water main.
- C. The method of harnessing the hydrant (reshackling or reblocking) shall match existing conditions or approval of ENGINEER.
- D. Install hydrant so base flange is even with or less than 4 inches above grade of surrounding surface.

### **3.3 RECONNECTING EXISTING HYDRANTS**

- A. Hydrant reconnections shall meet new work requirements indicated in Section 33 12 19.
- B. When existing tee on water main is to be moved to new location, seal and shackle old tee.

### **3.4 HYDRANT BARREL EXTENSIONS**

- A. Follow AWWA C502 to extend barrels, operating stems and flanged adapters in design material and workmanship so hydrant base flange is even with or less than 4 inches above grade of surrounding surface.

### **3.5 RESETTING WATER METERS**

- A. Follow Section 33 12 33 to relocate water meters and service connections to locations indicated.
- B. Follow Section 33 05 14 to adjust meter boxes to grade in paved surfaces.

### **3.6 FIELD QUALITY CONTROL**

- A. Hydrostatic tests, Section 33 08 00.
- B. Disinfection, Section 33 13 00.

END OF SECTION