

The mix design shall be submitted for approval and shall be accompanied by compression test data at 90 days for at least five cylinders cast with the proposed mix design. Cylinders shall be prepared in accordance with ASTM D 4832. At the Engineer's discretion, evidence of successful past performance for a proposed mix design may be accepted in lieu of compression tests.

**624.03. GENERAL.** Verizon representative shall inform the Engineer of any improper construction techniques and/or inferior materials observed during their inspections. The engineer shall have the authority to reject any material or work which does not meet the requirements of these specifications. The Contractor shall request the services of DIG SAFE and where needed UVM "DIG SAFE" for the purposes of utility location.

The conduit system shall be constructed in a continuous manner, from cable vault to cable vault, rather than in segments.

**624.04. EXCAVATION.** The conduit trench shall be excavated to the required depth and to a width sufficient to install the conduit. Method of installation shall be in accordance with conduit manufacturer's specifications and recommendations.

Where an existing utility is found to conflict with the proposed work, the location, elevation and size of the utility shall be accurately determined without delay by the Contractor and the information shall be furnished, in writing, to the Engineer for resolution of the conflict. Excavation for handholes shall be to the required depth and shall include 6-inch depth beneath the bottom for a level compacted sand base.

All excavation shall be confined to as little surface area as possible, keeping within all applicable safety requirements.

**624.05. INSTALLATION OF CONDUIT.** Conduit shall not be placed until the trench has been approved by the Engineer. Also, prior to backfilling conduits, the Contractor shall contact (through the Engineer) Verizon for inspection and approval.

The conduits shall be placed in accordance with the configuration(s) shown on the plans, with spacers placed as indicated. Joints for conduit shall be made with the type of joint cement supplied and recommended by the conduit manufacturer.

Where conduit is stubbed, caps shall be provided. After backfilling, the end of the stub shall be prominently marked.

No preformed bends are required. No heat source or additional tools shall be used. The CATV conduit shall be installed with minimum bends in such a manner as to insure that during the coaxial cable installation no cable is subjected to pulling tensions greater than the following maximums:

For .500" cable 200 lbs.  
For .750" cable 420 lbs.

Verizon conduit bends shall be as noted on the plans.

Random conduits shall be mandreled, at the direction of the Engineer, with a 4-inch diameter solid mandrel.

Mandrel the four corners plus one conduit in each intermediate tier of the conduit structure.

Conduit spacers, as approved, must be used to insure 1-inch separation between conduits. Spacers to be placed at 6-foot intervals or as recommended by the conduit manufacturer, and not more than 2 feet from manhole walls.

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