

**ITEM 036020**

**Item 0360201- POLYMER PULLBOX- TYPE I**

**Item 0360202- POLYMER PULLBOX- TYPE II**

**DESCRIPTION**

This item shall consist of furnishing and installing a precast polymer concrete pullbox of the type called for at the location and to the dimensions and details shown on the plans, or as ordered by the Engineer and in conformity with these specifications. Concrete Pullbox Type I refers to 28" X 28" X 24" (height) pullbox and Concrete Pullbox Type II refers to 32" X 19" X 30" (height) pullbox.

**REFERENCED ITEMS**

Item 0102101, 0100801, 0106401 and 010430

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for handholes in accordance with the contract general requirements.

Certified Test Report:

Submit 5 copies of certified test reports for pullbox in accordance with the contract general requirements.

Shop Drawings:

Submit 5 copies of shop drawings for pullbox in accordance with the contract general requirements.

**MATERIALS**

The materials for this work shall conform to the following specifications.

The polymer pullboxes shall be pre-cast polymer concrete models no. PG2424BA24 and PG1730BA30 as manufactured by Strongwell Quazite or approved equal.

Bituminous concrete: Shall conform to Item 0104703

Topsoil, fertilizing, seeding & mulching: These items shall conform to Item 0106401.

Crushed stone shall conform to the material requirements of item 0100801

### **CONSTRUCTION METHODS**

Enclosures, covers and extensions shall be of monolithic material construction; components of dissimilar materials shall not be used. All products shall conform to Western Underground Committee (WUG) Guide 3.6. The following requirements shall apply:

Static vertical Box Wall Test load of 22,570 lb. Covers shall be provided with a surface minimum coefficient of friction of 0.50 and shall be secured with two stainless steel bolts. Bolts shall be self-retaining and shall withstand a minimum of 70 ft. lbs. torque and have a minimum 750 lbs. pull out strength. Nuts shall be floating and shall provide a minimum of ½ inch movement from the center of the nut.

Certification of compliance testing, with Western Underground Committee (WUG) Guide 3.6 testing procedures and Society of Cable Telecommunication Engineers (SCTE) Recommended Practices for Construction and Testing, Issue 1, Section 5, by nationally recognized independent testing laboratory, shall be provided.

The contractor shall furnish the polymer concrete pullbox and cover in a color approved by the Engineer. The LOGO on the polymer concrete pullbox cover shall indicate "Traffic Signal" for traffic signal cabling and "Electric" for electrical cabling, and shall be as indicated during the shop drawing approval.

The pullbox of the size specified shall be installed as shown on the plans, which includes placement of 12 inches crushed stone before the installation of pullbox. The areas disturbed by the excavation for the pullbox shall be neatly graded to conform to the adjacent surface and contours. Where topsoil has been removed, it shall be replaced to its original depth (except that in no case shall this depth be less than 4 inches) and the area shall be fertilized, seeded and mulched. At final installation the box and cover shall be flush with finished grade. When the pullbox is placed in the sidewalk the back fill shall be replaced with the trap-rock as fill material.

Where pullboxes are shown in sidewalk or paved areas, the concrete pullbox shall be set flush and the surrounding area shall be replaced with the same type of material as removed. These pullboxes shall have no beveled edges.

Unless otherwise ordered by the Engineer, a handhole cover plate sized to fit the specified pullbox shall be installed on each pullbox.

All conduits entering the pullbox shall be bonded together by means of a jumper running from ground bushings on the conduit ends. All open conduit entrances in the walls of pullbox shall be grouted to prevent the surrounding sand or dirt entering into the pullbox.

When the pullbox is placed in sidewalk areas, the sidewalk shall be sawcut at the nearest joint and the complete slab(s) of sidewalk shall be removed and replaced. The replacement of sidewalk shall conform to the requirements specified under Item 0102101.

When pullbox is placed in brick sidewalk areas, the sidewalk shall be restored matching the existing pattern.

**METHOD OF MEASUREMENT**

This work will be measured for payment by the number of polymer pullbox of the type specified, complete and accepted in-place.

**BASIS OF PAYMENT**

This work will be paid for at the contract price each for "POLYMER PULLBOX" of the type called for, complete in-place, which price shall include a polymer precast concrete pullbox, cover, crushed stone, excavating, backfilling and replacement of all surrounding areas including sidewalk, pavement, grading and placing topsoil, seeding, fertilizing, mulching and equipment, tools, labor and work incidental thereto. The contract unit price shall also include locating and intercepting existing conduit at those locations shown on the plans, and cutting exiting conduit and installing copper bonding jumpers in accordance with the details.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0360201	Polymer Pullbox- Type I	EA
0360202	Polymer Pullbox- Type II	EA