

**ITEM 0320101**

**NEW RADIAL GRANITE CURB DRIVEWAY RETURN**

**DESCRIPTION**

This item shall include the removal and disposal of existing curb, removing old concrete or other foundation, excavating for, and furnishing and placing new concrete foundation, furnishing and setting to line and grade new radial granite curb driveway return, furnishing and placing concrete and processed trap rock backfill, caulking curb joints, making all necessary pavement repairs and grading behind the curb where necessary.

**REFERENCED ITEMS**

Items 0100101, 0102101, 0102801 and 0106401

**REQUIRED SUBMITTALS**

Material Samples:

Submit material samples for curb returns in accordance with the contract general requirements.

**MATERIALS**

1. **GRANITE CURB**

Granite curb returns shall be 20 inches deep and shall conform to the detail shown in the contract drawings. It shall meet all requirements for granite curb as specified in Item 0100101- New Straight Granite Curb On New Foundation.

2. **CEMENT CONCRETE**

All materials for this work shall conform to the requirements of Section M.03 of The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, 2004, for Class "C" concrete.

3. **CAULK**

Caulking compound shall be a material which complies with ASTM C-920, Type S, Grade NS, Class 25 sealing compound, polyurethane based elastomeric, single component, moisture cured sealant, capable of 25% joint movement. The color of the compound shall be cement mortar gray.

**CONSTRUCTION METHODS**

1. **EXCAVATION**

The Contractor shall excavate on both sides of the curb to be set. The street pavement shall be removed to a width of at least 6" in front of the curb to facilitate proper setting and backfilling. Bituminous concrete and macadam pavements in front and back of the curb shall be cut to neat straight lines before excavation to minimize pavement damage.

Where concrete base pavement is encountered excavation shall include removal of all existing concrete or other foundations. Saw cutting the concrete base shall also be included in this item.

Excavation for this work shall also include removal of all old concrete or other foundations encountered.

2. **SETTING CURB**

The curb shall be set to line and grade established by the Engineer. Maximum variation from established line and grade shall be 1/4". The finished curb shall present a neat appearance free from irregularities of line and grade.

All blocking used to hold the curb in place shall be removed before backfilling is completed.

3. **FOUNDATION AND BACKFILL**

Cement concrete shall be placed as foundation and backfilled around the curb in accordance with the drawings. The Contractor may use a very stiff mix and shall spade and tamp to eliminate all voids, especially under the curb.

Where a concrete surface is to be placed behind a curb, the concrete backfill shall be placed in back of the curb to 5" below top of curb for 5" concrete

sidewalks, and 8" below top of curb for sidewalk ramps as applicable and in front of the curb to the base of the pavement encountered, which is 5" below gutter grade for flexible base and 9" below top of curb for rigid base.

Where bituminous surface is to be replaced behind the curb, concrete backfill shall be placed in back of the curb to 6" below top of curb, new processed trap rock shall be placed on top of the concrete to two inches below the top of the curb and shall be thoroughly compacted.

#### 4. PAVEMENT REPAIR

The following applies where the entire roadway is not to be resurfaced. The edge of the pavement shall be trimmed to neat straight lines not less than 12" from the face of the curb and shall be painted with hot asphalt cement. The face of the curb below gutter grade shall also be painted with **hot** asphalt cement. Hot asphalt cement shall be graded by viscosity at 140 F and shall conform to the requirements of AASHTO M226-80 except that AC-20 viscosity grade shall be as follows:

<u>Test</u>	<u>Minimum</u>	<u>Maximum</u>
Viscosity, 140 F, poises	2000	+400
Viscosity, 275 F, Cs.	300	
Penetration, 77 F, 100 g, 5 Sec	60	
Flash Point, COC, F	50	
Solubility in Trichlorethylene, %	99.0	
Tests on Residue - Thin Film Oven Test Loss on Heating, %	00	0.50
Ductility, 66 F, 2 inches/min, cm	30	
Ductility, 77 F, 2 inches/min, cm	50+	
Viscosity, Ratio, ATFO/BTFO	4	

5. **REPAIR BEHIND CURB**

Where there is no walk directly behind the curb, the top 6" of curb trench shall be backfilled with existing usable soil or new topsoil. The new topsoil shall conform to the requirements specified under Item 0106401.

Where sod has been saved and is in good condition, the sod shall be replaced to match the top of curb and existing ground.

Where no sod is available, the topsoil shall be graded to match the top of curb and existing ground. Fertilizer, lime, seed and mulch, conforming to the material requirements of Item 0106401, shall then be applied in accordance with the Construction Methods of Item 0106401.

The cost for loaming and seeding up to a maximum of 12" behind the curbs and for any additional unnecessary damage done by the Contractor shall be included in this item. Loaming and seeding beyond 12" from the curb as ordered by the Engineer will be paid for under Item 0106401.

6. **CAULKING CURB JOINTS**

Caulking compound shall be a material which complies with ASTM C-920 for Sealing Compound, Synthetic-Rubber Base, Single Component, Chemically Curing. The color of the compound shall be cement mortar gray. All curb joints shall be filled with caulking compound with either pneumatic or ratchet hand gun or with other equipment as approved by the Engineer.

**METHOD OF MEASUREMENT**

This work will be measured for payment by the number of each New Radial Granite Curb Driveway Return installed and accepted by the Engineer.

**BASIS OF PAYMENT**

Payment for this work will be made at the contract unit price per each "NEW RADIAL GRANITE CURB DRIVEWAY RETURN," installed and accepted, including all equipment, materials, tools, labor and incidental expenses.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0320101	New Radial Granite Curb Driveway Return	EA