

ITEM 08603.0710 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 300 mm DIA. 14

GA. (68 mm x 13 mm)

ITEM 08603.0716 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 450 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0722 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 600 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0726 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 800 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0731 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 900 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0736 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 1000 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0741 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 1200 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0745 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 1400 mm DIA. 12

GA. (68 mm x 13 mm)

ITEM 08603.0751 M - EXTENSION OF EXISTING CULVERTS WITH CORRUGATED STEEL PIPE - FULLY PAVED - 1600 mm DIA. 12

GA. (68 mm x 13 mm)

### **DESCRIPTION:**

This work shall consist of the extension, 3 linear meters or less, of existing culverts in accordance with the Standard Specifications, the contract plans and the appropriate standard sheets.

### **MATERIALS:**

Materials shall meet the requirements specified in the following subsections:

Select Granular Fill	203-2.02
Corrugated Steel Pipe	707-02

### **CONSTRUCTION DETAILS:**

1. Excavation - The requirements specified in 206, Trench, Culvert and Structures Excavation, that apply to culverts and storm drains shall govern, except for modifications on the plans, the standard sheets or as directed by the Engineer.

#### Laying Pipe

- A. General - All pipe shall be laid in reasonably close conformity to line and grade and shall have a full, firm and even bearing at each joint and along the entire length of pipe. Any single run of pipe, including end sections, shall consist wholly of the same material unless otherwise directed by the Engineer.

- B. Handling and Assembly of Pipe - All pipe shall be handled and assembled in accordance with the Manufacturer's instructions except as modified on the plans or by the Engineer's written order.
- C. Round Corrugated Metal Pipe and Pipe Arches - Steel pipe with longitudinal seams shall be placed with the seams at the sides. Circumferential seams with laps shall be placed with the laps in the downstream direction so flow of water is directed over instead of under each succeeding downstream section.

Bedding and Backfilling Pipe - The type of materials to be used in bedding and backfilling at culverts and pipes and the procedure of placement shall conform to the applicable standard sheets and provisions of 203-3.15, Fill and Backfill at Structures, Culverts, Pipes, Conduits, and Direct Burial Cables.

Special care shall be exercised in placing and compacting material immediately adjacent to pipes in order to avoid damage to the pipe and to prevent misalignment.

Movement of construction equipment, vehicles and loads over and adjacent to any pipe shall be done at the contractor's risk.

## 2. Damage Pipe and Repair

- A. General - Pipe that is damaged or disturbed through any cause occurring prior to acceptance of the contract, shall be repaired, realigned or replaced as directed by the Engineer and at the contractor's expense. Pipe which is defective from any cause, including damage caused by handling and determined by the Engineer as unrepairable, shall be unacceptable for installation and shall be replaced as directed by the Engineer and at no cost to the State.
- B. Damaged Bituminous Coatings - Damage to bituminous coatings or bituminous paved inverts may be repaired in the field by a hot application of asphalt cement (702-0200 or 702-0300), or cold asphalt repair material of a brand which appears on the Department's approved list.

## 3. Joints

- A. Corrugated Metal Pipe - Corrugated metal pipe and pipe arch connections for making field joints shall consist of corrugated bands, so constructed as to lap on equal portions of each culvert section to be connected. All connections shall be an approved type, fabricated and installed so that a secure and firm pipe connection may be readily made in the field.

### **METHOD OF MEASUREMENT:**

The number of Culvert Extensions to be paid for under this work will be the number erected in accordance with the plans or directions of the Engineer.

### **BASIS OF PAYMENT:**

The accepted quantities of all pipes construction and reconstruction will be paid for at the contract price bid which will include the cost of furnishing all labor, materials and equipment necessary to complete the work including pipe, trench and culvert excavation, backfill and select granular fill conforming to the

applicable standard sheets, plans or as directed by the Engineer. Concrete collars, galvanized end sections and sheeting shall be paid for under their respective items.