

ITEM 690.6220--25 - FURNISH AND INSTALL TOLL LANE TRENCH DRAINS

1. DESCRIPTION:

- 1.01 The work shall consist of the fabrication and casting of the Toll Lane Trench Drain into the Toll Lane concrete as shown on the plans and directed by the Engineer.

2. MATERIALS:

- 2.01 Trench drain installation will include the following:
- A. Three inch (3") diameter "No-Hub" cast iron pipe, fittings (bends, tees, wyes, reducers, etc.) and no-hub coupling assemblies for treadle frame drainage as indicated on the drawings. Cast iron pipe and fittings shall meet requirements of ASTM A888 and/or CISPI Standard 301. Couplings shall meet the requirements of ASTM Standard C1277 and CISPI Standard 310. No-hub sealing sleeves shall conform to ASTM Standard C564.
 - B. A 12" x 12" x 1/4" steel plate collar. Plate shall be fabricated with hole centered in the plate. The hole shall be sized to allow the 3 inch (3") diameter cast iron pipe to pass through with 1/8" maximum clearance.
- 2.02 Trench drains shall be fabricated in accordance with the Contract Drawings.
- A. Trench drain assembly shall be fabricated and jointed by welding performed according to the New York State Steel Construction Manual (NYSSCM) – 1981 including the current addenda. All shop welders must be qualified by tests as described in Section 8 of the NYSSCM. The manual shielded metal arc welding (SMAW) process must be used for all welding unless otherwise approved. Use properly dried E7018 electrodes.
 - B. Prior to painting of the trench drains, and in shop joint inspection including the Engineer, or a designated representative, and the Contractor shall take place. The approval of the Engineer must precede the application of protective coatings. Finishing requirements are specified on drawings.

3. CONSTRUCTION DETAILS:

- 3.01 The Contractor shall be responsible for damage of any nature. Such responsibility for damage shall continue until the official opening by the Authority of the lane in which the trench drain is installed.
- 3.02 After the lanes have been reconstructed, but prior to concreting, as shown on the drawings, the treadle frame and drain piping shall be accurately positioned and secured for concreting in place.
- 3.03 When all components are in place, secure and approved by the Engineer, the Contractor will proceed with the 12" base slab pour. This pour partially embeds the treadle frame, the trench drain, drain pipes, and may be used to firmly set curb sections. Allow this pour to set for a minimum of six (6) hours. After allotted time and a check of treadle frame and trench drain positioning by the Engineer, the Contractor may proceed with the preparation for the 10" pavement pour.
- 3.04 Care must be taken when placing concrete at the trench drain. Do not allow concrete to enter drain body or grate frame. Clean completely before concrete has set.

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4. METHOD OF MEASUREMENT:

- 4.01 The work shall be measured on an each basis for installation of the trench drain unit, installation of trench drain piping and 1/4" steel plate collar including connection to toll lane drainage structure.

5. BASIS OF PAYMENT:

- 5.01 The unit price bid for installation of the trench drain unit shall include the cost of all labor, equipment, and materials necessary to install the unit.