

## 710 BRIDGE DECK DRAINAGE

### 710.01 DESCRIPTION

Work consists of furnishing, installing, and painting the scuppers, grates, drainpipe, collector pipe, fittings, hangers, supports and all other materials necessary for the bridge deck drainage system as shown in the Contract Documents.

### 710.02 MATERIALS

Materials shall meet the following requirements:

Scuppers – [815.05](#)

Grates – [815.05](#)

Pipe – [809.01\(A\)](#)

Pipe Fittings – [809.01\(B\) \(2\)](#)

Gaskets – ASTM C 564

### 710.03 CONSTRUCTION REQUIREMENTS

- (A) **SHOP DRAWINGS.** The Contractor shall prepare and submit to the Chief Engineer construction drawings for any deck drainage system in accordance with [Section 105](#).
- (B) **ALIGNMENT.** Scupper surfaces shall conform to grades and lines of the completed structure. Inserts shall be properly spaced for the collector pipe system and hangers adjusted so that the plan grades are secured. Straight pipe shall be in standard uniform lengths. Approved short pipe lengths shall be used where needed to meet line and grade as closure pieces.
- (C) **CUTTING.** When pipe and fittings require cutting, the Contractor shall take field measurements for making, closing and connecting pieces of correct dimension. Cutting shall leave a smooth end.
- (D) **JOINTS.** Joints shall be assembled to insure tight, flexible joints that safely permit movement caused by expansion and contraction. The inside of the socket and the outside of the spigot shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter. The circular rubber gasket shall be flexed inward and inserted in the gasket recess of the socket. A thin film of approved gasket lubricant as supplied by the pipe manufacturer shall be applied to either the inside surface of the gasket or to spigot or both. The joint shall then be completed by forcing the spigot to the bottom of the socket with an approved forked tool, jack-type tool or other device. Pipe that is not furnished with a depth mark shall be marked before assembly to assure that spigot is inserted to full depth. Field-cut pipe lengths shall be filed or ground to resemble the spigot end of pipe as manufactured.
- (E) **CONNECTIONS TO EXISTING PIPES.** Prior to making connections to existing pipe the Contractor shall verify the actual size and location of existing pipe in service and provide pipe and fittings with suitable ends or adapters to connect to existing pipe. Limits

of pipe and fittings for this purpose shall be as approved on drawings submitted by the Contractor.

- (F) **PAINTING.** Scuppers and grates shall be shop painted in accordance with [707](#). After the collector pipe system has been completely installed, it shall be cleaned and painted in conformance with [707](#) for new metalwork. The color shall be as directed by the Chief Engineer.

#### **710.04 MEASURE AND PAYMENT**

The unit of measure for Bridge Deck Drainage will be the lump sum. No actual measurements will be made.

Bridge Deck Drainage will be paid for at the contract lump sum price, which payment will include painting, and all labor, materials, tools, equipment and incidentals necessary to complete the work as specified herein.