

ITEM 570.9810--25 – CORROSION INHIBITOR

1. DESCRIPTION:

- 1.01 This work shall consist of surface preparation and furnishing and placing a corrosion inhibitor at the locations indicated on the Contract Plans or where ordered by the Engineer. The work will also include providing access to the pin and hangers for inspection by the Engineer.

2. MATERIALS:

- 2.01 **Corrosion Inhibitor:** The corrosion inhibitor used shall be suitable for outdoor use, be transparent or semi-transparent, easily removable, and able to protect the steel for a minimum of 2 years without reapplication. One of the following materials or an approved equal shall be supplied:

- NO-OX-ID “A-Special” – as furnished by:

Sanchem Inc.
1600 S. Canal Street
Chicago, IL 60616

- 2.02 **Chloride Remover:** The chloride remover shall be added to the pressure washer water during pressure washing. One of the following materials or an approved equal shall be supplied:

- CHLOR*RID – as furnished by:

CHLOR*RID International, Inc.
P.O. Box 908
Chandler, AZ 85244

3. CONSTRUCTION DETAILS:

- 3.01 Remove loose paint and rust scale with wire or power brush and clean surfaces in accordance to the corrosion inhibitor manufacturer’s recommendations and product specifications.

- 3.02 After loose paint and rust scale has been removed in accordance with Section 3.01, pressure wash the pin and hangers, girders, and header beams to a minimum distance of 5 ft on each side of the centerline of pin and hanger. The contractor shall also wash the underside and in between the steel header beams. The equipment for pressure washing shall be operated at pressures between 1750 and 2000 psi and with a minimum flow rate of 3-5 gal/minute provided that these pressures do not damage the paint or other coatings on the bridge and a minimum temperature of 120 degrees Fahrenheit. If these pressures and flow rates cause such damage, then the Contractor shall reduce either or both to a level satisfactory to the Engineer. The pressure washer shall be operated at a distance of 6 inches to one foot from the surface.

During washing operations the Contractor shall add a chloride remover to the water per the manufacturer’s specification.

Pressure washing shall not be allowed when ambient temperatures are less than 40°F or when ambient temperatures are expected to drop below 40°F before the bridge is dry. The Engineer shall be the sole determiner as to when temperatures lower than 40°F are likely to occur.

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Work shall be conducted in such a manner so as not to damage or remove existing epoxy protective coatings or any other protective coating on the bridge. Any damage to the structure being worked on or to surrounding structures and property shall be repaired by the Contractor at no cost to the Authority.

- 3.03 Upon completion of the surface preparation in accordance with Sections 3.01 and 3.02 and prior to the application of the corrosion inhibitor the Contractor shall provide access to the pin and hangers for ultra-sonic testing. The ultra-sonic testing will be performed by the Engineer or his/her said representative. All incidental labor and material necessary to make the work area accessible for testing shall be supplied by the Contractor.
- 3.04 After the ultra sonic testing is complete the Contractor shall apply corrosion inhibitor per the manufacturer's specifications to produce a 30 mil minimum thickness.

4. METHOD OF MEASUREMENT:

- 4.01 The work will be measured as the number of pin and hanger assemblies satisfactorily coated within the limits shown on the Contract Plans. A pin and hanger assembly will be considered as all exposed steel on both sides of the girders from the centerline of the pins to the first transverse stiffeners on both sides of the pin centerline.

5. BASIS OF PAYMENT:

- 5.01 The unit price bid per each pin and hanger assembly shall include the cost of all labor, materials, and equipment necessary to complete the work.