SPECIAL NOTE FOR CORROSION INHIBITORS

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department’s 2008 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Furnish and add an approved corrosion inhibitor to the plastic concrete mixture for precast, prestressed, non-composite, concrete deck units.

2.0 MATERIALS. Use one of the following:

1) W. R. Grace's DCI: The aqueous solution shall contain 30 ± 1 percent calcium nitrate by weight and shall weigh 10.6 ± 0.1 pounds per gallon.
2) Master Builder's Rheocrete 222: Use this product only with MBVR Concentrate air entraining admixture.
3) SIKA's Armatec 2000.
4) CORTEC's MCI 2000.

3.0 CONSTRUCTION. Ensure the air entraining, water reducing, or water reducing and retarding admixtures are compatible with the corrosion inhibitor. When corrosion inhibitors act as an accelerator in addition to inhibiting corrosion of the steel, adjust the quantities of other admixtures to produce acceptable workability and setting time accordingly.

Provide material matching the manufacturer's originally approved sample based on infrared spectrum analysis.

Ensure the manufacturer of the corrosion inhibitor is available at the request of the fabricator to provide technical assistance.

3.1 DCI Solution. Add to the concrete mixture at the rate of 4.0 gallons per cubic yard. Ensure that the solution does not contact other admixtures before entering the concrete. Consider the water in the DCI solution as part of the mixing water.

3.2 Rheocrete 222. Add to the concrete mixture at the rate of one gallon per cubic yard.

3.3 Armatec 2000. Add to the concrete mixture at the rate of 1/2 gallon per cubic yard.

3.4 MCI 2000. Add to the concrete mixture at the rate of 3 pints per cubic yard.

4.0 MEASUREMENT AND PAYMENT. The Department will not measure furnishing and incorporating the corrosion inhibitor into the concrete mixture for payment. The Department will consider furnishing and incorporating the corrosion inhibitor, and furnishing a manufacturer's representative for technical assistance incidental to the concrete deck units in which the corrosion inhibitor is used.

January 1, 2008