### PROJECT SPECIAL PROVISIONS

#### **ROADWAY**

# **AGGREGATE PRODUCTION:**

(11-20-01)

SP10 R05

Provide aggregate from a producer who uses the current Aggregate Quality Control/Quality Assurance Program that is in effect at the time of shipment.

No price adjustment is allowed to contractors or producers who use the program. Participation in the program does not relieve the producer of the responsibility of complying with all requirements of the 2006 Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

## PORTLAND CEMENT CONCRETE (Alkali-Silica Reaction):

(2-20-07)

SP10 R16

Revise the 2006 Standard Specifications as follows:

Article 1024-1(A), replace the 2nd paragraph with the following:

Certain combinations of cement and aggregate exhibit an adverse alkali-silica reaction. The alkalinity of any cement, expressed as sodium-oxide equivalent, shall not exceed 1.0 percent. For mix designs that contain non-reactive aggregates and cement with an alkali content less than 0.6%, straight cement or a combination of cement and fly ash, cement and ground granulated blast furnace slag or cement and microsilica may be used. The pozzolan quantity shall not exceed the amount shown in Table 1024-1. For mixes that contain cement with an alkali content between 0.6% and 1.0%, and for mixes that contain a reactive aggregate documented by the Department, regardless of the alkali content of the cement, use a pozzolan in the amount shown in Table 1024-1.

Obtain the list of reactive aggregates documented by the Department at:http://www.ncdot.org/doh/operations/materials/pdf/quarryasrprob.pdf

•	Table 1024-1	
Pozzolans for Use in Portland Cement Concrete		
Pozzolan	Rate	
Class F Fly Ash	20% by weight of required cement content, with 1.2	
	lbs Class F fly ash per lb of cement replaced	
Ground Granulated Blast Furnace Slag	35%-50% by weight of required cement content	
:	with 1 lb slag per lb of cement replaced	
Microsilica	4%-8% by weight of required cement content, with	
i	1 lb microsilica per lb of cement replaced	

# **GLASS BEADS:**

(7-18-06) SP10 R35

Revise the 2006 Standard Specifications as follows:

### Page 10-223, 1087-4(C) Gradation & Roundness

Replace the second sentence of the first paragraph with the following:

All Drop-On and Intermixed Glass Beads shall be tested in accordance with ASTM D1155.

Delete the last paragraph.

## **QUALIFICATION OF WELDS AND PROCEDURES:**

(7-21-09)

SP10 R43

Page 10-143, Subarticle 1072-20(D) Qualification of Welds and Procedures, replace the third sentence of the first paragraph with the following:

For all prequalified field welds, submit Welding Procedure Specifications (WPS) for each joint configuration for approval at least 30 days prior to performing any welding. In lieu of this, use the WPS provided and preapproved by the Department. These preapproved WPS are available from the Materials and Tests Unit or at:

http://www.ncdot.org/doh/operations/materials/structural/appr\_proc.html. Use non-prequalified welds only if approved by the Engineer. Submit WPS for all non-prequalified welds to the Engineer for approval. At no cost to the Department, demonstrate their adequacy in accordance with the requirements of the Bridge Welding Code.

#### **CHANGEABLE MESSAGE SIGNS:**

(11-21-06)

SP11 R11

Revise the 2006 Standard Specifications as follows:

Page 11-9, Article 1120-3, Replace the 3rd sentence with the following:

Sign operator will adjust flash rate so that no more than two messages will be displayed and be legible to a driver when approaching the sign at the posted speed.

### **PAVEMENT MARKING LINES:**

(11-21-06) (Rev. 9-18-07)

SP12 R01

Revise the 2006 Standard Specifications as follows:

Page 12-2, 1205-3(D) Time Limitations for Replacement, add the following at the beginning of the chart:

Facility Type	Marking Type	Replacement Deadline
I and the second se	, —	By the end of each workday's
roadway (4 or more total lanes) and	including	operation if the lane is opened to
ramps, including Interstates	symbols	traffic

Page 12-14, Subarticle 1205-10, Measurement and Payment, delete the first sentence of the first paragraph and replace with the following:

Pavement Marking Lines will be measured and paid for as the actual number of linear feet of pavement marking lines per application that has been satisfactorily placed and accepted by the Engineer.