PROJECT SPECIAL PROVISIONS

ROADWAY

CLEARING AND GRUBBING - METHOD II:

(9-17-02) (Rev. 1-17-12)

200

SP2 R02A

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the 2012 Roadway Standard Drawings.

SHOULDER AND FILL SLOPE MATERIAL:

(5-21-02

235 560

SP2 R45 A

Description

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 560 and Section 235 of the 2012 Standard Specifications.

Measurement and Payment

Where the material has been obtained from an authorized stockpile or from a borrow source and *Borrow Excavation* is not included in the contract, no direct payment will be made for this work, as the cost of this work will be part of the work being paid at the contract lump sum price for *Grading*. If *Borrow Excavation* is included in this contract and the material has been obtained from an authorized stockpile or from a borrow source, measurement and payment will be as provided in Section 230 of the 2012 Standard Specifications for Borrow Excavation.

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12

605

SP6 R01

Revise the 2012 Standard Specifications as follows:

Page 6-3, Article 605-7 APPLICATION RATES AND TEMPERATURES, replace this article, including Table 601-1, with the following:

Apply tack coat uniformly across the existing surface at target application rates shown in Table 605-1.

TABLE 605-1 APPLICATION RATES FOR TACK COAT

Eviating Surface	Target Rate (gal/sy)
Existing Surface	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport or at application.

TABLE 605-2 APPLICATION TEMPERATURE FOR TACK COAT

Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	130 - 160°F
Emulsified Asphalt, Grade CRS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-1H	130 - 160°F
Emulsified Asphalt, Grade HFMS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-2	130 - 160°F

Page 6-18, Article 610-1 DESCRIPTION, lines 40-41, delete the last sentence of the last paragraph.

Page 6-19, Subarticle 610-3(A) Mix Design-General, line 5, add the following as the first paragraph:

Warm mix asphalt (WMA) is allowed for use at the Contractor's option in accordance with the NCDOT Approved Products List for WMA Technologies available at: http://www.ncdot.org/doh/operations/materials/pdf/wma.pdf.

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

(11-21-00) (Rev. 7-17-12)

609

SP6 R15

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0	4.4%
Asphalt Concrete Intermediate Course	Type I 19.0	4.8%
Asphalt Concrete Surface Course	Type S 4.75A	6.8%
Asphalt Concrete Surface Course	Type SA-1	6.8%
Asphalt Concrete Surface Course	Type SF 9.5A	6.7%
Asphalt Concrete Surface Course	Type S 9.5	6.0%
Asphalt Concrete Surface Course	Type S 12.5	5.6%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2012 Standard Specifications.

ASPHALT PLANT MIXTURES:

(7-1-95)

609

SP6 R20

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00)

620

SP6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications.

The base price index for asphalt binder for plant mix is \$559.33 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **November 1, 2012**.

FINAL SURFACE TESTING NOT REQUIRED:

(5-18-04) (Rev. 5-15-12)

610

SP6 R45

Final surface testing is not required on this project.

CHAIN LINK FENCE AND GATES:

Description

The existing 72" chain link fence and cantilever sliding gate shall be removed and replaced by a new 72" chain link fence with two cantilever sliding gates, one each at the existing location and the proposed Ramp A location. The limits of removal and installation will be as shown on the plans. The new fence and gates shall be similar in kind and quality of the existing fence and gate. All work shall be in accordance with Section 866 of the *Standard Specifications*, the plans, and as directed by the Engineer.

Measurement and Payment

Chain Link Fence and Gates will be paid at the contract lump sum price for the work detailed in this section. Such price and payment will be full compensation for all work covered by this provision.

Payment will be made under:

Pav Item

Chain Link Fence and Gates

Pay Unit

Lump Sum\

MATERIALS:

(2-21-12) (Rev. 12-18-12)

1000, 1005, 1080, 1081, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

			REO	TA UIREME	BLE 1000 NTS FOR		CRETE				
		Maxii	mum Wat			Con	sistency . Slump		Cemen	t Content	t
Class of Concrete	Min. Comp. Strength at 28 days		trained crete	Entr	Non Air- Entrained Concrete		Non- Vibrated	; Vib	rated	Non- Vibrated	
00	M S E	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vibrated		Min.	Max.	Min.	Max.
Units	, psi			· ·		inch	inch	lb/cy	lb/cy	lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	· •	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	: -	639	715	: •	-
Drilled Pier	4,500	· •	· -	0.450	0.450		5-7 dry 7-9 wet		: :	640	800
Α	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	, 602	-
В	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	
B Slip Formed	2,500	0.488	0.567	-	-	1.5	-	508		-	-
Sand Light- weight	4,500		0.420		-	4		715	<u>.</u>	: _	-
Latex Modified	3,000 7 day	0.400	0.400		Ab-1000 to 100 t	. 6		658	: -	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow-		-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	. -	Flow- able			100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-		slip form 3.0 hand place	-	526	: •	: : : :	· _
Precast	See Table	as needed	as needed	_	-	. 6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	_	-	. 8	-	564	as needed		,

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

Light- weight ^C	X	ABC	ABC	. 9	14M	78M	67	6M	57M	57	. 0	467M 1	4 1	Std. 2	
· •			'	<u> </u>		. '	· •			:	: 1	100	100	2"	· -!
: : •	. 5	3	100		•	ı			100	100	100	100	100	1/2"	:
: . •	100	75-	75- 97	: •		•	100	100	100	95- 100	90-	ı	20- 55	1"	
	, !			; '	1	100	100	100		· .	20- 55	35- 70	0-15	3/4"	. 10
100	. 79	4 5	55- 80	; ; ;	1	98-	. 1	20- 55	25- 45	25- 60	0-10		:	1/2"	ercen
80-				100	100	75- 100	20- 55	0-20	ı		0.5	0-30	0-5	3/8"	tage o
5- 40	40	20-	35- 55	100	35- 70	20- 45	0-10	. 0 -8	0-10	0-10	: .	0-5	: . •	#	f Tots
0-20			` .	40 P	5-20	0-15	0-5		0-5	0-5			· • ·	#	ıl by \
1	25	P	25- 45			ı				· •	: : •	•		#10	Veigh
0-10			•	0-10	· 0 -8	. 1			ı	· I		ı	ı	#16	Percentage of Total by Weight Passing
	ı		30 30						ı			,	ı	#40	ing
0-2.5	12 ^B	P .	12 ^B	>	. >	· >	>	>	>	>		A	>	#200	
AST	Maintenance Stabilization		Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains	AST, Str. Concrete, Asphalt Plant Mix	AST	AST, Concrete Pavement	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks	

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1078-1 REQUIREMENTS FOR CONCRETE							
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi					
Maximum Water/Cementitious Material Ratio	0.45	0.40					
Maximum Slump without HRWR	3.5"	3.5"					
Maximum Slump with HRWR	8"	8"					
Air Content (upon discharge into forms)	5 + 2%	5 + 2%					

Page 10-151, Article 1080-4 Inspection and Sampling, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A.

Page 10-162, Subarticle 1081-1(B) Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-169, Subarticle 1081-3(G) Anchor Bolt Adhesives, delete this subarticle.

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

TABLE 1092-3 MINIMUM COEFFICIENT OF RETROREFLECTION FOR NC GRADE A (Candelas Per Lux Per Square Meter)

Observation Angle, degrees	Entrance Angle, degrees	White	Yellow	Green	Red	Blue	Fluorescent Yellow Green	Fluorescent Yellow
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27

SELECT MATERIAL, CLASS III, TYPE 3:

(1-17-12) 1016, 1044

SP10 R05

Revise the 2012 Standard Specifications as follows:

Page 10-39, Article 1016-3, CLASS III, add the following after line 14:

Type 3 Select Material

Type 3 select material is a natural or manufactured fine aggregate material meeting the following gradation requirements and as described in Sections 1005 and 1006:

Percentage of Total by Weight Passing												
3/8"	#4	#8	#16	#30	#50	#100	#200					
100	95-100	65-100	35-95	15-75	5-35	0-25	0-8					

Page 10-39, Article 1016-3, CLASS III, line 15, replace "either type" with "Type 1, Type 2 or Type 3".

Page 10-62, Article 1044-1, line 36, delete the sentence and replace with the following:

Subdrain fine aggregate shall meet Class III select material, Type 1 or Type 3.

Page 10-63, Article 1044-2, line 2, delete the sentence and replace with the following:

Subdrain coarse aggregate shall meet Class V select material.