Section:	101.02 ABBREVIATIONS			
Revision:	Add the following:			
	KYCT Kentucky Cracking Test			
Section:	103.06 EXECUTION OF CONTRACT			
Revision:	Replace the first sentence with the following:			
	Within 30 calendar days after receiving the Contract, execute and return to the Department			
	along with the following items:			
Section:	103.06 EXECUTION OF CONTRACT			
Revision:	Remove the requirement to print documents, by replacing the second sentence in the second			
	paragraph with the following:			
	Execute these documents.			
Section:	103.08 FAILURE TO EXECUTE CONTRACT			
Revision:	Change the allowable time before possible nullification of award from 15 to 30 calendar days,			
	by replacing the first sentence with the following:			
	The bidder's failure to execute the Contract or to comply with all requirements of Subsection			
	103.06 within 30 calendar days after receipt of the Contract will be just cause for the			
	Department to nullify the award.			
Section:	105.03 Record Plans			
Revision:	Replace the last sentence in this subsection with the following:			
	The Department will furnish the Contractor with an electronic file copy of the Record Plans at			
	the Pre-Construction conference.			
Section:	103.06.01 (incorrect in book) Commercial General Liability			
Page:	107-9			
Revision:	Renumber section as 107.18.01			
Section:	103.06.02 (incorrect in book) Business Automobile Liability			
Page:	107-9			
Revision:	Renumber section as 107.18.02			
Section:	103.06.03 (incorrect in book) Workers' Compensation Insurance and Employer's Liablility			
	Insurance			
Page:	107-9			
Revision:	Renumber section as 107.18.03			
Section:	108.01 SUBCONTRACTING OF CONTRACT			
Revision:	Replace the second sentence in the fifth paragraph with the following:			
	All payments to subcontrators must be entered into AASHTOWare Project Civil Rights and			
	Labor as proof that payment has been made to the subcontractor within the 7 calendar days.			
Section:	108.01 SUBCONTRACTING OF CONTRACT			
Revision:	Change the last word in the fifth paragraph from 'request' to 'requirement'			
Section:	109.07.01 Liquid Asphalt			
Revision:	Remove the following items from the list of 'Adjustable Contract Items':			

	Asphalt Curing Seal Asphalt Prime Coat							
	Asphalt Materials for Preventive Maintenance applications							
	Asphalt Materials for Preventive Maintenance applications Asphalt Seal Coat							
Section:	109.07.02 Fuel							
Revision:	Change the Fuel/Work ratio for the items listed below:							
	<u>Item Threshold Quantity Fuel/Work</u>							
	Drainage Blanket, Asphalt Treated 5,000 tons 0.75							
	Asphalt Mixtures for							
	Pavements or Shoulders 3,000 tons 0.75							
Section:	214.03 CONSTRUCTION							
Revision:	Add the following as the final paragraph in the section:							
	Demonstrate to the Engineer that the placement technique prevents damage to the fabric.							
Section:	214.03 CONSTRUCTION							
Subsection:	214.03.03 Slope Protection and Channel Lining							
Revision:	Replace the first paragraph with the following:							
	Place geotextile fabric for slope protection / geotextile fabric for channel lining with the long							
	dimension parallel to the channel or toe of slope.							
Section:	214.03 CONSTRUCTION							
Subsection:	214.03.04 Underdrains							
Revision:	Replace the first sentence in the subsection with the following:							
	Place and shape geotextile fabric for subsurface drainage to the sides and bottom of the trench							
	without stretching the fabric.							
Section:	214.03 CONSTRUCTION							
Subsection:	214.03.05 Subgrade or Embankment Foundation Stabilization							
Revision:	Rename the subsection as follows: Subgrade Stabilization / Rock Roadbed							
Section:	214.03 CONSTRUCTION							
Subsection:	214.03.05 Subgrade Stabilization / Rock Roadbed							
Revision:	Replace the first (1st) paragraph of the subsection with the following:							
	Place geotextile fabric for stabilization, unless otherwise noted. Install with the long dimension							
	parallel to the long dimension of the area to be covered.							

Section:	214.03 CONSTRUCTION						
Subsection:	214.03.05 Subgrade Stabilization / Rock Roadbed						
Revision:	Add the following as the final paragraph in the section:						
Kevision.							
	Place, spread, and compact rock or backfill in such a manner that minimizes the development of						
	wrinkles and movement in the fabric. In curves and intersections, cut the fabric and overlay						
	appropriately. Keep the turning of tracked vehicles to a minimum to prevent displacement of						
	the fill and damage to the fabric. Repair any damage caused during placement or by vehicles.						
Section:	214.03 CONSTRUCTION						
Subsection:	214.03.06 Drainage Blanket						
Revision:	Replace the first sentence in the subsection with the following:						
	Place geotextile fabric for subsurface drainage with the long dimension parallel to the long						
	dimension of the area to be covered.						
Section:	214.03 CONSTRUCTION						
Subsection:	214.03.07 Embankment Foudation Working Platform						
Revision:	Add the following as new subsection 214.03.07:						
	214.03.07 Embankment Foundation Working Platform. To facilitate embankment						
	construction over soft ground, place geotextile fabric for separation unless otherwise specified.						
	Place as directed in the plans or by the Engineer. Install with the long dimension parallel to the						
	long dimension of the area to be covered. Leave surface vegetation in place.						
	During back dumping and spreading, do not allow the wheels of trucks, dozer blades, and other equipment to come into direct contact with the fabric. Spread the material in the direction of the						
	fabric overlap. To avoid damage to the geotextile fabric, dump rock fill behind the leading edge of the rock layer, then blade into place. Repair any damage caused during placement or by vehicles. If large fabric wrinkles develop during spreading operations, fold and flatten the						
	wrinkles in the direction of spreading. Avoid large folds which reduce the fabric overlap width.						
Section:	214.05 PAYMENT						
Revision:	Remove the following from list of pay items:						
	02596-02599 Fabric-Geotextile, Type Square Yard						
Section:	214.05 PAYMENT						
Revision:	Add the following to the list of pay items:						
	02602 Fabric-Geotextile Class 1 Square Yard						
	02603 Fabric-Geotextile Class 2 Square Yard						
Section:	215.02 MATERIALS						
Subsection:	215.02.01 Geotextile Fabric						
Revision:	Replace the text in this subsection with the following:						
	Conform to Section 843.						

Section:	215.03 CONST	RUCTION					
Revision:		cond sentence in the	final para	graph wit	h the following:		
	Place a protective ring using geotextile fabric for subsurface drainage and separation; clean No.						
	2 aggregate or shot rock of similar size, quality, and gradation approved by the Engineer; and crushed aggregate.						
Section:	215.05 PAYMENT						
Revision:		lowing from list of p Fabric-Geotextile,		quare Yar	d		
Section:	215.05 PAYM		турс в	quare rur			
Revision:		ing to the list of pay	items:				
lte vigion.	02602	Fabric-Geotextile C		uare Yar	d		
	02603	Fabric-Geotextile C					
Section:	402 05 02 Aspl	halt Mixtures HMA	and WM	A Includ	ing Mixtures with Reclaimed Material		
Revision:		t sentence in this sec					
lte vigion.					nal overall bid item pay.		
Section:					ing Mixtures with Reclaimed Material		
Part:							
	MIXES	JOSTWENT SCHEL	OLE CO	MPACII	ON OPTION A BASE AND BINDER		
Table: Revision:	MIXES AV	le with the following	g:	MPACII	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following		MPACII	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following	g: V	Result	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following	V Test:	Result	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following	V Test	Result %) AADTT	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following	V Test:	Result %) AADTT Class 3	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following	V Test	Result %) AADTT	ON OPTION A BASE AND BINDER		
	MIXES AV	le with the following A Pay Value	Test: (GAADTT Class 2 3.2-3.8	Result %) AADTT Class 3 or 4	ON OPTION A BASE AND BINDER		
	MIXES AV	Pay Value 1.05 1.00 + 0.1 (AV-3.0)	Y Test: (SAADTT Class 2 3.2-3.8 1.5-3.1	Result (%) AADTT Class 3 or 4 3.2-3.8 2.0-3.1	ON OPTION A BASE AND BINDER		
	MIXES AV	Pay Value 1.05 1.00 + 0.1 (AV-3.0) 1.00 + 0.1 (4.5-AV)	Test: (SAADTT Class 2 3.2-3.8 1.5-3.1 3.9-6.0	Result %) AADTT Class 3 or 4 3.2-3.8	ON OPTION A BASE AND BINDER		
	MIXES AV	Pay Value 1.05 1.00 + 0.1 (AV-3.0)	Y Test: (SAADTT Class 2 3.2-3.8 1.5-3.1	Result (%) AADTT Class 3 or 4 3.2-3.8 2.0-3.1	ON OPTION A BASE AND BINDER		
	MIXES AV	Pay Value 1.05 1.00 + 0.1 (AV-3.0) 1.00 + 0.1 (4.5-AV)	Test: (SAADTT Class 2 3.2-3.8 1.5-3.1 3.9-6.0	Result (%) AADTT Class 3 or 4 3.2-3.8 2.0-3.1	ON OPTION A BASE AND BINDER		

Section: Part:

402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures with Reclaimed Material

Table:

LOT PAY ADJUSTMENT SCHEDULE COMPACTION OPTION A SURFACE MIXES

ΑV

Revision: Replace the table with the following:

AV				
Pay Value	Test I	Result		
	(9	%)		
	AADTT	AADTT		
	Class 2	Class 3		
		or 4		
1.05	3.2-3.8	3.2-3.8		
1.00 + 0.1 (AV-3.0)	1.5-3.1	2.0-3.1		
1.00 + 0.1 (4.5-AV)	3.9-6.0	3.9-6.0		
0.75	6.1-6.5			
(1)	< 1.5 or	< 2.0 or		
	> 6.5	> 6.0		

Section:

403.03.03 Preparation of Mixture

Part: Subpart:

Revision:

Modify table in subpart 5

Mix Performance Verification. FOR ALL 0.5-inch and 0.38-inch nominal surface mixtures, ensure that the following limits are met of exceeded to obtain approval:

Mix Design Performance Limits						
Class	KYCT Index2					
_	<u>(min)</u>	<u>(min)</u>				
<u>2</u>	<u>7500</u>	<u>110</u>				
<u>3</u>	<u>10000</u>	<u>110</u>				
<u>4</u>	<u>10000</u>	<u>125</u>				
<u>PG 76-22</u>						
ALL	20,000	<u>75</u>				

Mixture rutting resistance shall meet the above number of passes for a critical rut depth of 1/2" (12.5 mm). The "Hamburg Passes" value is determined by averaging the results from both sides of the test.

Test in accordance with KM 64-450.

Section:	501.03.019 Surface Tolerances and Testing Surface					
Part:	B) Ride Quality					
Subpart:	2) Category A Requirements					
Revision:	Replace the last sentence in the first paragraph with the following:					
	At the Department's discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be					
	applied in lieu of corrective work.					
Section:	501.03.19					
Part:	B)					
Subpart:	3) Category B Requirements					
Revision:	Replace the last sentence in the first paragraph with the following:					
	At the Department's discretion, a pay deduction of \$750 per 0.1-lane-mile section may be					
	applied in lieu of corrective work.					
Section:	508.03 CONSTRUCTION					
Revision:	Replace the second sentence with the following:					
	Use Class AA concrete according to Subsection 601.03.					
Section:	508.05 Payment					
Revision:	Add the following codes to available Concrete Median Barrier, Type: 01968-01977					

Section:
Part:
B) Mortar, Grout, Flowable Fill, and Self-Consolidating Concrete
Subpart:
Subpart:
Revision:
C01.03.03 Proportioning and Requirements
B) Mortar, Grout, Flowable Fill, and Self-Consolidating Concrete
5) Flowable Fill
Replace subpart 5) with the following:

- 5) Flowable Fill. Use flowable fill consisting of a mixture of cement, sand, fly ash, water, and other materials the Engineer approves. Contrary to Section 844, do not allow the loss on ignition for Class F fly ash to exceed 12 percent. Ensure that the concrete producer certifies mix proportions for flowable fill as follows:
 - Flowable Fill for Pipe Backfill (excavatable). Proportion as follows, per cubic yard batch:

 Cement
 30 pounds

 Fly Ash, Class F
 300 pounds

 Natural Sand (S.S.D.)
 3,000 pounds

 Water (Maximum)
 550 pounds

 Flowable Fill for Bridge End Bent Backfill. Proportion as follows, per cubic yard batch:

Cement 100 pounds Fly Ash, Class F or Class C 300 pounds Natural or Crushed Sand (S.S.D.) 2,950 pounds Water (Maximum) 550 pounds

Alternate Mixtures for Flowable Fill. The Department may approve other mixtures. The mixtures may include other proportions of the above materials, Class C fly ash, chemical admixtures, air entrainment, air entraining admixture designed for use in flowable fill, foaming agents, or aggregate not conforming to the Standard Specifications. The contractor shall submit a mix design that will produce a non-segregating mixture meeting the following properties and verified by trial batch.

•	Flow Consistency (min)	8"
	ASTM D6103	
•	Compressive - Pipe Backfill (min 28 day)	50psi
	ASTM D4832	
•	Compressive - End Bent Backfill (min 28 day)	250psi
	ASTM D4832	
•	Compressive - Pipe Backfill (max 90 day)	120psi
	ASTM D4832	
•	Air Content (max)	30%
	ASTM D6023	
•	Early Opening	
	Support min 170 lb individual	Within 3 hours
	Visual Determination	

When proposing an alternate mix, make and test a trial batch of at least 4 cubic yards to ensure that the mix will have flow and density characteristics suited for the intended use. Use the ingredients, proportions, and equipment intended for the project, including batching, mixing, and delivery.

The Department will observe all phases of the trial batching for approval. Ensure the proposed mixture is proportioned to obtain a minimum flow of 8 inches when tested with a 3 by 6 inch open ended cylinder modified flow test and meets applicable strength requirements. Ensure additional requirements, as stated above, for time of bleeding and time to achieve firmness are met when appropriate for application. Submit the proposed mixture proportions and appropriate test results to the Engineer for review and approval. When the mixture is proprietary, comply with Subsection 107.05.

the mixture is proprietary, comply with Subsection 107.05.

The Department will cast, cure, and break test cylinders from the flowable fill trial batch according to ASTM D 4832 using 4x8 cylinders. Prior to completion of the 28 day curing period, transport the test cylinders to the MCL for compressive strength testing. Obtain an average compressive strength of 50 to 100 psi at 28 days for application as pipe backfill or minimum compressive strength of 250 psi at 28 days for application as bridge end bent backfill. For applications requiring early opening to traffic or placement of pavement as soon as possible, provide a mixture that conforms to the following general guidelines:

"The Engineer will approve flowable fill, delivered to the project, based on certifications indicating proper proportions for the intended use.

Deleted: When deviating from the above specified proportions and materials

Deleted: below

Deleted: 1) Mixture bleeds freely within 10 minutes.¶
2) Require the mixture to support a 150-pound person within 3 hours.¶

Section:	603.03.05 Drainage					
Revision:	In the eighth (8th) paragraph, remove "type IV" from the fabric references in the first (1st) and					
	third (3rd) sentences.					
Section:	607.03.02					
Part:	(a) Prequalification					
Revision:	Remove the following item to the list entitled "Fabricators having SBR, IBR, ABR, or CPT					
	certification may fabricate the following":					
	· Armored Edges					
Section:	607.03.02					
Part:	(a) Prequalification					
Revision:						
	add the following items to the list entitled "AISC certification not required for the following":					
	· Armored Edges or joints with a nominal width of 4 inches or less					
	· Railing System Type II					
Section:	609.05 PAYMENT					
Revision:	add the following line to the table "Schedule for Adjusted Quantity for Depth of Cover					
	Deficiency"					
	Depth of Cover Deficiency (inches) $+0.26$ to $+0.50^{(4)}$					
	Quantity Adjustment Factor 0.06					
Section:	609.05 PAYMENT					
Part:	Note (4) under "Schedule for Adjusted Quantity for Depth of Cover Deficiency"					
Revision:	Replace note (4) with the following:					
	Quantity Adjustment Factor only applies if the Contractor elects to have the bridge deck cored					
	as per KM 64-313. If the Contractor accepts adjustment based on the pachometer readings, this					
	Quantity Adjustment Factor is 0.00.					
Section:	615 PRECAST THREE SIDED STRUCTURES					
Revision:	Insert complete Section 615					
Section:	701.05 PAYMENT					
Revision:	Remove the following from the list of pay items:					
	02600 Fabric-Geotextile Type IV for Pipe Square Yard (2)					
Section:	701.05 PAYMENT					
Revision:	Add the following to the list of pay items:					
	02600 Fabric-Geotextile Class 2 for Pipe Square Yard (2)					
Section:	701.05 PAYMENT					
Revision:	Replace "Type IV" in the item name in note (2) with "Class 2"					

Section:	715.02.07 "Pop" Fasteners				
Revision:	Remove this section in its entirety.				
Section:	715.01 DESCRIPTION				
Revision:	Replace the second sentence with the following:				
	Panel Signs may be ground mounted, overhead structure mounted, or bridge mounted signs				
Section:	715.02.03 Steel Reinforcement				
Revision:	Change section reference from 602 to 811.				
Section:					
	715.03 CONSTRUCTION				
Revision:	Remove all but the first paragraph from this Section. 715.03 will now read as follows:				
	The Department may inspect fabrication and erection work. The Department will perform a day				
	and night inspection after the installation is complete.				
Section:	715.03.01 Location				
Revision:	Remove the first and fourth sentences from this Section, and insert 'to the plans' into the final				
	sentence. The Section will now read as follows:				
	Consider sign locations specified in the Plans as approximate only.				
	Determine the exact location for each sign and obtain the Engineer's approval. Center overhead				
	signs over the lane or lanes to which they apply.				
	Allow for differences in elevation across the full shoulder width, as specified in the Plans,				
	in maintaining the required 18-foot minimum vertical clearance to the bottom of the lowest				
	parts of the signs or supports for overhead signs. Submit all proposed revisions to the plans in				
	writing to the Engineer for written approval.				
Section:	715.03.02 Messages				
Revision:	Delete entire Section				
Section:	715.03.03 Attachment				
Revision:	Renumber as 715.03.02 Attachment				
Section:	715.03.02 Attachment				
Revision:	Replace section with the following:				
	Letters, symbols, numbers, and borders are to be attached to the sign face using the 'direct				
	applied' method.				
Section:	715.03.04 Shields				
Revision:	Delete entire Section				
Section:	715.03.05 Covering				
Revision:	Renumber as 715.03.03 Covering				
Section:	715.03.06 Shop Drawings				
Revision:	Renumber as 715.03.04 Shop Drawings				
Section:	715.03.07 Fabrication				
Revision:	Renumber as 715.03.05 Fabrication				
Section:	715.03.08 Footings, Bases, and Pedestals				
Revision:	Renumber as 715.03.06 Footings, Bases, and Pedestals				

Section:	715.03.06 Footings, Bases, and Pedestals
Revision:	Add the following as the first sentence in the third paragraph:
	Use Class A concrete according to Subsection 601.03.
Section:	715.03.09 Sign Beams and Supports
Revision:	Renumber as 715.03.07 Sign Beams and Supports
Section:	715.03.07 Sign Beams and Supports
Revision:	Remove "and Type "B" " from the third sentence in the first paragraph.
Section:	715.03.07 Sign Beams and Supports
Part:	B)
Revision:	Remove part B) Type B Beam
Section:	715.03.07 Sign Beams and Supports
Part:	C) Type C Beam
Revision:	Change part number as follows:
	B) Type C Beam
Section:	715.03.07 Sign Beams and Supports
Part:	C) Type D Breakaway Supports
Revision:	New part C) after removal of Type B Beam from list with text as follows:
	Specifications for Type D breakaway supports are listed on the details sheet for Type "D"
	supports.
Section:	715.03.10 Bridge Mounting for Signs
Revision:	Renumber section as 715.03.08 Bridge Mounting for Signs
Section:	715.03.11 Mounting Signs
Revision:	Renumber section as 715.03.09 Bridge Mounting for Signs
Section:	715.03.10 Logo Signs
Revision:	Insert new section 715.03.10 Logo Signs, with text as follows:
	Unless directed in the project plans, existing logo panel signs are to be kept in service during
	construction. Contact the logo contractor if signs are to be out of service for more than one day.
	Temporary installations shall be on square wood posts (with the holes drilled in the bottom, per
	the detail sheet, for locations not protected by guardrail, barrier wall, etc.).
Section:	715.04.03 Sign Supports
Revision:	Replace the second paragraph with the following:
	The Department will not measure clearing and grubbing or excavation for payment and will
	consider them incidental to this item of work.
Section:	715.04.06 Sign Panels
Revision:	add the following as the second paragraph in this section:
	The Department will not measure temporary panel signing for payment and will consided them
	incidental to this item of work.
Subsection:	716.03.10 Electrical Junction Box
Part:	B) Filter Fabric
Revision:	rename part B) to the following: Geotextile Fabric

Subsection:	716.03.1	10 Electric	al Junction Box						
Part:	B) Geotextile Fabric								
Revision:				with the following:					
				ggregate and junction box, the c		tall			
	geotexti	le fabric fo	or subsurface dra	inage and separation in the botto	om of hole.				
Subsection:		725.04.06 Concrete, Class AA (for pads)							
Revision:		Replace this subsection with the following:							
		artment will not measure the quantities of Concrete Class AA, excavation, or steel							
			ent for payment, and will consider them incidental to Crash Cushion Type VII, Type						
~ .	VI, or T	ype VI-T.	T.						
Subsection:		PAYMEN		C					
Revision:			ving from the list						
Subsection:	08104	REQUIRE	/	Cubic Yard					
Revision:		-	aragraph with the	e following:					
Kevision.				d hydraulic cement from approve	ed mille listed in t	ho			
				terials. Mills obtain approval by					
				ver the previous 6 months along					
				cement mill laboratories shall be					
				cements are permitted for inclu					
				equirements and submit an acce					
				ne services of) a laboratory that i					
	test met	hods. Wh	en supplying cem	nent with a SO3 content above th	ne value in table I	of ASTM			
				C 1038 14-day expansion test da	ta for the supplied	SO3			
		on the cert							
Subsection:		REQUIRE	MENTS						
Part:	3)								
Subpart:	a)								
Revision:			d sentence with the						
C4*			ements for Comb	he fly ash does not exceed 4.0 p	ercent.				
Section: Revision:			with the followin						
Revision:	Replace	the table				ı			
			FINE AGGR	REGATE CONSENSUS PROPERT REQUIREMENTS	ГҮ				
				REQUIREMENTS					
				Uncompacted Void Content					
		AADTT		of Fine Aggregate (Percent), ⁽¹⁾ Minimum	Sand Equivalent (Percent),				
		Class	Design AADTT		Minimum				
	2 <600 40.0 40								
		3	600 to 2999	43.0	45				
		4	>3000	45.0	50				
			ı		I	l			

Section: Revision:	804 Rep								
	Cla	ss A and Cl		stant Aggregate S	Sources, the Cond	e Source List and the crete Aggregate Re e Source List.			
Section: Revision:	804 Mod								
Revision.		Sieve Size 1/8 inch 30. 4 30. 8 30. 16 30. 30 30. 50 30. 100 30. 200	Type II % Passing 100 90-100 65-9060-90 45-7040-70 30-5025-50 18-3015-30 10-21 5-15		Type III % Passing 100 70-9070-100 45-70 28-50 19-34 12-25 7-18 5-15	ng Stockpile Tolerance			
Section: Revision:	805.01 GENERAL. Replace the second paragraph with the following: The Department's List of Approved Materials includes the Aggregate Source List, the list of Class A and Class B Polish-Resistant Aggregate Sources, the Concrete Aggregate Restriction List, Lightweight Aggregate Source List, and Microsurface Aggregate Source List.								
Section: Revision:	ASPHALT MIXTURES AND SEALS Replace the table with the following:								
	COARSE AGGREGATE CONSENSUS PROPERTY REQUIREMENTS								
		AADTT Class		Coarse A Angu (Perc	Coarse Aggregate Angularity (Percent) Crushed Faces				
		2	<600	<u>≥1</u> 85	≥2 80	10			
		3	600 to 2999			10	ł		
		4	≥ 3000	95 100	90	10			
		⁽¹⁾ Criterion	based on a 5:1 n	naximum-to-mi	nimum ratio.		1		

Section: 806.03.01 General Requirements Revision: Revise the table with the following edited Dynamic Shear values: PG BINDER REQUIREMENTS AND PRICE ADJUSTMENT SCHEDULE PG 58-28 (PG 58S-28) Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay Original Binder Dynamic Shear, G*/sinδ 1.00 kPa Min. 1.00-0.95 0.94-0.90 0.89-0.85 0.84-0.80 < 0.80 Viscosity 3 Pa·s RTFO Residue Mass Loss, % 1.00 Max. 1.01-1.10 1.11-1.20 1.21-1.30 1.31-1.40 > 1.40 MSCR $J_{nr3.2}$, Max. 4.5 kPa⁻¹ < 4.7 4.71-4.75 4.76-4.80 4.81-4.85 ≥ 4.86 J_{nr diff}, Max 75 % PAV Aging BBR Creep Stiffness 300 MPa Max. 300-315 316-330 331-345 346-360 > 360 m-value 0.300 Min. 0.290-0.300 0.285-0.289 0.280-0.284 0.275-0.279 < 0.274 Dynamic Shear, G*sinδ @ 25 °C (2) 5,000 kPa Max 6,000 kPa Max 0-5,200 0-6,200 5,101-5,300 6,201-6,300 5,301-5,400 6,301-6,400 5,401-5,500 6,401-6,500 > 5,501 > 6,501 PG 64-22 (PG 64S-22) 100% Pay 80% Pay 70% Pay 50% Pay Test Specification 90% Pay Original Binder Dynamic Shear, G*/sinδ 1.00 kPa Min. 1.00-0.95 0.94-0.90 0.89-0.85 0.84-0.80 < 0.80 Viscosity 3 Pa·s RTFO Residue Mass Loss, % 1.00 Max. 1.01-1.10 1.11-1.20 1.21-1.30 1.31-1.40 > 1.40 MSCR 4.5 kPa⁻¹ ≥ 4.86 $J_{nr3.2}$, Max. < 4.7 4.71-4.75 4.76-4.80 4.81-4.85 J_{nr_diff}, Max. 75 % PAV Aging BBR Creep Stiffness 300 MPa Max 300-315 316-330 331-345 346-360 > 360 0.300 Min. 0.290-0.300 0.285-0.289 0.280-0.284 0.275-0.279 < 0.274 m-value 5,000 kPa Max. 6,000 kPa Max. 5,201-5,300 6,201-6,300 5,401-5,500 6,401-6,500 > 5,501 0-5,200 0-6,200 5,301-5,400 Dynamic Shear, G*sinδ Section: 806.03.01 General Requirements. **Revision:** Revise the Table with the following corrected values: RTFO Residue Mass Loss, % 1.00 Max. 1.01-1.10 1.11-1.20 1.21-1.30 1.31-1.40 > 1.40 MSCR < 4.70.7 0.5 kPa⁻¹ 4.71 4.76 4.81 $\geq 4.860.86$ $J_{nr3.2}$, Max 4.80<u>0.76-</u> 4.750.71-0.75 4.85<u>0.81-</u> 0.85 0.80 75 % J_{nr. diff}, Max

Section:	805.03.02 Physical Properties							
Revision:	Replace the first 2 lines in this section with the following:							
ACVISION.	Wear (Except Slag, Granite, and Sandstone) 40% maximum							
	Wear (Granite and Sandstone) Wear (Granite and Sandstone) 50% maximum							
Section:	814.06 MATERIALS FOR END TREATMENTS							
Part:								
rart: Revision:	A) Anchorage Systems Revise the minimum breaking strength to be 42,800, and replace reference to AASHTO M 30,							
	Class C with AASHTO M 30, Class A.							
Section:	830.02.01 Delineator Sheeting							
Part:	A) Barrier Wall Delineator							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956, Type XI, Class 1.							
Section:	830.02.01 Delineator Sheeting							
Part:	B) Guardrail Delineator							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956, Type XI, Class 1.							
Section:	830.02.01 Delineator Sheeting							
Part:	C) Delineator Post							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956, Type XI, Class 1.							
Section:	830.02.03 Drum Sheeting							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956. Use approved types for necessary							
	colors on the Department's List of Approved Materials.							
Section:	830.02.03 Drum Sheeting							
Revision:	Add the following sentence to the end of the section:							
	White and fluorescent orange sheeting, both Type IV or higher, will be required for all drums							
	utilized for Maintenance of Traffic.							
Section:	830.02.04 Cone and Tubular Marker Sheeting							
Revision:	Rename the Section "830.02.04 Cone, Vertical Panel, and Tubular Marker Sheeting							
Section:	830.02.04 Cone and Tubular Marker Sheeting							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956. Use approved types for necessary							
	colors on the Department's List of Approved Materials.							
Section:	830.02.04 Cone, Vertical Panel, and Tubular Marker Sheeting							
Revision:	Add the following sentence to the end of the section:							
	White and fluorescent orange sheeting, both Type IV or higher, will be required for all vertical							
	panels, tubular markers, and 42-inch cones utilized for Maintenance of Traffic.							
Section:	830.02.06 Permanent Sign Sheeting							
Revision:	Replace text with the following:							
	Use retroreflective sheeting conforming to ASTM D 4956, Type XI, Class 1.							
Subsection:	834.07.05 Geotextile Filter Fabric Type IV							
Revision:	Change the subsection title to the following: Geotextile Fabric							
Section:	837.03 APPROVAL							
Revision:	In the first sentence, replace 'AASHTO T-250' with 'KM 64-268'							
Section:	837.03 APPROVAL							
Revision:	Replace this section with the following:							
	Select materials that conform to the composition and physical characteristic requirements below							
	when evaluated in accordance with KM 64-268 or other test methods as cited. The Department							
	will obtain samples of thermoplastic material for compliance testing to the requirements of this							
	sections in accordance with the Department's Materials Field Sampling Manual.							

Section:	837.03.01 Composition										
Revision:	Add the following sentence to the end of the paragraph:										
	Manufacturers are to produce extruded thermoplastic in compliance with the values listed in										
	Table 1.	1 1									
Section:	837.03.01 Composition										
Revision:	Label Composition table as new subsection '837.03.02 Table 1'.										
Section:	837.03.02 Physical Characteristics										
Revision:	Renumber subsection as 837.03.03										
Section:	837.06 MANUFACTURER'S TESTING										
Revision:	In the first sentence, replace 'AASHTO T-250' with 'KM 64-268'										
Section:	837.09 ACCEPTANCE OF NON-SPECIFICATION COMPLIANT THERMOPLASTIC										
Revision:	Add new subsection with the following text:										
	The Department may accept thermoplastic found to be in non-conformance to the Specification Acceptance Range at a reduction in pay, see Table 2. Thermoplastic with analytical test result to conforming to the Specification Acceptance Range but within the Acceptance Range with										
	Deduction may be accepted for incorporation into the project with applicable reductions in pa Deductions are cumulative to a maximum of 60% reduction in pay applied to the contract unit										
	bid price for the thermo	plastic. Thermoplas	tic with three (3) or r	nore analytical tests	resulting						
	in non-conformance to	the Specification Ac	ceptance Range or an	y analytical test resu	lt						
	exceeding the Acceptar	nce Range with Dedu	ction will be rejected	and removed from the	he project.						
	Do not allow transfer o	f thermoplastic mate	rials between projects	s that have analytical	test						
	results in the Acceptance Range with Deduction.										
Section:	837.10 Table 2										
Revision:	Add new subsection titl	led 'Table 2' with the	following table:								
	837.10 Table 2.	MODI ASTIC PRICE	ADJUSTMENT SCH	EDITE	1						
	THERE	ior Eristic FideE	I DJUSTIVILIVI SUIT	Deduction							
	A polytical Test	Specification	Acceptance Range	Applied to Unit							
	Analytical Test Binder, %	Acceptance Range 18.0 min.	with Deduction 16.0 -17.9	Cost 50%							
	Glass Beads %										
	(Premixed) Titanium Dioxide,	30-40	28-30	20%							
	% for white	10.0 min.	9.0 -9.9	20%							
	Calcium										
	Carbonate and Inert Fillers for										
	white,	42.0 max.									
	Calcium Carbonate and										
	Inert Fillers for										
	Yellow,	50.0 max.									
	Heavy Metals Content	Comply with									
		40 CFR 261									
	Color	6.0 ΔE*	6.0 ΔE*- 8.0 ΔE*	10%							
Subsection:	844.01 FLY ASH REQ	UIREMENTS									
Revision:	Replace the first paragraph with the following, in order to increase the loss on ignition to										
	percent:	•	<u>.</u>	5							
	onform to ASTM C	518, Class									
	F or Class C, except ensure that the loss on ignition does not exceed 4.0 percent or 6.0 percent										
	for fly ash receiving an approved chemical treatment.										
	ung un	11									