SUBSECTION: REVISION:	101.02 Abbreviations.  Insert the following abbreviation and text into the section:					
	KEPSC Kentucky Erosion Prevention and Sediment Control					
SUBSECTION:	101.03 Definitions.					
REVISION:	Replace the definition for Specifications – <i>Special Provisions</i> with the following:					
	Additions and revisions to the Standard and Supplemental Specifications covering conditions peculiar to and individual project.					
SUBSECTION: REVISION:	102.07.01 General. Replace the first sentence with the following:					
	Submit the Bid Proposal on forms furnished on the Department internet website ( <a href="http://transportation.ky.gov/contract/">http://transportation.ky.gov/contract/</a> ), including the Bid Packet and disk created from the Expedite Bidding Program.					
SUBSECTION: REVISION:	102.07.02 Computer Bidding. Replace the first paragraph with the following:					
	Subsequent to ordering a Bid Proposal for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement ( <a href="http://transportation.ky.gov/contract/">http://transportation.ky.gov/contract/</a> ). Download the bid file from the Department's website to prepare a Bid Proposal for submission to the Department. Include the completed Bid Packet produced by the Expedite Bidding Program and submit it along with the disk created by said program.					
	Replace the second paragraph with the following:					
	In case of a dispute, the printed Bid Proposal and bid item sheets created by the Expedite Bidding Program take precedence over any bid submittal.					
SUBSECTION: REVISION:	102.08 IRREGULAR BID PROPOSALS. Replace point four of the first paragraph with the following:					
	4) fails to submit a disk created from the Expedite Bidding Program.					
	Replace point one of the second paragraph with the following:					
	<ol> <li>when the Bid Proposal is on a form other than that furnished by the Department or printed from other than the Expedite Bidding Program, or when the form is altered or any part is detached; or</li> </ol>					
SUBSECTION: REVISION:	103.02 AWARD OF CONTRACT. Replace the first sentence of the third paragraph with the following:					
	The Department will normally award the Contract within 10 working days after the date of receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all bidders for a period not to exceed 60 calendar days for final disposition of award.					

SUBSECTION:	105.12 FINAL INSPECTION AND ACCEPTANCE OF WORK.
REVISION:	Insert the following paragraphs after the first paragraph:
RE VISION.	Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completeon.  Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work.  Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspections; or Poperations required.  The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repa
SUBSECTION:	105.13 CLAIM RESOLUTION PROCESS.
REVISION:	Delete the last paragraph from the section.
SUBSECTION:	106.10 FIELD WELDER CERTIFICATION REQUIREMENTS.
REVISION:	Insert the following sentence before the first sentence of the first paragraph:
112 ( 1510)	All field welding must be performed by a certified welder unless otherwise noted.
SUBSECTION:	112.03.11 Temporary Pavement Markings.
PART:	B) Placement and Removal of Temporary Striping.
REVISION:	Replace the 2 <sup>nd</sup> sentence of the fist paragraph with the following:
REVISION.	
	On interstates and parkways, and other roadways approved by the State Highway Engineer, install
at the at 1	pavement striping that is 6 inches in width.
SUBSECTION:	112.03.12 Project Traffic Coordinator (PTC).
REVISION:	Add the following at the end of the subsection:
	After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task.

CLIDCECTION	200,02.02.0.1.1.1					
SUBSECTION:	206.03.02 Embankment					
REVISION:	Replace the last paragraph with the following:					
	When real readhed is ensaifed, construct the unner 2 feet of the embeddment essenting to Subsection					
	When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A).					
SUBSECTION:	213.03.03 Inspection and Maintenance.					
REVISION:	Insert the following paragraph after the second paragraph:					
KE VISION.	insert the following paragraph after the second paragraph.					
	When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure					
	compliance with the inspection and maintenance requirements of the permit. The Engineer will perform					
	verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall					
	event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will					
	provide copies of the inspection only when improvements to the BMP's are required. Verification					
	inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance					
	with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete					
	the work within 5 days.					
SUBSECTION:	213.03.05 Temporary Control Measures.					
PART:	F) Temporary Mulch.					
REVISION:	Replace the last sentence with the following:					
	Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and anchor it into the soil					
	by mechanically crimping it into the soil surface or applying tackifier to provide a protective cover.					
	Regardless of the anchoring method used, ensure the protective cover holds until disturbance is required					
	or permanent controls are in installed.					
SUBSECTION:	303.05 PAYMENT.					
<b>REVISION:</b>	Replace the second paragraph of the section with the following:					
	The Department will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay					
GYID GE GETON	Adjustment Schedule for Specialty Mixtures in Section 402.					
SUBSECTION:	401.02.04 Special Requirements for Dryer Drum Plants.					
PART: REVISION:	F) Production Quality Control. Replace the first sentence with the following:					
KEVISION.	replace the first sentence with the following.					
	Stop mixing operations immediately if, at any time, a failure of the automatic electronic weighing					
	system of the aggregate feed, asphalt binder feed, or water injection system control occurs.					
SUBSECTION:	401.02.04 Special Requirements for Dryer Drum Plants.					
<b>REVISION:</b>	Add the following:					
	Part G) Water Injection System. Provided each system has prior approval as specified in Subsection					
	402.01.01, the Department will allow the use of water injection systems for purposes of foaming the					
	asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA).					
	Ensure the equipment for water injection meets the following requirements:					
	1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted);					
	2) Injection equipment has variable controls that introduce water ratios based on production rates					
	of mixtures;					
	3) Injects water into the flow of asphalt binder prior to contacting the aggregate;					
	4) Provides alarms on the water injection system that operate when the flow of water is					
	interrupted or deviates from the prescribed water rate.					
SUBSECTION:	401.03.01 Preparation of Mixtures.					
REVISION:	Replace the last sentence of the second paragraph with the following:					
	Do not use combalt hinder while it is feeming in a stereous tents					
	Do not use asphalt binder while it is foaming in a storage tank.					

#### Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July 24, 2009 Letting)

SUBSECTION: REVISION:	401.03.01 Preparation of Mix Replace the third paragraph as		Temperature table	e with the following:
	Maintain the temperature of t following table:	he component materia	ls and asphalt mix	xture within the ranges listed in the
		MIXING AND LAYING	TEMPERATURES	5 (°F)
	Material		Minimum	Maximum
	Aggregates		240	330
	Aggregates used with Recycl (RAP)		240	_
	Asphalt Binders	PG 64-22 PG 76-22	230 285	330 350
	Asphalt Mixtures at Plant (Measured in Truck)	PG 64-22 HMA PG 76-22 HMA PG 64-22 WMA	250 310 230	330 350 275
	Asphalt Mixtures at Project (Measured in Truck When Discharging)	PG 76-22 WMA PG 64-22 HMA PG 76-22 HMA PG 64-22 WMA PG 76-22 WMA	250 230 300 210 240	300 330 350 275 300
SUBSECTION: REVISION:	402.01 Description. Replace the paragraph with the	-		
	Provide the process control and acceptance testing of all classes and types of asphalt mixtures which may be furnished either as hot mix asphalt (HMA) or warm mix asphalt (WMA) produced with water injection systems.			
SUBSECTION REVISION:	402.01.01 Warm Mix Asphalt Add the following subsection		nd Approval.	
	402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.  The Department will evaluate trial production of WMA by use of a water injection system provided the system is installed according to the manufacturer's requirements and satisfies the requirements of Section 401. Evaluation will include production and placement of WMA to demonstrate adequate mixture quality including volumetric properties and density by Option A as specified in Subsection 402.03.02 D). Do not place WMA for evaluation on Department projects. Provided production and placement operations satisfy the applicable quality levels, the Department will approve WMA production on Department projects using the water injection system as installed on the specific asphalt mixing plant evaluated.			
SUBSECTION: REVISION:	402.05.02 Asphalt Mixtures a Replace Subsection Title as be		P.	
SUBSECTION:	402.05.02 Asphalt Mixtures, l 402.05.02 Asphalt Mixtures, l			
REVISION:	Replace the paragraph with th		iding Mixtures W	ш кар.
	for each lot placed based on the appropriate Lot Pay Adjustme properties within each sublot	the degree of compliand ent Schedule, the Depa and average the sublot partment will apply the Department will calcula	ee with the specifi rtment will assign pay values to dete Lot Pay Adjustm tte the Lot Pay Ad	a pay value for the applicable ermine the pay value for a given ent for each lot to a defined unit ljustment using all possible

SUBSECTION: PART: REVISION: SUBSECTION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. C) Conventional and RAP Mixtures Placed on Shoulders. Replace title with the following: HMA, WMA, and RAP Mixtures Placed on Shoulders. 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.				
PART: REVISION:	D) Conventional and RAP Mixtures Replace the title with the following:	Placed Monoli	thically as Asphalt I	Pavement Wedge.	
REVISION.					
	HMA, WMA, and RAP Mixtures Pla	aced Monolithi	cally as Asphalt Pav	rement Wedge.	
SUBSECTION: PART: TABLES: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures VMA Replace the VMA table with the following:				
			VMA	1	
		Pay Value	Deviation From Minimum		
		1.00	≥ min. VMA		
	0.95 0.1-0.5 below min. 0.90 0.6-1.0 below min.				
	(1) > 1.0 below min.				
SUBSECTION: PART: TABLES: REVISION:					
		V	MA		
		Pay Value	Deviation		
			From Minimum		
	_	1.00	≥ min. VMA		
		0.95	0.1-0.5 below min. 0.6-1.0 below min.		
	-	(1)	> 1.0 below min.		
	_				

CLIDGE CELON	402.05.02 A 1.1/M. / HD4A	1337344 1 1	1. 14. 1	7'.1 D A D		
SUBSECTION: PART:	402.05.02 Asphalt Mixtures, HMA Lot Pay Adjustment Schedule, Com			Vith RAP.		
TABLE:	VMA	ipaction Option	D MIXIUIES			
REVISION:	Replace the VMA table with the fol	llowing:				
		V	MA			
		Pay Value	Deviation			
			From Minimum	ı		
		1.00	≥min. VMA			
		0.95	0.1-0.5 below mi	n.		
		0.90	0.6-1.0 below mi	-		
		(2)	> 1.0 below min			
SUBSECTION:	403.03.03 Preparation of Mixture.					
PART: NUMBER:	C) Mix Design Criteria. 1) Preliminary Mix Design.					
REVISION:	Replace the last two sentences of th	e paragraph and	table with the fo	llowing:		
112 (1510)						
	Complete the volumetric mix design					
	for the number of 20-year ES classes, as given in the bid iten					
		as for Superpure		) y <b>cu</b> r 251.	1411540	as rone ws.
				oer of Gyr		
	Class	ESAL's (milli		N <sub>design</sub>	N <sub>max</sub>	
	2 3	$\frac{< 3.0}{3.0 \text{ to } < 30.0}$	0 7	50 75	75 115	
	4	> 30.0	8	100	160	
		<u> </u>				
CLID OF CONTON	402.02.00 1	10 10				
SUBSECTION: PART:	403.03.09 Leveling and Wedging, a A) Leveling and Wedging.	and Scratch Cour	se.			
REVISION:	Replace the first sentence of the first paragraph with the following:					
	Conform to the gradation requirement	ents (control poi	nts) of AASHTO	M 323 for	base, bir	nder, or surface
	as the Engineer directs.					
SUBSECTION:	403.03.09 Leveling and Wedging, a	and Scratch Cour	se.			
PART:	B) Scratch Course.					
REVISION:	Replace the second sentence of the first paragraph with the following:					
	Conform to the gradation requirement	ents (control nois	otal of A A SUTO	M 222 for	basa bir	ndar ar surface
	Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.					
	-					
SUBSECTION:	407.01 DESCRIPTION.					
REVISION:	Replace the first sentence of the paragraph with the following:					
	Construct a pavement wedge composed of a hot-mixed or warm-mixed asphalt mixture.					
SUBSECTION:	409.01 DESCRIPTION.					
<b>REVISION:</b>	Replace the first sentence of the paragraph with the following:					
	Usa raalaimad aanhalt navamant (D	AD) from Donor	tmant projects or	other ener	oved ser	roos in hot miv
	Use reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) provided mixture requirements are satisfied.					
SUBSECTION:	410.01 DESCRIPTION.					
REVISION:	Delete the second sentence of the paragraph.					

CLIDGE CELON	1400001C C W 1				
SUBSECTION: REVISION:	410.03.01 Corrective Work. Replace the last sentence of the paragraph with the following:				
	Provide a final surface comparable to the adjacent pavement that does not require corrective work in				
	respect to texture, appearance, and skid resistance.				
SUBSECTION:	410.03.02 Ride Quality.				
PART: NUMBER:	B) Requirements. 1) Category A.				
REVISION:	Replace the last sentence of 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.				
SUBSECTION:	410.03.02 Ride Quality.				
PART: NUMBER:	B) Requirements. 2) Category B.				
REVISION:	Replace the second and third sentence of the first paragraph with the following:				
	When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and replace				
	the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of \$750 per				
	0.1-lane-mile section may be applied in lieu of corrective work.				
SUBSECTION:	410.05 PAYMENT.				
REVISION:	Add the following sentence to the end of the first paragraph:				
	The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.				
SUBSECTION:	413.05.02 CL3 SMA BASE 1.00D PG76-22.				
REVISION:	Insert the following sentence between the first and second sentence of the first paragraph:				
	The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives				
	but will not allow the overall pay value for a lot to exceed 1.00.				
SUBSECTION:	413.05.02 CL3 SMA BASE 1.00D PG 76-22.				
TABLE: REVISION:	JOINT DENSITY TABLE Replace the joint density table with the following:				
REVISION.	Replace the joint density table with the following.				
	LANE DENSITY				
	Pay Value Test Result (%)				
	1.05 95.0-96.5				
	1.00 93.0-94.9				
	0.95 92.0-92.9 or 96.6-97.0				
	0.90 91.0-91.9 or 97.1-97.5				
	< 91.0  or > 97.5				
SUBSECTION: REVISION:	413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22. Insert the following sentence between the first and second sentence of the first paragraph:				
	The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives				
	but will not allow the overall pay value for a lot to exceed 1.00.				

SUBSECTION:	413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.					
TABLE:	JOINT DENSITY TABLE					
REVISION:	Replace the joint density table with the following:					
			DENSITY			
		Pay Value Lane Density Joint Density				
			Test Result (%)	Test Result (%)		
		1.05	95.0-96.5	92.0-96.0		
		1.00	93.0-94.9	90.0-91.9		
		0.95		89.0-89.9 or 96.1-96.5		
		0.90	91.0-91.9 or 97.1-97.5	88.0-88.9 or 96.6-97.0		
		0.75		< 88.0 or > 97.0		
			< 91.0 or > 97.5			
SUBSECTION:	501.05.02 Ride Qu		1 64 6			
REVISION:	Add the following	sentence to the end	d of the first paragraph:			
	The sum of the pay	value adjustments	s for the ride quality shall	not exceed \$0 for the p	roject as a whole.	
SUBSECTION:	505.03.04 Detectal	ble Warnings.				
REVISION:	Replace the first se	ntence with the fol	llowing:			
	Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the Standard Drawings.					
SUBSECTION:	505.04.04 Detectable Warnings.					
REVISION:	Replace the paragraph with the following:					
	The Department will measure the quantity in square feet. All retrofit applications for maintenance					
	projects will require	e the removal of e	xisting sidewalks to meet	the requirements of the	standard drawings	
			sociated with the remova			
	concrete sidewalk u		bid item or incidental to t	the bid item for the cons	truction of the	
SUBSECTION:	505.05 PAYMENT		oicu.			
REVISION:	Add the following to the bid item table:					
	Code Pay Item Pay Unit					
	23158ES505	Detectable Warn				
SUBSECTION:	509.01 DESCRIPTION.					
REVISION:	Replace the second paragraph with the following:					
	The Department may allow the use of similar units that conform to the National Cooperative Highway					
	Research Program	(NCHRP) 350 Tes	st Level 3 (TL-3) requiren	nents and the typical fea	tures depicted by	
	the Standard Drawings. Obtain the Engineers approval prior to use. Ensure the barrier wall shape,					
	length, material, drain slot dimensions and locations typical features are met and the reported maximum deflection is 3 feet or less from the NCHRP 350 TL-3 for Test 3 – 11 (pickup truck impacting at 60 mph					
	at a 25-degree angl					
SUBSECTION: REVISION:	601.03.02 Concrete Add the following	Producer Respon				
	If a concrete plant becomes unqualified during a project and there are no other qualified plants in the region, the Department will provide qualified personnel to witness and ensure the producer follows the required specifications. The Department will assess the Contractor a \$100 per hour charge for this service.					

SUBSECTION:	606.02.11 Coarse Aggregate.
REVISION:	Replace with the following:
	Conform to Section 805, size No. 8 or 9-M.
SUBSECTION:	609.04.06 Joint Sealing.
REVISION:	Replace Subsection 601.04 with the following:
	Subsection 606.04.08.
SUBSECTION:	609.05 Payment.
REVISION:	Replace the Pay Unit for Joint Sealing with the following:
	See Subsection 606.05.
SUBSECTION:	701.03.06 Initial Backfill.
REVISION:	Replace the first sentence of the last paragraph with the following:
	When the Contract specifies, perform quality control testing to verify compaction according to KM 64-512.
SUBSECTION:	701.03.08 Testing of Pipe.
REVISION:	Replace and rename the subsection with the following:
	701.03.08 Inspection of Pipe. The engineer will visually inspect all pipe. The Department will require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining pipe structures on the project to provide for the minimum inspection requirement. The pipe will be selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be inspected is at least 50 percent of the total linear feet of all installed pipe on the project.  Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete inspection is possible.  Notify the Engineer immediately if distresses or locations of improper installation are discovered. When camera testing shows distresses or improper installation in the installed pipe, the Engineer may require additional sections to be tested. Provide the video and report to the Engineer when testing is complete in accordance with KM 64-114.  Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation, sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and installation thresholds indicated in the table below, provide the Department with an evaluation of each location conducted by a Professional Enginee

CIDCECTION.	701 04 07 T-+i					
SUBSECTION: REVISION:	701.04.07 Testing. Replace and rename the subsection	with the following:				
REVISION.	replace and remaine the subsection	with the following.				
	<b>701.04.07 Pipeline Video Inspection.</b> The Department will measure the quantity in linear feet along the pipe invert of the structure inspected. When inspection above the specified 50 percent is					
	along the pipe invert of the structur	re inspected. When ins	pection above t	he specified 50 percent	is	
	performed due to a disagreement of				id in	
	error, the Department will measure the quantity as Extra Work according to Subsection 104.03. However, if additional distresses or non-conformance is found, the Department will not measure the					
	additional inspection for payment.					
	1 1 3					
SUBSECTION:	701.05 PAYMENT.					
REVISION:	Add the following pay item to the			р п '		
	Code Pay Ita 23131ER701 Pipelii	em ne Video Inspection		<u>Pay Unit</u> Linear Foo	ıt	
	23131ER/01 Tipelli	ne video mispection		Linear 1 00		
SUBSECTION:	701.05 PAYMENT					
TABLE:	PIPE DEFLECTION DETERMIN		STING			
REVISION:	Replace this table with the following	ng table and note:				
		PIPE DEFLEC	TION			
	Amount of Deflection (9)		Payment			
	0.0 to 5.0	70)		ait Did Deigo		
				the Unit Bid Price he Unit Bid Price (1)		
	10 or greater Remove and Replace					
	Provide Structural Analysis as indicated above. Based on the structural analysis, pipe may be					
CIDCECTION	allowed to remain in place at the	reduced unit price.				
SUBSECTION: TABLE:	701.05 PAYMENT PIPE DEFLECTION DETERMINED BY MANDREL TESTING					
REVISION:	Delete this table.	ED DI MANDREL I	ESTING			
SUBSECTION:	713.02.01 Paint.					
REVISION:	Replace with the following:					
~~~~	Conform to Section 842 and Section	on 846.				
SUBSECTION:	713.03 CONSTRUCTION.		- C-11			
REVISION:	Replace the first sentence of the se	cond paragraph with th	e following:			
	On interstates and parkways, and o	ther routes approved b	v the State High	nway Engineer install n	avement	
	striping that is 6 inches in width.	The second of th	,	F.		
SUBSECTION:	713.03.03 Paint Application.					
REVISION:	Replace the second paragraph with	the following table:				
	Material	Paint Application R	ate C	lass Beads Application	1 Rate	
	4 inch waterborne paint	Min. of 16.5 gallons	mile N	lin. of 6 pounds/gallon	1 Natt	
	6 inch waterborne paint	Min. of 24.8 gallons/		lin. of 6 pounds/gallon		
	6 inch durable waterborne paint	Min. of 36 gallons/m		fin. of 6 pounds/gallon		
	pani		1 27	- T - 1		

GT:TD GT: GTT G 3:						
SUBSECTION:	713.03.04 Marking Removal.					
REVISION:	Replace the last sentence of the paragraph wit the following:					
	77					
CLIDGE CELON	Vacuum all marking material and removal debris concurrently with the marking removal operation.					
SUBSECTION:	713.05 PAYMENT.					
REVISION:	Insert the following codes and pay items below the Pavement Striping – Permanent Paint:					
	Code Pay Item Pay Unit					
	23159EN Durable Waterborne Marking – 6 IN W Linear Foot					
	23160EN Durable Waterborne Marking – 6 IN Y Linear Foot					
SUBSECTION:	714.03 CONSTRUCTION.					
REVISION:	Insert the following paragraph at the end of the third paragraph:					
KE VISION.	insert the following paragraph at the end of the time paragraph.					
	Use Type I Tape for markings on bridge decks, JPC pavement and JPC intersections. Thermoplastic					
	should only be used for markings on asphalt pavement					
SUBSECTION:	714.03.07 Marking Removal.					
REVISION:	Replace the third sentence of the paragraph with the following:					
	Vacuum all marking material and removal debris concurrently with the marking removal operation.					
SUBSECTION:	716.01 DESCRIPTION.					
<b>REVISION:</b>	Insert the following after the first sentence:					
	Energize lighting as soon as it is fully functional and ready for inspection. Ensure that lighting remains					
	operational until the Division of Traffic Operations has provided written acceptance of the electrical					
	work.					
GLIDGE GETON	714 00 01 P 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
SUBSECTION:	716.02.01 Roadway Lighting Materials.					
REVISION:	Replace the third sentence of the paragraph with the following:					
	Submit for material approval an electronic file of descriptive literature, drawings, and any requested					
	design data.					
	design data.					
SECTION:	717 – THERMOPLASTIC INTERSECTION MARKINGS.					
REVISION:	Replace the section name with the following:					
	INTERSECTION MARKINGS.					
SUBSECTION:	717.01 DESCRIPTION:					
REVISION:	Replace the paragraph with the following:					
	Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn					
	Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion					
	process or by applying preformed thermoplastic intersection marking material.					
SUBSECTION:	717.02 MATERIALS AND EQUIPMENT.					
REVISION:	Insert the following subsection:					
REVISION.	most the following subsection.					
	717.02.06 Type I Tape. Conform to Section 836.					
	71 "T"					
SUBSECTION:	717.03.03 Application.					
<b>REVISION:</b>	Insert the following part to the subsection:					
	B) Type I Tape Intersection Markings. Apply according to the manufacturer's recommendations. Cut					
	all tape at pavement joints when applied to concrete surfaces.					

SUBSECTION:	717.03.05 Proving Period.				
PART:	A) Requirements.				
REVISION:	Insert the following to this section:				
KE VISION.	insert the following to this section.				
	2) Type I Tape. During the proving period, ensure that the pavement marking material shows no signs				
	of failure due to blistering, excessive cracking, bleeding, staining, discoloration, oil content of the pavement materials, drippings, chipping, spalling, poor adhesion to the pavement, loss of				
		ige, and normal wear. Type I Tape is manufactured or			
		o meet certain retroreflective requirements. As long a			
		e and shows no signs of failure due to the other items			
		oreflectivity readings will not be required. In the abs			
		based on a nighttime visual observation.	<b>G</b> ,		
SUBSECTION:	717.03.06 Marking Removal.	-			
<b>REVISION:</b>	Replace the third sentence of the	e paragraph with the following:			
		d removal debris concurrently with the marking remo	val operation.		
SUBSECTION:	717.05 PAYMENT.				
REVISION:	Insert the following bid item cod	des:			
	~ .				
	Code	Pay Unit	Pay Item		
	06563	Pave Marking – R/R X Bucks 16 IN	Linear Foot		
	20782NS714	Pave Marking Thermo – Bike	Each		
	23251ES717, 23264ES717	Pave Mark TY I Tape X-Walk, Size	Linear Foot		
	23252ES717, 23265ES717	Pave Mark TY I Tape Stop Bar, Size	Linear Foot		
	23253ES717	Pave Mark TY I Tape Cross Hatch	Square Foot		
	23254ES717	Pave Mark TY I Tape Dotted Lane Extension	Linear Foot		
	23255ES717	Pave Mark TY I Tape Arrow, Type	Each		
	23268ES717-23270ES717				
	23256ES717	Pave Mark TY I Tape- ONLY	Each		
	23257ES717	Pave Mark TY I Tape- SCHOOL	Each		
	23266ES717	Pave Mark TY 1 Tape R/R X Bucks-16 IN	Linear Foot		
	23267ES717	Pave Mark TY 1 Tape-Bike	Each		
SUBSECTION:	805.01 GENERAL.				
REVISION:	Replace the second paragraph w	rith the following:			
		114	1:		
		oved Materials includes the Aggregate Source List, the	e list of Class A and		
CIDCECTION	805.04 CONCRETE.	gate Sources, and the Concrete Restriction List.			
SUBSECTION:		reference in first centence of the third necessary with	"VM 64 620"		
REVISION:	Kepiace the AASH10 1 160°1	reference in first sentence of the third paragraph with	NIVI 04-029		
SUBSECTION:	805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.				
TABLE:	AGGREGATE SIZE USE				
PART:	Cement Concrete Structures and	Incidental Construction			
REVISION:		g Overlays" with "8 or 9-M for Waterproofing Overla	vs"		
ALTIDION.	1 replace 7 mi for waterproofing	5 Creating 5 with 0 of 2 in 101 waterproofing Overla	JS		

#### **Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition**

(Effective with the July 24, 2009 Letting)

SUBSECTION: 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.

**REVISION:** Replace the "SIZES OF COARSE AGGREGATES" table in with the following:

					S	IZES (	OF COAI	RSE A	GGREG	ATES							
	Sieve AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT																
Aggregate Size	Nominal <sup>(3)</sup> Maximum Aggregate Size	4 inch	3 1/2 inch	3 inch	2 1/2 inch	2 inch	1 1/2 inch	1 inch	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
1	3 ½ inch	100	90-100		25-60		0-15		0-5								
2	2 ½ inch			100	90-100	35-70	0-15		0-5								
23	2 inch			100		40-90		0-15		0-5							
3	2 inch				100	90-100	35-70	0-15		0-5							
357	2 inch				100	95-100		35-70		10-30		0-5					
4	1 ½ inch					100	90-100	20-55	0-15		0-5						
467	1 ½ inch					100	95-100		35-70		10-30	0-5					
5	1 inch						100	90-100	20-55	0-10	0-5						
57	1 inch						100	95-100		25-60		0-10	0-5				
610	1 inch						100	85-100		40-75		15-40					
67	3/4 inch							100	90-100		20-55	0-10	0-5				
68	3/4 inch							100	90-100		30-65	5-25	0-10	0-5			
710	3/4 inch							100	80-100		30-75	0-30					
78	1/2 inch								100	90-100	40-75	5-25	0-10	0-5			
8	3/8 inch									100	85-100	10-30	0-10	0-5			
9-M	3/8 inch									100	75-100	0-25	0-5				
10(2)	No. 4										100	85-100				10-30	
11(2)	No. 4						•				100	40-90	10-40			0-5	
DENSE GRADED AGGREGATE <sup>(I)</sup>	3/4 inch							100	70-100		50-80	30-65			10-40		4-13
CRUSHED STONE BASE (1)	1 ½ inch				100		90-100		60-95		30-70	15-55			5-20		0-8

<sup>(1)</sup> Gradation performed by wet sieve KM 64-620 or AASHTO T 11/T 27.

Note: The Department will allow blending of same source/same type aggregate when precise procedures are used such as cold feed, belt, or equivalent and combining of sizes or types of aggregate using the weigh hopper at concrete plants or controlled feed belts at the pugmill to obtain designated sizes.

<sup>(2)</sup> Sizes shown for convenience and are not to be considered as coarse aggregates.

<sup>(3)</sup> Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained.

SUBSECTION:	805.16 SAMPLING AND TESTING.								
REVISION:	Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion								
REVISION.	Test.								
	Replace the "ASTM D 3042" method with the "KM	64-625" method fo	or Insoluble Resid	ue.					
SUBSECTION:	810.04.01 Coating Requirements.								
REVISION:	Replace the "Subsection 806.07" references with "Subsection 806.06"								
SUBSECTION:	810.06.01 Polyvinyl Chloride (PVC) Pipe.								
PART:	B) Culvert and Entrance Pipe.								
REVISION:	Replace the title with the following:								
	B) Culvert Pipe, Storm Sewer, and Entrance Pipe.								
SUBSECTION:	837.03 APPROVAL.								
REVISION:	Replace the last sentence with the following:								
	The Department will sample and evaluate for approv								
	use per contract prior to installation of the thermopla								
	thermoplastic material until it has been approved by			Department a					
CIDCECTION	minimum of 10 working days to evaluate and approve	ve thermoplastic m	ateriai.						
SUBSECTION: REVISION:	837.03.01 Composition. COMPOSITION Table:								
KEVISION:	Replace								
	Lead Chromate	0.0 max.	4.0 min.	1					
	with	0.0 max.	4.0 mm.	'					
	Heavy Metals Content	Comply with	1 40 CFR 261	1					
SECTION:	DIVISION 800 MATERIAL DETAILS			1					
REVISION:	Add the following section in Division 800								
	3 · · · · · · · · · · · · · · · · · · ·								
	SECTION 846 – DURABLE WATERBO	ORNE PAINT							
	846.01 DESCRIPTION. This section covers quick								
	for permanent applications. The paint shall be read	ly-mixed, one-com	nponent, 100% ac	rylic waterborne					
	striping paint suitable for application on such tra	ffic-bearing surface	ces as Portland c	ement concrete,					
	bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.								
	946 92 Ammung 1 Calast materials that a minimum to the								
	<b>846.02 Approval.</b> Select materials that conform to the composition requirements below. Provide								
	independent analysis data and certification for each formulation stating the total concentration of each								
	heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping								
	operations. The initial sample may be sent from the manufacture of the paint. The Department will								
	randomly sample and evaluate the paint each week that the striping operations are in progress.								
	, 1	F9 sp	F108						
	The non-volatile portion of the vehicle shall	ll be composed of a	a 100% acrylic pol	lymer as					
	determined by infrared spectral analysis. The acrylic								
	evidenced by infrared peaks at wavelengths 1568, 16	624, and 1672 cm-1	1 with intensities e	equal to those					
	produced by an acrylic resin known to be 100% cros								
	•								

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PAINT COMPOSITION							
Property and Test Method	Yellow	White					
Daytime Color (CIELAB)	L* 81.76	L* 93.51					
Spectrophotometer using	a* 19.79	a* -1.01					
illuminant D65 at 45°	b* 89.89	b* 0.70					
illumination and 0° viewing with	Maximum allowable variation	Maximum allowable variation					
a 2° observer	2.0ΔE*	2.0ΔE*					
Nighttime Color (CIELAB)	L* 86.90	L* 93.45					
Spectrophotometer using	a* 24.80	a* -0.79					
illuminant A at 45° illumination	b* 95.45	b* 0.43					
and 0° viewing with a 2° observer	Maximum allowable variation	Maximum allowable variation					
	2.0ΔE*	2.0ΔE*					
Heavy Metals Content	Comply with 40 CFR 261	Comply with 40 CFR 261					
Titanium Dioxide	NA	10% by weight of pigment					
ASTM D 4764		min.					
VOC	1.25 lb/gal max.	1.25 lb/gal max.					
ASTM D 2369 and D 4017							
Contrast Ratio	0.97	0.99					
(at 15 mils wft)							

**846.02.01 Manufacturers Certification.** Provide a certification of analysis for each lot of traffic paint produced stating conformance to the requirements of this section. Report the formulation identification, traffic paint trade name, color, date of manufacturer, total quantity of lot produced, actual quantity of traffic paint represented, sampling method utilized to obtain the samples, and data for each sample tested to represent each lot produced.

**846.03** ACCEPTANCE PROCEDURES FOR NON-SPECIFICATION DURABLE WATERBORNE PAVEMENT STRIPING PAINT. When non-specification paint is inadvertently incorporated into the work the Department will accept the material with a reduction in pay. The percentage deduction is cumulative based on its compositional properties, but will not exceed 60 percent. The Department will calculate the payment reduction on the unit bid price for the routes where the non-specification paint was used.

DURABLE WATERBORNE PAVEMENT STRIPING PAINT REDUCTION SCHEDULE										
Non- conforming Property	Resin	Color	Contrast	TiO <sub>2</sub>	VOC	Heavy Metals Content				
Reduction Rate	60%	10%	10%	10%	60%	60%				