Subsection:	101.02 ABBREVIATIONS				
Revision:	Add the following abbreviation:				
	AADTT - Average Annual Daily Truck Traffic				
Subsection:					
Revision:	Add the following Definitions to this section:				
	Superpave Mix Design Technologist (SMDT) - An inspector qualified by the KYTC to				
	submit, adjust, or approve asphalt mix designs.				
	Superpave Plant Technologist (SPT) - An inspector qualified by the KYTC to perform routine				
	inspection and process control, acceptance, or verification testing on asphalt mixtures.				
Subsection:	102.15 Process Agent.				
Revision:	Replace the 1st paragraph with the following:				
	Every corporation doing business with the Department shall submit evidence of compliance				
	with KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and				
	271B.16-220, and file with the Department the name and address of the process agent upon				
	whom process may be served.				
Subsection:	105.13 Claims Resolution Process.				
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer				
	available through the forms library and are forms generated within the AASHTO SiteManager				
	software.				
Subsection:	108.01 Subcontracting of Contract.				
Revision:	Replace the section with the following:				
	Do not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion of				
	the Contract or Contracts, or of the right, title, or interest therein, without the Engineer's written				
	consent. If the Contractor chooses to subcontract any portion of the Contract, a written request				
	to sublet work must be submitted on the Subcontract Request (TC 63-35) form for the				
	Engineer's approval. When directed by the Engineer, submit a certified copy of the actual				
	subcontract agreement executed between the parties.				
	The Engineer will allow the Contractor to subcontract a portion, but the Contractor must				
	perform with his own organization work amounting to no less than 30 percent of the total				
	Contract cost. The Engineer will not allow any subcontractor to exceed the percentage to be				
	performed by the Contractor and will require the Contractor to maintain a supervisory role over				
	the entire project.				
	Do not allow any subcontractor to further subcontract any parties of the yearly without obtaining				
	Do not allow any subcontractor to further subcontract any portion of the work without obtaining written consent from the Engineer. When the Engineer gives such consent, the first tier				
	subcontractor may further subcontract a portion of his work not to exceed 50 percent of the work				
	originally subcontracted to him by the Contractor. Do not allow any second tier subcontractor to				
	subcontract any portion of the work.				
	subcontract any portion of the work.				
	Extra work performed by subcontractors in accordance with Section 109 will not be utilized in				
	the computation of total dollar amount subcontracted. Subcontract percentages are based upon				
	the original contract amount.				
I					

Payment to subcontractors for satisfactory performance of their work or materials supplied must be made within 7 calendar days from receipt of payment from the Engineer. Upon request by the Engineer, provide proof that payment has been made to the subcontractor within the 7 calendar days. Progress payments may be withheld for failure to comply with this request.

The Engineer's written consent to subcontract, assign, or otherwise dispose of any portion of the Contract does not, under any circumstances, relieve the Contractor or the surety of their respective liabilities and obligations under the Contract. The Engineer will make transactions only with the Contractor. The Engineer will recognize subcontractors only in the similar capacity of employees or workers of the Contractor who are subject to the same requirements as to character and competence as specified in Subsection 108.06.

Lease agreements are acceptable on Department projects. No additional paperwork is needed when equipment is rented from a commercial rental company unless the leased equipment comes with an operator. In these circumstances, payroll records for the operator of the leased equipment must be maintained and submitted by the contractor in accordance with Department policy.

Lease agreements between contractors that involve equipment only will require the submittal of a TC 63-71 Department Equipment Rental Form. If a Contractor is found to be in violation of these requirements, the Engineer reserves the right to withhold payment for the work which was performed in violation of these requirements. This provision does not include the lease or use of equipment from a corporation or company wholly owned by the Contractor. The Contractor shall not use equipment in the performance of the Contract to which title is not held by the Contractor or an approved subcontractor without a submitted lease agreement.

If a public official has provided a documented Declaration of Emergency, then the Engineer may verbally waive the requirement of submitting a TC 63-71 Department Equipment Rental Form until the situation has ended. After the emergency situation ends, immediately remove the equipment from the project or submit a completed TC 63-71 Department Equipment Rental Form to the Engineer.

	bsection:	
. 7		

108.03 Preconstruction Conference.

Revision:

Replace 8) Staking with the following:

8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.

Subsection:

109.07.02 Fuel.

Revision:

Revise item Crushed Aggregate Used for Embankment Stabilization to the following:

Crushed Aggregate

Used for Stabilization of Unsuitable Materials

Used for Embankment Stabilization

Delete the following item from the table.

Crushed Sandstone Base (Cement Treated)

Subsection:	110.02 Demobilization.				
Revision:	Replace the first part of the first sentence of the second paragraph with the following:				
	Perform all work and operations necessary to accomplish final clean-up as specified				
	in the first paragraph of Subsection 105.12;				
Subsection:	112.03.12 Project Traffic Coordinator (PTC).				
Revision:	Replace the last paragraph of this subsection with the following:				
	Ensure the designated PTC has sufficient skill and experience to properly perform the task				
	assigned and has successfully completed the qualification courses.				
Subsection:	112.04.18 Diversions (By-Pass Detours).				
Revision:	Insert the following sentence after the 2nd sentence of this subsection.				
	The Department will not measure temporary drainage structures for payment when the contract				
	documents provide the required drainage opening that must be maintained with the diversion.				
	The temporary drainage structures shall be incidental to the construction of the diversion. If the				
	contract documents fail to provide the required drainage opening needed for the diversion, the				
	cost of the temporary drainage structure will be handled as extra work in accordance with				
	section 109.04.				
Subsection:	201.03.01 Contractor Staking.				
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the				
	general supervision of a Professional Engineer or Land Surveyor licensed in the				
	Commonwealth of Kentucky.				
Subsection:	201.04.01 Contractor Staking.				
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of				
the project under the supervision of a Professional Engineer or Land Surveyor licer					
Commonwealth of Kentucky.					
Subsection:	206.04.01 Embankment-in-Place.				
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable				
	excavation included in the original plans that is disposed of for payment and will consider it				
incidental to Embankment-in-Place.					
Subsection:					
Revision:	Replace paragraph with the following:				
	Select Type I or Type II cement conforming to Section				
	801. Use the same type cement throughout the work.				

Subsection:	208.03.06 Curing and Protection.				
Revision:	Replace the fourth paragraph with the following:				
Revision:	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day consists of a continuous 24-hour period in which the ambient air temperature does not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7), 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department may allow a shortened curing period when the Contractor requests. The Contractor shall give the Department at least 3 day notice of the request for a shortened curing period. The Department will require a minimum of 3 curing days after final compaction. The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened curing time is requested. The Department will test cores using an unconfined compression test. Roadbed cores must achieve a minimum strength requirement of 80 psi.				
Subsection:	208.03.06 Curing and Protection.				
Revision:	Replace paragraph eight with the following:				
	At no expense to the Department, repair any damage to the subgrade caused				
	by freezing.				
Subsection:	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Revision:	Revise Seed Mix Type I to the mixture shown below:				
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)				
	35% Hard Fescue				
	(Festuca (Festuca longifolia)				
	10% Ryegrass, Perennial (Lolium perenne)				
	5% White Dutch Clover				
	(Trifolium repens)				

	Lifective with the replacity 23, 2010 Letting					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	A) Seed Mixtures for Permanent Seeding.					
Number:	2)					
Revision:	Replace the paragraph with the following:					
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed					
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course					
	replace the crown vetch with Kentucky 31 Tall Fescue.					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	A) Seed Mixtures for Permanent Seeding.					
Number:	3)					
Revision:	Replace the paragraph with the following:					
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.					
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to					
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	B) Procedures for Permanent Seeding.					
Revision:	Delete the first sentence of the section.					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	B) Procedures for Permanent Seeding.					
Revision:	Replace the second and third sentence of the section with the following:					
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100					
	pounds of nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply					
	agricultural limestone to the seedbed when the Engineer determines it is needed. When requ					
	place agricultural limestone at a rate of 3 tons per acre.					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	D) Top Dressing.					
Revision:	Change the title of part to D) Fertilizer.					
Subsection:	212.03.03 Permanent Seeding and Protection.					
Part:	D) Fertilizer.					
Revision:	Replace the first paragraph with the following:					
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established.					
	Use fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to					
	the seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-					
	10 fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000					
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply					
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional					
	cost to the Department. Re-establish any vegetation severely damaged or destroyed beca					
	an excessive application of fertilizer at no cost to the Department.					
Subsection:	: 212.03.03 Permanent Seeding and Protection.					
Part:	D) Fertilizer.					
Revision:	Delete the second paragraph.					
Subsection:						
Revision:	Replace the entire section with the following:					
	The Department will measure the quantity of agricultural limestone in tons.					

Subsection:	212.04.05 Fertilizer.					
Revision:						
Kevision.	Replace the entire section with the following: The Department will measure fertilizer used in the seeding or sodding operations for payment.					
	The Department will measure fertilizer used in the seeding or sodding operations for payment.					
Subsection:	The Department will measure the quantity by tons.					
	212.05 PAYMENT.					
Revision:	Delete the following item code:					
	Code Pay Item Pay Unit					
	05966 Topdressing Fertilizer Ton					
Subsection:	212.05 PAYMENT.					
Revision:						
	Add the following pay items:					
	Code Pay Item Pay Unit					
	05963 Initial Fertilizer Ton					
	05964 20-10-10 Fertilizer Ton					
	05992 Agricultural Limestone Ton					
Subsection:	213.03.02 Progress Requirements.					
Revision:	Replace the third paragraph with the following:					
	After exposing areas of erodible material, make every effort to stabilize and protect the					
	areas as quickly as possible. Permanently seed and mulch all areas at final grade within 14 days.					
	Temporary stabilization practices on those portions of the project where construction activities					
	have temporarily ceased shall be initiated within 14 days of the date of activity cessation. The					
	Engineer will suspend grading operations for instances where the Contractor fails to sustain					
	erosion control measures to effectively control erosion and to prevent water pollution in					
	accordance with the KPDES Permit. In addition, the Engineer will withhold monies due on					
	current estimates until corrective work has been initiated and is continuously progressing to					
	remediate noted deficiencies. Additionally, should noted deficiencies not be adequately					
	addressed to the satisfaction of the Engineer within 7 calendar days of receipt of written					
	notification of deficiencies, the Department will apply a penalty equal to the daily liquidated					
	damages rate until all aspects of the work have been completed.					
Subsection:	213.03.05 Temporary Control Measures.					
Part:	E) Temporary Seeding and Protection.					
Revision:	Delete the second sentence of the first paragraph.					
Subsection:	304.02.01 Physical Properties.					
Table:	Required Geogrid Properties					
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	B) Sampling.					
Revision:	b) Samping.					
	Replace the second sentence with the following:					
	The Department will determine when to obtain the quality control samples using the random-					
	number feature of the mix design submittal and approval spreadsheet. The Department will					
	randomly determine when to obtain the verification samples required in Subsections 402.03.03					
	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.					

Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	D) Testing Responsibilities.				
Number:	3) VMA.				
Revision:	Add the following paragraph below Number 3) VMA:				
	Retain the AV/VMA specimens and one additional corresponding G _{mm} sample for 5 working				
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a				
	mixture sample for 5 working days for mixture verification testing by the Department. When				
	the Department's test results do not verify that the Contractor's quality control test results are				
	within the acceptable tolerances according to Subsection 402.03.03, retain the samples and				
	specimens from the affected sublot(s) for the duration of the project.				
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	D) Testing Responsibilities.				
Number:	4) Density.				
Revision:	Replace the second sentence of the Option A paragraph with the following:				
	Perform coring by the end of the following work day.				
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	D) Testing Responsibilities.				
Number:	5) Gradation.				
Revision:	Delete the second paragraph.				
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	H) Unsatisfactory Work.				
Number:	er: 1) Based on Lab Data.				
Revision: Replace the second paragraph with the following:					
When the Engineer determines that safety concerns or other considerations prohib					
	immediate shutdown, continue work and the Department will make an evaluation of				
	acceptability according to Subsection 402.03.05.				

Subsection:	402.03.03 Verification.				
Revision:	Replace the first paragraph with the following:				
	402.03.03 Mixture Verification. For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.				
Subsection:	402.03.03 Verification.				
Part:	A) Evaluation of Sublot(s) Verified by Department.				
Revision:	Replace the third sentence of the second paragraph with the following: When the paired <i>t</i> -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.				
Subsection:	402.03.03 Verification.				
Part:	B) Evaluation of Sublots Not Verified by Department.				
Revision:	Replace the third sentence of the first paragraph with the following: When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.				
Subsection:	402.03.03 Verification.				
Part:	B) Evaluation of Sublots Not Verified by Department.				
Revision:	Replace the third sentence of the second paragraph with the following: When the F -test or t -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.				
Subsection: Part:	402.03.03 Verification. C) Test Data Patterns.				

Revision:	Replace the second sentence with the following:	ond sentence with the following:		
When patterns indicate substantial differences between the verified and non-verified sublots, the				
	Department will perform further comparative testing according to subsection 402.03.05.			

Subsection: Revision:

402.03 CONSTRUCTION.

Add the following subsection: **402.03.04 Testing Equipment and Technician Verification.** For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the Department will obtain an additional verification sample at random using the Asphalt Mixture Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and Department's laboratory testing equipment and technicians. The Department will obtain a mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it according to AASHTO R 47. The Department will retain one split portion of the sample and provide the other portion to the Contractor. At a later time convenient to both parties, the Department and Contractor will simultaneously reheat the sample to the specified compaction temperature and test the mixture for AV and VMA using separate laboratory equipment according to the corresponding procedures given in Subsection 402.03.02. The Department will evaluate the differences in test results between the two laboratories. When the difference between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate and resolve the discrepancy according to Subsection 402.03.05.

402.03.02 Contractor Quality Control and Department Acceptance **Subsection:** C) Setup Part: **Revision:** Replace the entire part with the following: The setup period is the first sublot of production. No new, or multiple setup periods will be permitted without obtaining written approval of the Engineer for these additional periods. After the first sublot no changes from the approved mix designs are permitted without first obtaining written approval from the Engineer. Keep plant and production adjustments within the specified approved mix design and specification requirements. No more than three mix designs are permitted to be approved by the Department per contract, per pay item, per plant. Within the same performance grade, changing asphalt cement supplier is permitted by notifying the Engineer and noting the new supplier and the supplier source code on the Asphalt Mixture Acceptance Workbook. Perform volumetric testing for AC, AV, and VMA within the first 2 hours of project production. By the end of the first sublot, test to document that the mixture meets a 0.90 minimum pay value for each of these properties. For mixtures with a total-project quantity between 500 and 1,000 tons, perform a minimum of one process control test for AC, AV, and VMA, and report the results to the Engineer. The Department will monitor the setup duties and testing and may test to confirm the setup results. When any of the mixture properties do not meet the minimum pay value, cease all shipments to the project and adjust procedures or mixture properties until they are acceptable. Provide the Engineer with documentation of the acceptable test results. Provide the Engineer with a copy of the random number chart established for the total tonnage for the mixture specified. Develop the rolling pattern during the first sublot. When necessary during setup, adjust the AC up to \pm 0.3 percent provided all other properties stay within their specified acceptance limits. Ensure the adjusted AC remains above the minimums specified in Subsection 403.03.03 C) 2). Obtain the Engineer's approval to make this adjustment on all Specialty Mixtures. 402.03.02 Contractor Quality Control and Department Acceptance **Subsection:** D) Testing Responsibilities. Part: Subpart: 1) AC **Revision:** Replace subpart 1) with the following: AC. Perform one evaluation corresponding to each AV/VMA analysis per sublot. Test according to KM 64-405 or AASHTO T308.

402.03.03 Verification

A) Evaluation of Sublot(s) Verified by Department

Modify the tolerance percentage in the chart for AC test from ± 0.5 to ± 0.7

Subsection:

Revision:

Part:

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Subsection:	402.03.03 Verification		
Part:	B) Evaluation of Sublot(s) Not Verified by Department		
Revision:	Modify the tolerance percentage in the chart for AC test from ±0.6 to ±0.8		
Subsection:	402.03.04 Dispute Resolution.		
Revision:	Change the subsection number to 402.03.05.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures		
Table:	AC		
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures		
Table:	AV		
Revision:	Replace ESAL with AADTT in all instances in this table.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures		
Table:	LANE DENSITY		
Revision:	Replace ESAL with AADTT in all instances in this table.		
Subsection:	402.05 PAYMENT.		
Part: Lot Pay Adjustment Schedule Compaction Option A Surface Mixtures			
Table:	ble: AV		
Revision:	Replace ESAL with AADTT in all instances in this table.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option A Surface Mixtures		
Table:	LANE DENSITY		
Revision:	Replace ESAL with AADTT in all instances in this table.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option A Surface Mixtures		
Note:	(1)		
Revision:	Replace ESAL with AADTT in all 4 instances in this note.		
Subsection:	1: 402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option B Mixtures		
Table:	AV		
Revision:	Replace ESAL with AADTT in all instances in this table.		
Subsection:	402.05 PAYMENT.		
Part:	Lot Pay Adjustment Schedule Compaction Option B Mixtures		
Note:	(2)		
Revision:	Replace ESAL with AADTT in both instances in this note.		

Subsection:	403.01 Description.				
Revision:	Replace the sentence three and four of the first paragraph with the following: Provide a Superpave Plant Technologist (SPT) or Superpave Mix Design Technician				
	(SMDT) qualified by the Laboratories' Quality Acceptance program. Be available to add				
	Quality Control concerns arising during work performed under section 403.				
Subsection:	403.02.07 Asphalt Pavers.				
Revision:	Add the following to the subsection:				
	7) Utilize a Durable Pavement Edge that produces material that is confined at the end gate and extrudes the asphalt material in such a way that results in a consolidated wedge-shape pavement edge of approximately 29 to 40 degrees as it leaves the paver (measured from a line parallel to the pavement surface). The device shall maintain contact to the graded material adjacent to the pavement and must be adjustable to allow for transition to cross roads, driveways and obstructions without requiring the paver to be stopped routinely. The device shall constrain the asphalt head and increase the density of the extruded profile. To achieve desired results, rolling is not required on the wedge. The desired pavement edge angle is 30 degrees. A listing of approved commercially manufactured Durable Pavement Edge systems will be				
	available on the Department internet website (http://transportation.ky.gov/Construction/Pages/Kentucky -Standard- Specifications.aspx).				
	If electing to not use a commercially manufactured Durable Pavement Edge system, proof shall be demonstrated that the device has been used on previous projects with acceptable results or a test section shall be constructed prior to the beginning of work which demonstrates that the wedge is capable of producing consolidation to the satisfaction of the Engineer. The <i>finished</i> angle of the Durable Pavement Edge shall be between 29 to 40 degrees. A single-plate strike-off method shall not be allowed for bituminous paving.				
Subsection:	: 403.02.10 Material Transfer Vehicle (MTV).				
Revision:	Disregard previous revisions from Supplemental Specifications. 2012 Standard Specification shall apply to this item				
Subsection:					
Part:	A) Preparation of Mixture				
Revision:	Replace ESAL with AADTT in all instances in this part				
Subsection:					
Part:	C) Mix Design Criteria				
Number:					
Revision:	Replace the paragraph in this part with the following:				

1) Preliminary Mix Design. Perform the volumetric mix design according to AASHTO R 35 and conforming to AASHTO M 323. The Department will require a dust-to-binder ratio range of 0.8 to 1.6. Complete the volumetric mix design at the appropriate number of gyrations as given In the table below for the construction year AADTT. The Department will define the relationship between AADTT Classes, as given in the bid items for Superpave mixtures, and AADTT ranges as follows:

Subsection:

403.03.03 Preparation of Mixture

Part:

C) Mix Design Criteria

Number:

1)

Revision:

Replace the chart with the following:

		Number of Gyrations		
Class	AADTT	$oldsymbol{N}$ initial	N design	N max
2	<600	6	50	75
3	600 to 2999	7	75	115
4	≥3000	8	100	160

Subsection:

403.03.03 Preparation of Mixture

Part:

C) Mix Design Criteria

Number:

2)

Revision:

Replace the last sentence in part 2) with the following:

Ensure the optimum AC is a minimum of 5.3 percent by weight of the total mixture for all 0.5-inch nominal surface mixtures and 5.6 percent by weight of the total mixture for all 0.38-inch nominal surface mixtures.

Subsection:

403.03.08 Shoulder Rumble Strips and Pavement Texturing

Revision:

Replace the entire subsection with the following:

Construct centerline, edgeline, and/or shoulder rumble strips according to the notes and drawings in the proposal, plans, and/or Standard Drawings, or as directed by the Engineer.

Unless directed otherwise by the Engineer, DO NOT install centerline, edgeline, and/or shoulder rumble strips where the posted speed limit is 45 MPH or less. Before sawing centerline and/or edgeline rumble strips, pre-mark the pavement surface and obtain the Engineer's approval of the proposed location, alignment, and control guides. After sawing the centerline and/or edgeline rumble strips, apply permanent centerline and/or edgeline striping, according to Section 713, on the sawed rumble strips at the locations approved by the Engineer. Before sawing shoulder rumble strips, obtain the Engineer's approval of the proposed layout, location, and alignment. Notify the Engineer if questions arise regarding changes in striping and/or rumble patterns. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

Section: Revision:

403.03 CONSTRUCTION.

Add the following Section: 403.03.14 Durable Pavement Edge.

The contractor will have the option to pave roadway shoulders monolithically with mainline pavement or by separate operation. However, if the shoulder is placed monolithically, with the mainline material, the Durable Pavement Edge shoe shall be used for the placement of the asphalt. For divided highways, the Durable Pavement Edge must be added to both median and outside bituminous shoulders when the paved shoulder width is 6 feet or narrower.

Construct the edge to the depth, width, and slope the Contract specifies where existing conditions permit. Remove the sod or perform trench excavation only when necessary to obtain the specified depth and width. Do not remove solid rock. Provide enough area to construct the Durable Pavement Edge so that the Durable Pavement Edge will be placed on solid material, free of debris such as loose material, grass, weeds or mud. The edge should be compacted such that there is no loose material. Short sections of handwork will be allowed for pavement transitions and turnouts.

Durable Pavement Edge is not intended for the following:

1) Centerline pavement joint.

Joint between paved side road and mainline.

Bridge decks. 4)

Adjacent to concrete barrier. 5)
Adjacent to curb and gutter. 6)

Edges between adjoining pavements.

Centerline pavement joint.

Mainline and taper joint. 9)

Mainline and turning joints.

The Durable Pavement Edge shall be applied when all of the following criteria are met, unless otherwise directed by the Engineer:

- 1) New bituminous pavement/shoulder or bituminous overlay is being constructed with at least 1- (one) inch of paving depth;
 - 2) The posted speed is 40 mph and higher;
 - 3) Pavements/shoulders that are not adjacent to curbing; and
 - 4) Pavements/shoulders that are not adjacent to barrier wall.

The Durable Pavement Edge may be omitted in the following situations with the approval of the Engineer:

- 1) Areas where existing drop-offs at the edge of existing pavement exceed 5 inches.
- 2) Areas where the distance from pavement edge to Durable Pavement Edge catch point exceeds 9 inches or where slopes are steeper than 3:1.

Subsection:	403.04.07 Rumble Strips.
Revision:	Rename the subsection to the following: Centerline, Edgeline, and Shoulder Rumble Strips and replace the paragraph with the following: The Department will measure the quantity of sawed rumble strips in linear feet. The Department will measure permanent striping according to Section 713. The Department will measure temporary striping when required by Section 112, the Traffic Control Plan, and/or when directed by the Engineer. When bicycle gaps are required in the rumble pattern, the Department will include the length of the bicycle gaps in the measurement of the rumble. The Department will not measure the areas where rumble strips are omitted, such as at intersections, crosswalks, bridges, railroad crossings, etc. The Department will not measure temporary striping that is only used for pre-marking centerline and/or edgeline rumble strips. The Department will not measure the removal of existing markings, pre-marking and layout, surface preparation, corrective work, labor, equipment, and any incidentals necessary to construct rumble strips, and will consider these items incidental to the installation of the rumble strips.
Section:	403.04 MEASUREMENT.
Revision:	Add the following subsection: 403.04.09 Durable Pavement Edge. The Department will not consider the Durable Pavement Edge for payment and will consider its use incidental to the
	asphalt mixture.
Subsection:	406.03.03 Application
Part:	B) Asphalt Tack Coat
Revision:	Replace the first paragraph with the following: Apply the tack coat with a spray bar that can be raised to a sufficient height so as to uniformly and completely coat the entire surface. When a uniform application, at the rate required, cannot be obtained from the spray bar, then apply the tack coat by fogging with a hand spray attachment. The Engineer will only accept complete and uniform coverage and will verify the application rate by gauge reading. If the application rate has not been achieved, reapply the tack coat to achieve the required application rate before placing asphalt mixture. Unless otherwise specified in the requirements for the asphalt mixture being placed, apply undiluted tack at a rate of 0.84 pounds (0.1 gallons) per square yard. Application rate will also be verified at the end of the production day by measurement according to section 109.
Subsection:	406.03.03 Application
Part:	B) Asphalt Tack Coat
Revision:	Replace the second paragraph with the following: When furnishing SS-1 or SS-1h for tack, the Department will only allow undiluted application.
Subsection:	406.04.02 Asphalt Material for Tack
Revision:	Replace the subsection with the following:
	The Department will measure the quantity according to Section 109.

Subsection:	406.05 Payment							
Revision:	add the following to the list of pay items:							
	00356 Aspl	nalt Material for Tack Ton						
Subsection:	403.05 Payme	ent.						
Revision:	Replace the bi	id code table with the following:						
	Code	ode Pay Item Pay Unit						
	06600	Remove Pavement Marker Type V	Each					
	01791 Adjust Manhole Frame to Grade Each							
	02697 Edgeline Rumble Strips Linear Foot							
	20458ES403 Centerline Rumble Strips Linear Foot							
	02696	Shoulder Rumble Strips	Linear Foot					

Subsection: 409.03.03 Preparation of Mixture

Part: A) Mix Requirements

Revision: Add the following note and replace the charts at the end of part A):

NOTE: For the following mixtures, limit the maximum cold feed percentages as such:

Surface mixtures with RAP only 20% Base Mixtures with RAP only 30% All mixtures with RAS only 5%

Surface mixtures with RAP and RAS combo 10% RAP, 3% RAS Base Mixtures with RAP and RAS combo 12% RAP, 4% RAS

ASPHALT BINDER	OF 0.5 in., 0.38 in., and No. 4 VIRGIN ASPHALT BINDER RAP					
SPECIFIED IN						
MIXTURE BID ITEM	≤ 17 % Effective Binder Content	18-23 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22	PG 76-22					
Tribula industrial	RAS					
	≤ 10 % Effective Binder Content	11-15 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22						
	RAP and RAS					
	≤ 12 % Effective Binder Content	13-18 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22	(2000)					

ASPHALT BINDER	F 1.50 in., 1.00 in., and 0.75 in. VIRGIN ASPHALT BINDER					
SPECIFIED IN	RAF					
MIXTURE BID ITEM	≤25 % Effective Binder Content	26-30 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22	PG 76-22	STUTE 5				
	RAS					
	≤12 % Effective Binder Content	13-20 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22	(1,000)	(-1111-)				
	RAP and	RAS				
	≤15 % Effective Binder Content	16-25 % Effective Binder Content				
PG 64-22	PG 64-22	PG 58-28				
PG 76-22		12 24442 1				

Subsection:	412.02.09 Material Transfer Vehicle (MTV).
Revision:	Replace the paragraph with the following:
Subsection:	412.03.07 Placement and Compaction.
Revision:	Replace the first paragraph with the following:
Subsection:	412.04 MEASUREMENT.
Revision:	Add the following subsection:
Subsection:	501.03.19 Surface Tolerances and Testing Surface.
Part:	B) Ride Quality.
Revision:	Add the following to the end of the first paragraph:
Subsection:	501.03.05 Weather Limitations and Protection.
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.
Subsection:	601.02.02 Cement
Revision:	Replace the third sentence with the following: The Department will allow the use of Type
	$IP(\leq 20)$, Type IS(≤ 30), Type IL, Type II, and Type III when the Engineer approves.
Subsection:	601.02.02 Cement
Revision:	Replace the fifth sentence with the following: If unsatisfactory test results are obtained using
	Type IP(\leq 20), Type IS(\leq 30), Type IL, Type II, or Type III cement complete the work using Type
	I cement.

Subsection:	601.03.02 Concrete Producer Responsibilities.									
Part:	E) Trip Tickets.									
Revision:	Replace the section with the following: Furnish a trip ticket containing the minimum									
Revision.	Turning we follow the following.									
							+			
	Contract Id:	Proj. Number:	Date:	County:			4			
	Truck No:	Producer Name:	- Asitatad Can		ger Sample Id:		+			
	Qty(Yds ³): Time Loaded (Non Agitated Concrete Only): Begin Mixing Time: AM PM REV									
	Set Retarder Us		Yes	Type	No		+			
	Water Reducer		Yes	Туре	No No					
	Water Underru		Gal/Yd ³		otal Gallons		1			
	Design W/C:	Actual W/C:	Slump (inche	es)						
	Batch Weight I	nformation:								
	Material: De	scription: Desi	gn Qty: Requ	uired: Bato	hed: %Var:	%Moisture: Actual:				
	Remarks:						_			
	The data on th	is ticket is correc	t for the appr	oved concre	ete mix design	.	+			
	Signature:				Date:					
		KRMCA Level II Te	chnician or P	lant Manag	er					
Subsection:	601.03.03 Proportion	ning and Req	uirements							
Part:	A) Concrete									
	/	CDEDIENT	пророда	TONIC AT	NID DEOLI	IDEMENTS EOD	VADIOLIC			
Revision:										
	CLASSES OF CON	CRETE as fo	ollows: Re	place "M	1 w/ Type	1 cement" with "N	I1 w/ Type 1			
	or blended hydraulic	cement"								
Subsection:	601.03.03 Proportion	ning and Dag	uiromonta							
	1				3.6: 1					
Part:	C) Mixtures Using T									
Revision:	Revise part C) heade	er to read as f	ollows: M	ixtures U	Jsing Type	$IP(\leq 20)$, $IS(\leq 30)$, a	and IL Cement			
	and Mineral Admixt	ures								
Subsection:	601.03.03 Proportion		uirements							
	1	•		,	3.61	. 1				
Part:	C) Mixtures Using T	ype IP, IS, ar	nd I(SM) C	ement of	r Mineral A	Admixtures				
Number:	1)									
Revision:	Revise first sentence	to read as fo	llows: Ty	oe IP(≤20)), IS(≤30).	, IL Cement.				
		-	<i>J</i> 1	. —	· · · · · ·	,				

la	[col oo oo p						
Subsection:	601.03.03 Proportioning and Requirements						
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:							
Revision:	Revise second sentence to read as follows: The use of fly ash, blast furnace slag cement, or						
	microsilica in concrete is the Contractor's option.						
Subsection:	601.03.03 Proportioning and Requirements						
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:	2)						
Revision:	Revise the first sentence in the second paragraph to read as follows: When the ability to use						
	blast furnace slag cement or microsilica has not been demonstrated have the concrete producer						
	provide trial batches in accordance with Subsection 601.03.02 G) 1).						
Subsection:	601.03.03 Proportioning and Requirements						
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:	2)						
Part:	[b)						
Revision:	Revise first sentence to read as follows: Blast Furnace Slag Cement						
Subsection:	601.03.03 Proportioning and Requirements						
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:	2)						
Part:	(b)						
Revision:	Revise second sentence to read as follows: When added as a separate ingredient, use Grade 120						
	or Grade 100 slag to reduce the quantity of cement, except do not use blast furnace slag cement						
	to reduce the quantity of Type IS(≤ 30) cement.						
Subsection:	601.03.03 Proportioning and Requirements						
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:	[2)						
Part:	(b)						
Revision:	In part b), replace all references to "GGBF slag" with "blast furnace slag cement".						
Subsection:	601.03.04 Classes and Primary Uses						
Part:	H) Class M1						
Revision:	Revise part H) to read as follows: High early strength for bridge joint repair and full or partial						
	depth bridge deck patching. (Type 1 cement or blended hydraulic cement)						
Subsection:	603.03.06 Cofferdams.						
Revision:	Replace the seventh sentence of paragraph one with the following:						
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth						
	of Kentucky.						
Subsection:	605.03.04 Tack Welding.						
Revision:	Insert the subsection and the following:						
	605.03.04 Tack Welding. The Department does not allow tack welding.						

Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
	decks prepared by hydrodemolition.
Subsection:	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following: 609.03.01 A) Swinging the Spans. Before placing concrete slabs on
	steel spans or precast concrete release the temporary erection supports under the bridge and
	swing the span free on its supports.
	swing the span free on its supports.
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam
	is placed in the final location and prior to placing steel reinforcement. At locations where lift
	loops are cut, paint the top of the beam with galvanized or epoxy paint.
Subsection:	611.03.02 Precast Unit Construction.
Revision:	Replace the first sentence of the subsection with the following:
	Construct units according to ASTM C1577, replacing Table 1 (Design
	Requirements for Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load
	Conditions) with KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605
	with the following exceptions and additions:
Subsection:	613.03.01 Design.
Number:	[2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD
	Bridge Design Specifications"
Subsection:	615.06.02
Revision:	Add the following sentence to the end of the subsection.
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled
	3/4 inch.
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.

Subsection: Revision:

615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.

Replace the subsection with the following:

Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be not more than 16 inches.

Subsection: Revision:

615.06.07 Laps, Welds, and Spacing for Precast Endwalls.

Replace the subsection with the following:

Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.

Subsection:	615.08.01 Type of Test Specimen.
Revision:	Replace the subsection with the following:
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the first batch of concrete. Acceptable start-up results are required for production of the first unit.
	After the first unit has been established, random acceptance testing is performed daily for each
	50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is
	performed.
Subsection:	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection:	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
Subsection:	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the "Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the production facility. Units shall be inspected upon arrival for any evidence of damage resulting from transport to the jobsite.
Subsection:	701.04.16 Deduction for Pipe Deflection.
Revision:	Insert the following at the end of the paragraph:
	The section length is determined by the length of the pipe between joints where the failure
	occurred.
Subsection:	716.02.02 Paint.
Subsection:	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims,
Subsection:	716.03.02 Lighting Standard Installation.
Revision:	Replace the paragraph with the following: Locate poles to avoid trees, drainage, structures, etc. Regardless of the station & offset noted, locate all poles/bases behind guardrail a minimum of 4 feet behind the face of the guardrail. All poles shall be placed as close to stations and offsets as stated on Plans to provide proper illumination. If any pole needs to be relocated from stations indicated, the Division of Traffic Operations shall be contacted. When submitting brochures for suggested luminaires include iso lux curves, IES type distribution, lamp lumens, and typical ballast factor used for each type of luminaire. Submit the photometric data in a digital IES format to the Division of Traffic Operations. Include with the submittal a point of contact and phone number to answer technical questions about the luminaire.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is
	positioned on the side away from on-coming traffic.

Subsection:	716.03.0)2 Lighti	ing Stand	dard In	stallation.					
Part:	A) Conventional Installation.									
Number:	1) Breakaway Installation and Requirements.									
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of									
	-					-				Signs, Luminaires,
					dition wit					218.113, 24 11111411 4 2,
	0.110	216	, = 0 10							
Subsection:	716.03.02 Lighting Standard Installation.									
D. A.	D) 11:-1-	M4 I	-4-11-4:	_						
Part:	B) High				C41 C	4	1 .	1 41 - 6 1	1 . т	. 11
Revision:	-						-		_	nstall each high mast
	I -				_	_		_	ircuit and	use luminaires with
Cl4:					nt luminai	res as sr	iown in	Plans.		
Subsection: Part:	(16.03.0 B) High	_	_		stallation.					
	2) Conci									
Number: Revision:	1				eeding par	o oronha	vyithin 1	hia aaati	on:	
Kevision:	Modifica	ation of	Chart an	ia succ	eeding pai	agrapiis	within	ills secu	OII.	
	Ť	Drillad 9	Shaft Dep	th Date						1
	1 1	Dillied .	знан Бер		Ground	2:1 (round	1.5:1	Ground	-
		Level (Ground		Slope	Sl	ope	Slo	pe ⁽²⁾	
		Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock	
		17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft	
		Steel Re	equireme	nts						
		Vert	ical Bars		Ties	or Spiral				
		Size Spacing or Total Size Pitch								
	#10 16 #4 12 inch									
	Note 1: Shaft length is 22 feet for cohesive soil only. For cohesionless soil, contact Geotechnical Branch for design.							hnical Branch for design.		
	Note 2: Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic Operations.									
	21,131011		C peranon,	J.						
	If rock is	s encour	ntered du	ring d	rilling ope	rations a	nd conf	irmed by	the Engi	neer to be of sound
				_				-	_	e length of rock
			-	_					-	onger than that of
				_		_				th shall be adjusted
	accordin				<i>5</i> ·			r	<i>5</i>	<i>y</i>
		<i>J</i> ,								

If a shorter depth is desired for the drilled shaft, the Contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the Geotechnical Branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection:	716.03.03 Trenching.						
Part:	A) Trenching of Conduit for Highmast Ducted Cables.						
Revision:	Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.						
Subsection:	716.03.03 Trenching.						
Part:	B) Trenching of Conduit for Non-Highmast Cables.						
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for						
	either situation listed previously, obtain the Engineer's approval and maintain the required						
	conduit depths coming into the junction boxes.						
Subsection:	716.03.04 Conduit Installation.						
Revision:	Replace the first two sentences of the paragraph with the following: Provide rigid steel conduit						
	encasement for all conductors except as specified in the Contract. Provide conduit that is listed						
	on the Department's List of Approved Materials.						
Subsection:	716.03.04 Conduit Installation.						
Part:	A) Conduit Requirements in Junction Boxes.						
Number:	1) Highmast Ducted Cable.						
Revision:	Replace the first two sentences with the following: Install conduit horizontally through the						
	junction box. Conduit shall be 4 inches from the bottom and 4 inches from the side of the						
	junction box.						
Subsection:	716.03.04 Conduit Installation.						
Revision:	Add the following to the Part to the Subsection: G) Bore and Jack. Construction						
	methods shall be in accordance with Subsections 706.03.02, paragraphs 1, 2 and 4.						
Subsection:	716.03.08 Splicing.						
Revision:	Replace the last sentence of the paragraph with the following: Ensure the splices are of the						
	correct size for the wire being used.						
Subsection:	716.03.10 Junction Boxes.						
Revision:	Replace subsection title with the following: Electrical Junction Box and replace the last sentence						
	of the paragraph with the following: Any additional junction boxes shall be approved by the						
	Engineer.						
Subsection:	716.03.13 Temporary Lighting.						
Revision:	Change subsection heading to the following: 716.03.13 Temporary/Maintain Lighting.						

716.03.13 Temporary /Maintain Lighting.
Replace the entire section with the following:
The Contractor shall furnish and install all materials necessary to temporarily light the
proposed roadway to design standards in Subsection 716.03. The Contractor shall submit his
proposed design of temporary lighting to the Division of Traffic Operations for approval at least
30 days before installation.
Maintain all lighting elements impacted within or outside the project limits until new lighting
elements are installed and a functional inspection has been performed on the new lighting
elements. The Contractor shall submit a proposed design for maintaining lighting to the
Division of Traffic Operations for approval at least 30 days before installation.
716.03.14 Remove Lighting.
Replace the section with the following: Remove all lighting equipment that is identified by the
Engineer as no longer necessary including, but not limited to, the following: pole bases, poles,
junction boxes, cabinets, and wood poles. Pole bases shall be removed a minimum of one foot
below finished grade by chipping off or other method that is approved by the Engineer. Dispose
of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot
below finished grade. Backfill holes with material approved by the Engineer. Conduit may be
abandoned in the ground. All materials shall be removed from the project as directed by the
Engineer. Transformers not owned by a utility shall be tested for PCB's and disposed of in
accordance with state regulations.
716.03.15 Painting.
Replace the first sentence with the following: Clean non-galvanized or damaged surfaces of
exposed junction boxes, pull boxes, control panels, poles, and similar equipment, and apply one
coat of an inhibiting paint and two coats of aluminum paint.
716.04.01. Poles.
Change the subsection heading to 716.04.01 Pole and replace the last sentence of the subsection
with the following: The Department will not measure anchor bolts, washers, nuts, anchor bolt
covers, ground lugs, and any associated hardware for payment and will consider them incidental
to this item of work.
716.04.02 High Mast Pole.
Replace the second sentence with the following: The Department will not measure the lowering
device, anchor bolts, head frame assembly, cables, winch unit, power cables, wiring, connectors,
circuit breakers, grounding lugs, ground wire, ground rods, conduits, test plugs,, adjustment and
calibration of the unit to provide the desired operation, and any associated hardware for payment
and will consider them incidental to this item of work.
716.04.03 Bracket.
Replace the second sentence with the following: The Department will not measure any
associated hardware needed for attaching the bracket to the pole for payment and will consider
them incidental to this item of work.
716.04.04 Pole Base.
Change the subsection heading to 716.04.04 Pole Bases and delete the paragraph.

Subsection:	716.04.04 Pole Bases.	
Revision:	Insert the following:	
	 A. Pole Base. The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work. B. Pole Base High Mast. The Department will measure the quantity in cubic yards 	
	furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.	
Subsection:	716.04.05 Pole Base in Median Wall.	
Revision:	Replace the last sentence with the following: The Department will not measure conduits, fittings, junction boxes, additional reinforcing steel, ground rods, ground wire, ground lugs, and aluminum cover plates (if specified) for payment, and will consider them incidental to this item of work.	

Subsection:	716.04.06 Transformer Base.		
Revision:	Replace the last sentence with the following: The Department will not measure transformer door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment and will consider them incidental to this item of work. The filling of any unused holes will also be considered incidental to this item of work.		
Subsection:	716.04.07 Pole with Secondary Equipment.		
Revision:	Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment.		
Subsection:	716.04.07 Pole with Secondary Control Equipment.		
Revision:	Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, electrical inspection fees, and required building fees involving utility secondary, and primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The filling of unused holes will also be considered incidental to this item of work.		
Subsection:	716.04.08 Lighting Control Equipment.		
Revision:	Replace the paragraph with the following:		
	The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work.		
Subsection:	716.04.09 Luminaire.		
Revision:	Replace the paragraph with the following: The Department will measure the quantity as e individual unit furnished and installed. The Department will not measure lamps, starters, ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern to payment and will consider them incidental to this item of work.		
Subsection:	716.04.10 Fused Connector Kits.		
Revision:	Replace the heading with the following: 716.04.10 Fuse Connector Kits.		
Subsection:	716.04.10 Fuse Connector Kits.		
Revision:	Replace the paragraph with the following: The Department will measure the quantity as eac individual unit furnished and installed. The Department will not measure fuses/lugs for payment will consider them incidental to this item of work.		

Subsection:	716.04.11 Conduit.				
Revision:	Replace the second sentence with the following: The Department will not measure installation				
	in ground or on structures, conduit fittings, test plugs, expansion joints with bonding straps,				
	grounding lugs, drill anchors, clamps, and any additional hardware required for payment and				
	will consider them incidental to this item of work.				
Subsection:	716.04.12 Markers.				
Revision:	Replace the section with the following: The Department will measure the quantity as each				
	individual unit furnished and installed.				
Subsection:	716.04.13 Junction Box.				
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.				
Subsection:	716.04.13 Electrical Junction Box Type Various.				
Revision:	Replace the section with the following: The Department will measure the quantity as each				
	individual unit furnished and installed. The Department will not measure additional junction				
	boxes for greater depths than those identified in Plans, #57 aggregate, backfilling, restoration of				
	disturbed areas to the satisfaction of the Engineer, geotextile filter fabric, concrete, hot dipped				
	galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment				
	, and will consider them incidental to this item of work.				
Subsection:	716.04.13 Junction Box.				
Part:	A) Junction Electrical.				
Revision:	Delete Part A.				
Subsection:	716.04.14 Trenching and Backfilling.				
Revision:	Replace the section with the following: The Department will measure the quantity in linear				
	feet. The Department will not measure excavation, backfilling, underground utility warning tape				
	(if required), and the restoration of disturbed areas to original condition for payment and will				
	consider them incidental to this item of work.				
Subsection:	716.04.15 Wire or Cable.				
Revision:	Replace the section with the following: The Department will measure the quantity in linear feet				
	furnished and installed. The Department will not measure installation within conduit, splice				
	boots, and any other hardware required for installing cable for payment and will consider them				
G 1	incidental to this item of work.				
Subsection:	716.04.16 Ducted Cable.				
Revision:	Replace the second sentence of the paragraph with the following: The Department will not				
	measure installation within trench or conduit and any other necessary hardware for payment and				
G 1 4	will consider them incidental to this item of work.				
Subsection:	716.04.17 Temporary Lighting				
Revision:	Rename the subsection as follows: 716.04.17 Temporary Lighting/Maintain Lighting.				

Subsection:	716 04 17 Tem	porary Lighting/Maintain Lighting.			
Revision:	Delete the paragraph and add the following parts:				
Kevision.	_	0 1	ure the quantity by lumn sum. The		
	A) Temporary Lighting. The Department will measure the quantity by lump sum. The Department will not measure poles, luminaires, wire, conduit, trenching and backfilling, control equipment, all relocations and removal, design (if required), and any other necessary hardware				
	to make a complete installation for payment and will consider them incidental to this item of				
	work.				
	B) Maintain Lighting. The Department will measure the quantity by lump sum. The				
	Department will not measure maintenance of lighting elements and design (if required) for payment and will consider them incidental to this item of work.				
G 1 4'	1 0		em of work.		
Subsection:	716.04.18 Remove Lighting.				
Revision:	_		partment will measure the quantity by lump		
	_	artment will not measure backfilling a			
	equipment and materials associated with any structural or electrical component of the lighting				
	-		s, junction boxes, cabinets, and wood poles		
	for payment and will consider them incidental to this item of work.				
Subsection:	716.04.19 Remove Pole Base.				
Revision:	Delete Subsection.				
Subsection:		and Jack Conduit.			
Revision:		section to 716.04.19 Bore and Jack C	onduit.		
Subsection:		and Jack Conduit.			
Revision:		Replace the paragraph with the following: The Department will measure the quantity in linear			
	feet. This item shall include all work necessary for boring and installing conduit under an				
	existing roadwa	•			
Subsection:	716.05 PAYMENT.				
Revision:	Revise the following under <u>Code</u> , <u>Pay Item</u> ,		<u>Unit</u> with the following:		
	<u>Code</u>	Pay Item	Pay Unit		
	04700-04701	Pole(Various)Mtg Ht	Each		
	04710-04714	Pole(Various)Mtg Ht High Mast	Each		
	04810-04811	Electrical Junction Box (Various)	Each		
	20391NS835	Electrical Junction Box Type A	Each		
	20392NS835	Electrical Junction Box Type C	Each		
	04770-04773	Luminaire (Various)	Each		
	04780	Fuse Connector Kit	Each		
	20410ED	Maintain Lighting	Lump Sum		
	04941	Remove Pole Base	Each		
Subsection:	719.03 Construction				
Revision:	Replace the first	st sentence in the second paragraph w	rith the following:		
	Construct guard	drail 31 inches to the top of the rail, v	with a tolerance of plus or minus one inch		
	above the theor	retical pavement elevation.			

Subsection:	719.03.02 Placing Rail		
Revision:	Replace the second sentence in the first paragraph with the following:		
ite vision.	Splice rail element at mid-span by lapping in the direction of traffic.		
Subsection:	723.02.02 Paint.		
Revision:	Replace sentence with the following: Conform to Section 821.		
Subsection:	723.03 CONSTRUCTION.		
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural		
ite vision.	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current		
	interims,		
Subsection:	723.03.02 Poles and Bases Installation.		
Revision:	Replace the title with the following: 723.03.02 Pole and Base Installation.		
Subsection:	723.03.02 Pole and Base Installation.		
Revision:	Replace the first paragraph with the following: Regardless of the station and offset noted,		
	locate all poles/bases behind the guardrail a minimum of four feet from the front face of the		
	guardrail to the front face of the pole base. Orient the handhole door away from traffic travel		
	path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade		
	as the sidewalk.		
Subsection:	723.03.02 Poles and Bases Installation.		
Part:	A) Steel Strain and Mastarm Poles Installation		
Revision:	Replace the title of Part A) Steel Strain and Mast Arm Pole Installation.		
Subsection:	723.03.02 Pole and Base Installation.		
Part:	A) Steel Strain and Mast Arm Pole Installation.		
Revision:	Insert the following sentence at the beginning of the first paragraph: Install pole bases 4 to 6		
	inches above grade.		
Subsection:	723.03.02 Pole and Base Installation.		
Part:	A) Steel Strain and Mast Arm Pole Installation.		
Revision:	Replace the second paragraph with the following: For concrete base installation, see Subsection		
110 (101011)	716.03.02 B), 2), Paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions		
Subsection:	723.03.02 Pole and Base Installation.		
Part:	B) Pedestal or Pedestal Post Installation.		
Revision:	Replace the second sentence with the following: If over 12 feet high the base shall have the		
	minimum depth and diameter as Subsection 716.03.02 (A), paragraph 2.		
Subsection:	723.03.02 Poles and Bases Installation.		
Part:	B) Pedestal or Pedestal Post Installation.		
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports,		
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for		
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.		
Subsection:	723.03.03 Trenching.		
Revision:	Replace the first sentence with the following: See Subsection 716.03.03 (B).		
Subsection:	723.03.03 Trenching.		
Part:	A) Under Roadway.		
Revision:	Delete Part A) Under Roadway.		

Revision:	Renumber Subsection to 723.03.13 Splicing.			
Subsection:	723.03.14 Splicing.			
Revision:	Replace the reference to "Standard Detail Sheets" in the first sentence with "Plans".			
Subsection:	723.03.12 Grounding Installation.			
Revision:	Renumber Subsection to 723.03.12 Grounding Installation.			
Subsection:	723.03.13 Grounding Installation.			
	of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet			
Subsection:	723.03.11 Loop Installation.			
Revision:	Renumber Subsection to 723.03.11 Loop Installation.			
Subsection:	723.03.12 Loop Installation.			
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of			
Subsection:	723.03.10 Wiring Installation.			
Revision:	Renumber Subsection to 723.03.10 Wiring Installation.			
Subsection:	723.03.11 Wiring Installation.			
Revision:	Renumber Subsection to 723.03.09 Backfilling and Disturbed Areas.			
Subsection:	723.03.10 Backfilling and Disturbed Areas.			
Revision:	Renumber Subsection to 723.03.08 Underground Warning Tape.			
Subsection:	723.03.09 Underground Warning Tape.			
Revision:	Replace with 723.03.06 Painting. See Subsection 716.03.15.			
Subsection:	723.03.08 Painting.			
	723.03.07 Electrical Junction Boxes. See Subsection 716.03.10.			
Revision:	Delete the Subsection and replace with the following:			
Subsection:	723.03.07 Bonding Requirements.			
	723.03.06 Painting. See Subsection 716.03.15.			
Revision:	Delete the Subsection and replace with the following:			
Subsection:	723.03.06 Coupling Installation.			
14C 4 121011•	723.03.05 Fuse Connector Kits. See Subsection 716.03.09.			
Revision:	Delete the Subsection and replace with the following:			
Subsection:	723.03.05 Conduit Requirements in Junction Boxes.			

Subsection:	723.03.13 Splicing.		
Revision:	Delete the reference to (IMSA 19-2) from the 5th sentence of the paragraph.		
Subsection:	723.03.15 Painting.		
Revision:	Delete Subsection.		
Subsection:	723.03.14 Splicing.		
Revision:	Replace with new Subsection 723.03.14 Remove Signal Equipment.		
Subsection:	723.03.14 Remove Signal Equipment.		
Revision:	Insert the following for the new subsection: Remove all traffic signal equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. Contact the district traffic Engineer to determine if any removed signal equipment needs to be returned to the district and to determine the location/time for such deliveries.		
Subsection:	723.05.16 Drawings.		
Revision:	Renumber the Subsection to 723.03.15 Drawings.		
Subsection: Revision:	723.03.15 Drawings. Replace Subsection with the following: Before final inspection of the traffic control device, provide a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment including: junction boxes, conduits, spare conduits, etc. Keep a daily record of all conduits placed in trenches, showing the distance from the pavement edge, the depth, and the length of runs, and indicate this information on the as-built drawings.		
Subsection:	723.03.17 Acceptance and Inspection Requirements.		
Revision:	Renumber Subsection to 723.03.16 Acceptance and Inspection Requirements.		
Subsection:	723.03.16 Acceptance and Inspection Requirements.		
Revision:	Replace the first paragraph of the section with the following: See Subsection 105.12. In coordination with the District Traffic Engineer, energize traffic control device as soon as it is fully functional and ready for inspection. After the work has been completed, conduct an operational test demonstrating that the system operates in accordance with the Plans in the presence of the Engineer. The Department will also conduct its own tests with its own equipment before final acceptance. Ensure that the traffic control device remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.		
Subsection: Revision:	723.04.01 Conduit. Replace the second sentence of the subsection with the following: The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.		

Subsection:	723.04.02 Junction Box.
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.
Subsection:	723.04.02 Electrical Junction Box Type Various.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, Aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.03 Trenching and Backfilling.
Revision:	Replace the second sentence with the following: The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
Subsection:	723.04.04 Open Cut Roadway.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure concrete, reinforcing steel, and asphalt for payment and will consider them incidental to this item of work.
Subsection:	723.04.05 Loop Wire.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.06 Cable.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.07 Pole-Wooden.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.08 Steel Strain Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.09 Mast Arm Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure anchor bolts, arms, mounting brackets, and any other necessary hardware for payment and will consider them incidental to this item of work.

Subsection: Revision:	723.04.10 Signal Pedestal. Replace the second sentence of the subsection with the following: The Department will not measure excavation, concrete, reinforcing steel, conduits, fittings, ground rods, ground wire, ground lugs, backfilling, restoring disturbed areas, and other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.11 Post.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.12 Anchor.
Revision:	Replace the second sentence of the subsection with the following: . The Department will not measure down-guy, messenger, clamps, guy guard, or insulators, and possible installation in various soil conditions for payment and will consider them incidental to this item of work.

Subsection:	723.04.13 Messenger.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure strand vises, bolts, washers, and other necessary hardware for payment and will
	consider them incidental to this item of work.
Subsection:	723.04.14 Install Signal LED.
Revision:	Revise subsection title to 723.04.14 Install Beacon Controller - 2 Circuit.
Subsection:	723.04.14 Install Beacon Controller - 2 Circuit.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.
Subsection:	723.04.15 Loop Saw Slot and Fill.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole for conduit, and grout for payment and will consider them incidental to this item of work.
Subsection:	723.04.16 Pedestrian Detector.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished, installed and connected to pole/pedestal. The Department will not measure installing R10-3e signs, detector housing, and installing mounting hardware for sign for payment and will consider them incidental to this item of work.
Subsection:	723.04.17 Signal.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure furnishing and installing LED modules, retroreflective tape, back plates, and any other hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.18 Signal Controller- Type 170.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and building fees involving secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches, model 400 modem card, electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground wires, and ground lugs for payment and will consider them incidental to this item of work.

Subsection:	723.04.19 Beacon Controller - 2 Circuit.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.
Subsection:	723.04.20 Install Signal Controller - Type 170.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure connecting the induction loop amplifiers, pedestrian isolators, load switches, model 400 modem card for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work.
Subsection:	723.04.21 Install Steel Strain Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure any necessary clamp assemblies for payment and will consider them incidental to this item of work.
Subsection:	723.04.22 Remove Signal Equipment.
Revision:	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.
Subsection:	723.04.23 Install Span/Pole Mounted Sign.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the hanger or any other hardware necessary to install the sign for payment and will consider them incidental to this item of work.
Subsection:	723.04.24 Install Pedestrian Head LED.
Revision:	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules and any other necessary hardware for payment and will consider them incidental to this item of work.

723.04.25 Install Signal LED.
Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules, retroreflective tape, back plates, and any other necessary hardware for payment and will consider them incidental to this item of work.
723.04.26 Install Coordinating Unit.
Replace the subsection with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
723.04.27 Video Camera.
Replace the second sentence of the subsection with the following: The Department will not measure video modules, mounting bracket, truss type arm, power cable, coaxial cable, and any other necessary hardware for payment and will consider them incidental to this item of work.
723.04.28 Install Pedestrian Detector Audible.
Replace the second sentence with the following: The Department will not measure installing R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
723.04.29 Audible Pedestrian Detector.
Replace the second sentence with the following: The Department will not measure furnishing and installing the R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
723.04.30 Bore and Jack Conduit.
Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.
723.04.31 Install Pedestrian Detector.
Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed and connected to pole/pedestal. The Department will not measure installing R 10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
723.04.32 Install Mast Arm Pole.
Replace the second sentence with the following: The Department will not measure installation of arms, signal mounting brackets, anchor bolts, and any other necessary hardware for payment and will consider them incidental to this item of work.
723.04.33 Pedestal Post.
Replace the second sentence with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, ground lugs, or any other necessary hardware for payment and will consider them incidental to this item of work.

Subsection:	723.04.34 Span Mounted Sign.
Revision:	Revise subsection title to 723.04.34 Span/Pole-Mounted Sign.
Subsection:	723.04.34 Span/Pole-Mounted Sign.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure the hanger, sign, and any other necessary hardware for payment and will consider them
	incidental to this item of work.
Subsection:	723.04.35 Remove and Reinstall Coordinating Unit.
Revision:	Add the following sentence to the end of the subsection: The Department will not measure
	removing, storage, reinstalling, and connecting radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this
	item of work.
Subsection:	723.04.36 Traffic Signal Pole Base.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, restoration, furnishing and installing reinforcing steel, anchor
	bolts, conduits, ground rods, ground wires, and ground lugs for payment and will consider them
	incidental to this item of work.
Subsection:	723.04.37 Install Signal Pedestal.
Revision:	Replace the second sentence of the subsection with the following: . The Department will not
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel,
	conduits, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for
	payment and will consider them incidental to this item of work.
Subsection:	723.04.38 Install Pedestal Post.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel,
	conduit, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for
	payment and will consider them incidental to this item of work.
Subsection:	723.04.39 Install Antenna.
Revision:	Replace the second sentence of the subsection with the following: The Department will not
	measure any other materials necessary to complete the installation for payment and will consider
	them incidental to this item of work.

Subsection:	723.05 PAYM		
Revision:	Replace items	04810-04811, 20391NS835, 20392N	NS835,23052NN and add item number
	24526ED unde	r Code, Pay Item, and Pay Unit with	the following:
	<u>Code</u>	Pay Item	Pay Unit
	04810	Electrical Junction Box	Each
	04811	Electrical Junction Box Type B	Each
	20391NS835	Electrical Junction Box Type A	Each
	20392NS835	Electrical Junction Box Type C	Each
	23052NN	Span/Pole-Mounted Sign	Each
	24526ED	Install Beacon Controller 2 Cir	Each
Subsection:	801.01 REQUI	REMENTS	
Revision:	Replace first se	entence in paragraph one with the fo	llowing: Provide Portland cement or blended
	hydraulic ceme	ent from approved mills listed in the	Department's List of Approved Materials.
			-

Subsection:	801.01 REQUIREMENTS
Number:	1)
Revision:	Replace first sentence with the following: Type I, II, III, and IV <i>Portland cement</i> conforms to
	ASTM C 150.
Subsection:	801.01 REQUIREMENTS
Number:	[3]
Revision:	Replace the first sentence with the following: Type IP (≤20), Portland-pozzolan cement,
	conforms to ASTM C595, and the following additional requirements to Type IP (≤20).
Subsection:	801.01 REQUIREMENTS
Number:	[3)
Part:	(b)
Revision:	Delete part b)
Subsection:	801.01 REQUIREMENTS
Number:	3)
Part:	(c)
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer
	shall furnish to the Engineer reports showing the results of tests performed on the fly ash used in
	the manufacture of the Type IP(≤20) cement shipped to the project.
Subsection	801.01 REQUIREMENTS
Number:	[3)
Part:	(d)
Revision:	Rename Part d) to Part c)
Subsection:	801.01 REQUIREMENTS
Number:	[3)
Part:	(e)
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type
	IP(≤20) cement throughout the project, unless the Engineer approved a change in brand in
	writing.
Subsection:	801.01 REQUIREMENTS
Number:	
Revision:	
	conforms to ASTM C 595 and the following requirements:
Subsection	801 01 REOUREMENTS
	'
120 11310111	to the requirements of ASTM C 989.
	writing. 801.01 REQUIREMENTS 4) Replace first sentence with the following: Type IS(≤30), Portland blast furnace slag cement, conforms to ASTM C 595 and the following requirements: 801.01 REQUIREMENTS 4) a) Replace part a) with the following: Use Grade 100 or 120 blast furnace slag cement conform

Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	(b)
Revision:	Delete part b)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	$\begin{pmatrix} c \\ c \end{pmatrix}$
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer
	shall furnish to the Engineer reports showing the results of the tests performed on the blast
	furnace slag cement used in the manufacturing of the Type IS(≤ 30) shipped to the project.
	l surpression de la manufactura de la compression de la compressio
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	(d)
Revision:	Rename Part d) to Part c)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	le)
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type
	IS(≤30) cement throughout the project, unless the Engineer approves otherwise.
Subsection:	801.01 REQUIREMENTS
Number:	5)
Revision:	Insert part 5) as the following: Type IL(5-15), Portland-limestone cement, conforms to ASTM
	C 595 and the following additional requirements:
C14:	001 01 DEOLUDEMENTS
Subsection:	801.01 REQUIREMENTS
Number:	[5]
Part:	a)
Revision:	Insert part a) as the following: The cement manufacturer shall furnish to the Engineer reports
	showing the results of test performed on the limestone used in the manufacture of the Type IL
	cement shipped to the project.
Subsection:	801.01 REQUIREMENTS
	· ·
Number:	[5]
Part:	b)
Revision:	Insert part b) as the following: Use only one brand of Type IL cement throughout the project,
Kevisioii:	unless the Engineer approves a brand change in writing.
	umess the engineer approves a trand change in writing.

Subsection:	801.01 REQUIR	EMENTS					
Number:	5)						
Part:	(c)						
Revision:	Insert part c) as t	he following: T	The Type IL blende	ed cement shall be	an intimate and uniform		
	blend produced b	y intergrinding	of the Portland ce	ment and limeston	ie.		
Subsection:	804.01.02 Crush	ed Sand.					
Revision:	Delete last senter	nce of the section	on.				
Subsection:	804.01.06 Slag.						
Revision:	Add subsection a	and following se	entence.				
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only						
	in asphalt surface	e applications.					
Subsection:	804.04 Asphalt N	Aixtures.					
Revision:	Replace the subs	ection with the	following:				
	Provide natu	ral, crushed, co	nglomerate, or bla	st furnace slag san	d, with the addition of filler		
	as necessary, to i	neet gradation i	requirements. The	Department will a	allow any combination of		
	natural, crushed,	conglomerate of	or blast furnace sla	g sand when the co	ombination is achieved		
	using cold feeds	at the plant. Th	ne Engineer may al	low other fine agg	regates.		
Subsection:	804.04.04 Requi	rements for Cor	nbined Aggregates	<u> </u>			
Part:	B)						
Revision:	Replace the char	t with the follow	ving:				
	SUPERPAV	E FINE AGG	REGATE CONS	ENSUS PROPE	RTY REQUIREMENTS		
	AADTT	Design	Uncompacted V	Void Content of	Sand Equivalent		
	CLASS	AADTT	Fine Aggregat	e (percent), ⁽¹⁾	(Percent),		
				mum	Minimum		
				m Surface)			
			≤ 100mm	>100mm			
	2	<600	40	40	45		
	3	600 to 2999	45	40	45		
	4	≥3000	45	45	50		
		_	!				

Subsection:	1805 05 02	Crushed Part	ticles		_				
Revision:		hart with the							
110 (1010 110									
	SUPI	ERPAVE CO.	ARSE AG	GREGAT	E CONSE	NSUS PRO	PERTY R	EQUIREM	ENTS
	AADTT	Design							
	CLASS	AADTT	Coarse A	Aggregate A	ngularity ((Percent)	Flat a	nd Elongate	$ed^{(1)}$
			Mini	mum Deptl	From Sur	rface		(Percent),	
			≤ 100mm >100mm		1	maximum			
				d Faces	Crushe	d Faces			
			≥1	≥2	≥1	≥2			
	2	<600	75	-	75	-		10	
	3	600 to 2999	95	90	80	75		10	
	4	≥3000	100	100	100	100		10	
Subsection:		General Req							
Revision:	Replace th	ne second sen	tence of th	ne paragrap	h with the	e following:			
		lly, the mater				-	-		
	_	to AASHTO						-	
		(non-recover	able creep	complian	ce) equal 1	to or below	0.5, when t	ested accor	rding to
	AASHTO	T 350.							
Subsection:	806.03.01	General Req	uirements.						
		1							
Table:	PG Binder	r Requiremen	ts and Pric	ce Adiustm	ent Scheo	dule			
Revision:		ne Elastic Rec		•			responding	values in th	ne table
110 / 1510111	with the fo		overy, 70	(AASII)	10 1301)	and an con	csponding	varues iii u	ic table
	with the re	mowing.							Tost
		Smaaifia	ation	1000/ Dov	000/ Do	900/ Day	700/ Day	50%Pay ⁽¹⁾	<u>Test</u>
	MGGD	Specific:		100% Pay	· · · · · · · · · · · · · · · · · · ·	<u>80% Pay</u>	70% Pay		=
		overy, % (3)	60 Min.	2	58	56	55	54	<53
Subsection:	806.03.01	General Req	uirements.						
Table:	PG Binder	r Requiremen	ts and Pric	ce Adjustm	ent Scheo	dule			
Superscript:	(3)								
Revision:	` '	with the following	lowing						
TEC (IDIUII)	-		_						
	Pe	erform testing	, at 04 C.						

Subsection:	806.04.03							
Гable:	EMULSIFIED	ASPHALT REQU	JIREMEN'	ΓS AND PR	ICE ADJU	USTMENT	Γ SCHED	ULE
Revision:								
Revision:	Replace SS-1 S	S-1h residue by dist	illation port	ion of Emulsi	fied Aspha	lt Requiren	nents and I	Orice
Revision:		S-1h residue by dist					nents and I	Price
Revision:		S-1h residue by dist edule. Do not alter		ther materials	in the table	e.		
Revision:	Adjustment Scho	edule. Do not alter	residue of ot				nents and I 25_53 55-57	Price ≤ 24.52 ≤ 54
Revision:	Adjustment School Residue by	SS-1, SS-1h	residue of ot ≥57	ther materials ≥ 28 56	in the table 27 55	e. 26 <u>54</u>	25 <u>53</u>	≤ 2 4 <u>52</u>
Revision:	Adjustment School Residue by	SS-1, SS-1h HFMS-2	residue of ot ≥ 57 ≥ 65	ther materials ≥ 28 <u>56</u> ≥ 64	in the table 27 55 61-63	e. 26 54 58-60	25 <u>53</u> 55-57	≤ 24 <u>52</u> ≤ 54

Subsection:	808.07 Polypropylene Waterproofing Membrane.					
Revision:	Disregard previous revisions from Supplemental Specifications effective with letting of April					
	29, 2016. 2012 Standard Specification shall apply to this item					
Subsection:	808.09 Acceptance.					
Revision:	Replace the reference to "KMIMS" in the second paragraph with SiteManager.					
Subsection:	811.10.04 Properties of the Coated Bar.					
Part:	B) Flexibility of Coating.					
Revision:	Replace the second sentence of the paragraph with the following: Ensure that the coated bars					
	are capable of being bent to 180 degrees (after rebound) over a mandrel, without any visible					
	evidence of cracking the coating.					
Subsection:	813.04 Gray Iron Castings.					
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".					
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.					
Number:	A) Bolts.					
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:					
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as					
	applicable.					
Subsection:	814.04.02 Timber Guardrail Posts.					
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph					
	4.1".					
Subsection:	814.04.02 Timber Guardrail Posts.					
Revision:	Replace the first sentence of the fourth paragraph with the following:					
	Use any of the species of wood for round or square posts covered under AWPA U1.					
Subsection:	814.04.02 Timber Guardrail Posts.					
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph					
	4.1".					
Subsection:	814.04.02 Timber Guardrail Posts.					
Revision:	Delete the second sentence of the fourth paragraph.					
Subsection:	814.05.02 Composite Plastic.					
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks					
	conforming to this section and assure blocks are from a manufacturer included on the					
	Department's List of Approved Materials.					
	2) Delete the last paragraph of the subsection.					
Subsection:	816.07.02 Wood Posts and Braces.					
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph					
IXCVISIUII.	4.1".					
Subsection:	816.07.02 Wood Posts and Braces.					
Revision:	Delete the second sentence of the first paragraph.					
	12 close the become bettered of the first paragraph.					

Subsection:	818.07 Preservative Treatment.			
Revision:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".			
Subsection:	833.01.02 Sheeting Signs.			
Revision:	Replace the second sentence with the following: Provide a thickness of 125 mils if any single			
	edge dimension of the sign exceeds 3 feet.			
Subsection:	834.14 Lighting Poles.			
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with loading and allowable stress requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims, with the exception of the following: The Cabinet will waive the requirement stated in the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only). The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).			
Subsection	834.14.03 High Mast Poles.			
Revision:	Remove the second and fourth sentence from the first paragraph.			
Subsection	834.14.03 High Mast Poles.			
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are			
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.			

	Effective with the February 23, 2018 Letting
Subsection:	834.14.03 High Mast Poles.
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.
	The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated products) or ASTM A 153 (hardware items).
Subsection:	834.16 ANCHOR BOLTS.
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.
Subsection:	834.17.01 Conventional.
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on the bottom of the housing that is legible from the ground and indicates the wattage of the fixture by providing the first two numbers of the wattage.
	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on

Subsection:					
	834.21.01 Waterproof Enclosures.				
Revision:	Replace the last five sentences in the second paragraph with the following sentences:				
Subsection:	835.07 Traffic Poles.				
Revision:					
	Replace the first sentence of the first paragraph with the following: Pole diameter and wall thickness shall be calculated in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with				
	current interims.				
Subsection:	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates have a thickness ≥ 2 inches.				
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter				
	shall not be less than 16.25 inches.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design,				
	pole forces shall be positioned in such a manner to maximize the force on any individual anchor bolt regardless of the actual anchor bolt orientation with the pole.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the first and second sentence of the sixth paragraph with the following: The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube but needs to be at least 12 inches.				

Subsection:	835.07 Traffic Poles.					
Revision:						
	*Replace the first sentence of the last paragraph with the following: Provide calculations and					
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of					
	Kentucky.					
	*Replace the third sentence of the last paragraph with the following: All tables					
	referenced in 835.07 are found in the AASHTO Standard Specifications for Structural Supports					
	for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.					
Subsection:	835.07.01 Steel Strain Poles.					
Revision:	Replace the second sentence of the second paragraph with the following:					
	The detailed analysis shall be certified by a Professional Engineer licensed in the					
Subsection:	835.07.01 Steel Strain Poles.					
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should be a second paragraph with the following: 7.					
	be shown for all fatigue related connections. Provide the corresponding detail, stress category					
	and example from table 11.9.3.1-1.					
Subsection:	835.07.02 Mast Arm Poles.					
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis					
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.					
Subsection:	835.07.02 Mast Arm Poles.					
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should					
	be shown for all fatigue related connections. Provide the corresponding detail, stress category					
Subsection:	835.07.03 Anchor Bolts.					
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be					
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.					
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully					
	galvanized (ASTM A 153).					

Subsection:	835.16.05 Optical Units.			
Revision:	Replace the 3rd paragraph with the following:			
	The list of certified p	g website: http://www.intertek.com.		
Subsection:	835.19.01 Pedestrian Detector Body.			
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum rectangular housing that is compatible with the pedestrian detector.			
Subsection:	843.01.01 Geotextile Fa	abric.		
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING			
Revision:	Add the following to the chart:			
	<u>Property</u>	Minimum Value ⁽¹⁾	<u>Test Method</u>	
	CBR Puncture (lbs)	494	ASTM D6241	
	Permittivity (1/s)	0.7	ASTM D4491	
Subsection:	843.01.01 Geotextile Fabric.			
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS			
Revision:	Add the following to the chart:			
	Property	Minimum Value ⁽¹⁾	<u>Test Method</u>	
	CBR Puncture (lbs)	210	ASTM D6241	
	Permittivity (1/s)	0.5	ASTM D4491	
Subsection:	843.01.01 Geotextile Fabric.			
Table:	TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION			
Revision:	Add the following to the chart:			
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method	
	CBR Puncture (lbs)	370	ASTM D6241	
	Permittivity (1/s)	0.05	ASTM D4491	

Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND				
	PAVEMENT EDGE DRAINS				
Revision:	Add the following to the chart:				
	<u>Property</u>	Minimum Value ⁽¹⁾	<u>Test Method</u>		
	CBR Puncture (lbs)	309	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC				
Revision:	Make the following changes to the chart:				
	<u>Property</u>	Minimum Value ⁽¹⁾	<u>Test Method</u>		
	CBR Puncture (lbs)	618	ASTM D6241		
	Apparent Opening Size	U.S. #40 ⁽³⁾	ASTM D4751		
	(3) Maximum average roll value.				