

CALL NO. 314
CONTRACT ID. 111337
HARDIN COUNTY
FED/STATE PROJECT NUMBER JP02 047 NEW-ROUTE
DESCRIPTION ELIZABETHTOWN-RADCLIFFE CONNECTOR ROAD
WORK TYPE GRADE & DRAIN AND PAVEMENT ALTERNATES
PRIMARY COMPLETION DATE 250 WORKING DAYS

LETTING DATE: September 23, 2011

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME September 23, 2011. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

ROAD PLANS

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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CONTRACT ID - 111337

ADMINISTRATIVE DISTRICT - 04

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - HARDIN JP02 047 NEW-ROUTE PCN - DE0470NEW1137

ELIZABETHTOWN-RADCLIFFE CONNECTOR ROAD SECTION 2 FROM CELLILLIANA DRIVE TO KY 220, A DISTANCE OF 2.82 MILES. GRADE & DRAIN AND PAVEMENT ALTERNATES. SYP NO. 04-08103.30. GEOGRAPHIC COORDINATES LATITUDE 37^45'05" LONGITUDE 85^55'52"

COMPLETION DATE(S):
250 WORKING DAYS
APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/contract)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

04/28/2011

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

Reciprocal preference to be given by public agencies to resident bidders

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.

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OPTION A

The Contractor is advised that the compaction of asphalt mixtures furnished for driving lanes and ramps, at 25mm (1 inch) or greater, on this project will be accepted according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specification. Joint cores as described in subsection 402.03.02 are required for surface mixtures only. The compaction of all other asphalt mixtures will be accepted by OPTION B.

8/18/11

KY 1600, Hardin Co. Item Number: 4-8103.3

SPECIAL NOTE ALTERNATE PAVEMENT BID ADJUSTMENT

This project includes alternate bidding for asphalt or concrete pavement. There are specific items listed for each pavement type to be bid with the alternate selected by the Contractor. There is also a line item in the alternate categories for each alternate to adjust for the projected out-year life-cycle costs to the Cabinet. These line item adjustments are as follows:

Asphalt Pavement Adjustment= \$589,633

Concrete Pavement Adjustment= \$301,335

NOTE: The Concrete Pavement Adjustment will be the same regardless of the shoulder alternate chosen.

The amount reflective of the pavement type selected by each contractor will be added to their respective bid for comparison of the low bid. The adjustment *shall be used only for determination of the lowest bidder and shall not be used to determine the final payment* to the contractor when the project is completed.

Please note that these adjustments should not be used for the calculation of the maximum Mobilization amount and are not required to be included in the minimum Demobilization amount.

Proposal Guaranty

As a supplement to Section 102 of the 2008 Standard Specifications, it will not be necessary for the Proposal Guaranty to include an amount necessary to cover the amount of the bid adjustment.

SPECIAL NOTE FOR SUBGRADE REINFORCEMENT FOR JPC PAVEMENT ALTERNATE

DESCRIPTION

This special note covers geogrid and geotextile fabric used for the reinforcement of subgrade and aggregate bases. If the JPC Pavement Alternate is selected the contractor is required to place a Type IV Geotextile Fabric under the Dense Graded Aggregate Base layer in the section(s) that do not include lime stabilization. In addition, the Contractor will have the option to use a geogrid between the fabric and the aggregate base to provide additional support for construction of the aggregate layer. Contrary to Section 302.03.03, if the geogrid is used, the 7-inch aggregate base will be placed in one lift. All other construction and density requirements of Section 302 will still apply. If the Contractor elects not to use the geogrid they will take full responsibility for the construction per the Standard Specifications of the aggregate base layer and the JPC Pavement. No additional compensation will be provided to stabilize the subgrade.

MATERIALS

Furnish Type II Geogrid, Tensar TX5 Triaxial Geogrid, or approved equivalent. Any alternate submitted by the Contractor for consideration should include detailed testing information and performance history. The geogrid for this project was specified to achieve the desired pavement foundation based on the specific soil and traffic information. The information provided should include the improvement to the resilient modulus of the aggregate layer.

Ensure that each roll is labeled with the manufacturer's name, product type, lot number, roll number, manufactured date, and roll dimension.

CONSTRUCTION

- 1. Geogrid Representative. Ensure that a representative of the geogrid manufacturer is on the project when work begins, and remains on call as the project progresses, to advise the Engineer.
- 2. Surface Preparation. Prepare the surface according to Section 207 and Section 208.
- 3. Geogrid Placement. Place geogrid at the proper elevation and alignment, in continuous strips with overlapping according to the manufacturer's recommendations. Verify the geogrid orientation (roll direction). Geogrid may be temporarily secured in place with staples, pins, sand bags or backfill as required by fill properties, fill placement procedures, or weather conditions as the Engineer directs.
- 4. Aggregate Placement. Place aggregate over the geogrid according to the Contract. Place, spread, and compact the aggregate in such a manner that minimizes the development of wrinkles and movement in the geogrid. The Department will require a minimum loose fill thickness of 6 inches prior to operation of tracked vehicles over the geogrid. Keep the turning of tracked vehicles to a minimum to prevent displacement of the fill and damage to the geogrid. Rubber tired equipment may pass over the geogrid reinforcement at slow speeds (less than 10 mph) when integrally-formed geogrid is used, and the subgrade is competent to support wheel loading without deformation. Avoid sudden braking and sharp turning movements. Repair any damage caused during placement or by vehicles.

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MEASUREMENT

The Department will measure the quantity of subgrade reinforcement in square yards. The square yard price will include the Type IV Geotextile Fabric and the Geogrid, if used by the Contractor. The Department will not measure providing the geogrid manufacturer's representative for payment and will consider it incidental to the geogrid.

PAYMENT

The Cabinet will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit24276ECSubgrade ReinforcementSq Yd

The Cabinet will consider payment as full compensation for all work required in this note.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

The contractor is advised that it is their responsibility to gain U.S. Army Corp of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". "Waters of the United States" are defined as perennial or intermittent streams, ponds or wetlands. Ephemeral streams are also considered jurisdictional waters, and are typically dry except during rainfall, but have a defined drainage channel. Questions concerning any potential impacts to "Waters..." should be brought to the attention of the appropriate District Office for the Corps of Engineers for a determination, prior to disturbance. Any fees associated with obtaining approval from the U.S. Army Corp of Engineer or other appropriate regulatory agencies for waste and borrow sites is the responsibility of the contractor.

01/01/2009

	Right-of-Way Cert	tifica	ation	Form	Revised 2/22/11
Fe	deral Funded	X	Original		
X Sta	ate Funded		Re-Certi	fication	
Interstate, Appalacl projects that fall und apply, KYTC shall r	completed and submitted to FHWA with the nia, and Major projects. This form shall als der Conditions No. 2 or 3 outlined elsewher esubmit this ROW Certification prior to con , this form shall be completed and retained	o be si re in th struction	ubmitted this form. It contra	to FHWA for <u>all</u> federal- When Condition No. 2 o ct Award. For all other	aid or 3
Date: 10AUG20	011				
Project Name:	E-town-Radcliff Connector (E2RC)	L. et	ting Date:	23SEP2011	
Project #:	13HC JPO1 C047 79589 04R	Co	unty:	Hardin	
Item #:	04-8103.30	Fed	leral #:	N/A	
Description of F	Project: Elizabethtown-Radcliff Connecte	r Sect	ion 2		
Projects that re Per 23 CFF sanitary hos accordance Relocation those that a		relocate locative of the fo	cquisition lees have ees adeq e(s) cover ollowing t	ons and/or relocated to decented to decent	ions ent, safe, and ng in of the Highway en met. (Check
been ad court bu right-of- posses:	ion 1. All necessary rights-of-way, includin equired including legal and physical posses at legal possession has been obtained. The way, but all occupants have vacated the la sion and the rights to remove, salvage, or covalue has been paid or deposited with the	sion. ere ma nds ar lemolis	Trial or ap by be som nd improv	opeal of cases may be p ne improvements remair ements, and KYTC has	pending in ning on the physical
to use a appeal been of vacated improve market	ion 2. Although all necessary rights-of-way all rights-of-way required for the proper exector some parcels may be pending in court a ptained, but right of entry has been obtained, and KYTC has physical possession and rements. Fair market value has been paid or value for all pending parcels will be paid or ction contract. (See note 1 below.)	cution nd on o d, the o right to or depo	of the pro other pare occupants remove, osited with	pject has been acquired, cels full legal possession s of all lands and improvi salvage, or demolish all n the court for most parc	Trial or n has not vements have the cels. Fair
of a full	te 1: The KYTC shall re-submit a right-of-wall Federal-Aid construction contracts. Awa legal possession and fair market value for a FHWA has concurred in the re-submitted in	rd mus all parc	st not to b cels has b	e made until after KYT0 een paid or deposited v	C has obtained

Right-of-Way Certification Form

Revised 2/22/11

Condition 3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA concurrence. (See note 2.)

Note 2: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to bid letting shall be the exception and never become the rule. In all cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition, payment for all affected parcels, and the relocation of all relocatees prior to AWARD of all Federal-Aid construction contracts or force account construction.

Approved:	Printed Name	Right-of-Way Supervisor
Approved:	DAVID L. ORR Printed Name	KYTC, Director of ROW &Utilities Signature
Approved:	Printed Name	FHWA, ROW Officer (when applicable)

Right-of-Way Certification Form

Revised 2/22/11

Date: 10A	AUG2011				Revised 2/22
Project N	lame E-towi	n-Radcliff Connector (E2RC)			
Project #	·	IP01 C047 79589 04R	County:	Hardin	
Item #:		03.30	•	N/A	
Letting D			r oddiai ii.		
2 F	Parcels have be vith the court Parcels have no Parcels have be been deposited	en acquired by a signed fee simple defense acquired by IOJ through concept been acquired at this time (expense acquired or have a "right of exwith the court (explain below for explain been relocated from parcets	lemnation and f lain below for ea ntry" but fair ma each parcel)	air market valu ach parcel) rket value has	e has been deposited not been paid or has n
Parcel #	Name/Statio	Explanation for delay relocation, or delayed pa			Proposed date of payment or of relocation
				-	
		ds and/or 0 cemeteries invor			All have been
acquired a	and are the resective Date: Aised: Februar	oonsibility of the project contracto	or to close/cap.	<u> </u>	

UTILITY NOTES TO BE INCLUDED IN THE PROPOSAL SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

HARDIN COUNTY JP01 047 79589 04 U RADCLIFF - ELIZABETHTOWN CONNECTOR (NEW ROUTE) ITEM NO. 4 - 8103.30

The following utility companies have facilities to be relocated and/or adjusted on the subject project:

Brandenburg Telephone Company - The telephone company anticipates the completion of the relocation and/or adjustment of their telephone facilities on the project on or before November 15, 2011. Contact: Mr. Kyle Dalton, Phone 270-766-7531.

Hardin County Water District # 2 - The water company anticipates the completion of the relocation and/or adjustment of their telephone facilities on the project on or before November 15, 2011. Contact: Mr. Sean Youravich, Operations Manager, Phone 270-737-1056 Ext. 304.

Comcast Communications - The CATV company anticipates the completion of the relocation and/or adjustment of their CATV facilities on the project on or before November 15, 2011. Contact: Mr. Ken Dashnaw, Engineer, Phone 270-268-1729.

Nolin RECC - The electric company is complete with of the relocation and/or adjustment of their electric facilities on the project. Contact: Mr. Greg Harrington, Engineering Superintendent, Phone 270-268-0163.

Kentucky Utilities Company (Distribution) - The electric company anticipates the completion of the relocation and/or adjustment of their electric facilities on the project on or before November 15, 2011. Contact: Mr. Chris Hawkins, Engineer, Phone 270-765-8616.

Kentucky Utilities Company (Transmission) - The electric company anticipates the completion of the relocation and/or adjustment of their electric transmission facilities on the project on or before December 30, 2011. The contractor will be able to work on the project in all locations except for around the existing pole RT STA 621+00. Before working under existing lines contact Kevin Montgomery. Contact: Mr. Kevin Montgomery, Transmission Project Coordinator, Phone Office 859-936-3219 Cell 859-797-4357

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Windstream Kentucky East, LLC - The telephone company anticipates the completion of the relocation and/or adjustment of their telephone facilities on the project on or before November 15, 2011. Contact: Mr. Roger Redford, Senior Engineer Major Projects, Phone 502-957-7140.

Louisville Gas & Electric Company - The gas company anticipates the completion of the relocation and/or adjustment of their gas facilities on the project on or before November 15, 2011. Contact: Mr. Greg Geiser, Project Manager, Phone 502-627-3708.

There are no railroads involved on this project.

PROTECTION OF UTILITIES

The location of utilities provided in the contract documents has been furnished by the facility owners and/or by reviewing record drawings and may not be accurate. It will be the roadway contractor's responsibility to locate utilities before excavating by calling the various utility owners and by examining any supplemental information supplied by the cabinet. If necessary, the roadway contractor shall determine the exact location and elevation of utilities by hand digging to expose utilities before excavating in the area of a utility. The cost for repair and any other associated costs for any damage to utilities caused by the roadway contractor's operations shall be borne by the roadway contractor.

BEFORE-U-DIG (BUD)

The Contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The Contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The Contractor must coordinate excavation with the utility owners, including those who do not subscribe to KY 811. It may be necessary for the Contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

COORDINATION WITH UTILITY FACILITY OWNERS

The Contractor will be responsible for contacting all utility facility owners on the subject project to have existing facilities located in the field. The Contractor will coordinate his/her activities with the utility facility owners to minimize and, where possible, avoid conflicts with utility facilities.



Kentucky Transportation Cabinet Highway District 4

And
(2), Construction

Kentucky Pollutant Discharge Elimination System Permit KYR10 Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

NEW CONNECTOR ROAD SECTION 2: FROM CECILLIANA DRIVE TO KY-220

Project: PCN ## - ####

HARDIN COUNTY JP02 047 NEW-ROUTE

KyTC BMP Plan for Project PCN ## -

Project information

Note -(1) = Design (2) = Construction (3) = Contractor

- 1. Owner Kentucky Transportation Cabinet, District 4
- 2. Resident Engineer: (2)
- 3. Contractor name: (2)
 Address: (2)

Phone number: (2)

Contact: (2)

Contractors agent responsible for compliance with the KPDES permit requirements (3):

- 4. Project Control Number (2)
- 5. Route (Address)

KY 1600 Elizabethtown, KY 42701

- 6. Latitude/Longitude (project mid-point): 37.751389/-85.931111
- County (project mid-point)Hardin
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

A. Site description:

- Nature of Construction Activity (from letting project description):
 NEW CONNECTOR ROAD SECTION 1: FROM CECILLIANA DRIVE TO KY-220
- 2. Order of major soil disturbing activities (2) and (3)
- 3. Projected volume of material to be moved 450,144 C.Y.
- Estimate of total project area (acres)
 103 Acres
- 5. Estimate of area to be disturbed (acres) 77.51
- 6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.(1)
- Data describing existing soil condition
 The area is primarily residential with some commercial and agricultural land use. The existing ground is vegetated. See Geotech report for further description of existing soil conditions.
- 8. Data describing existing discharge water quality (if any)
 None
- Receiving water name Billy Creek and Otter Creek
- 10.TMDLs and Pollutants of Concern in Receiving Waters: No TMDLs involved with this project
- 11. Site map Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and

resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.

12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.

- 3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - ➤ Construction Access This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - ➤ Clearing and Grubbing The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved
 - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - Brush and/or other barriers to slow and/or divert runoff.
 - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
 - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
 - Non-standard or innovative methods.
 - Cut & Fill and placement of drainage structures The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
 - ➤ Profile and X-Section in place The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.

- Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
- Additional Channel Lining and/or Erosion Control Blanket.
- Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
- Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection
 - Placing Sod
 - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: No permanent BMPs will be constructed with this project

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.

2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there any hazardous wastes being generated at the

project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

Hazardous Products:

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

Petroleum Products:

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

> Fertilizers:

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

> Paints:

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

Concrete Truck Washout:

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

> Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

E. Maintenance

- 1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
- Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. None

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- ➤ Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.

- ➤ Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- ➤ Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

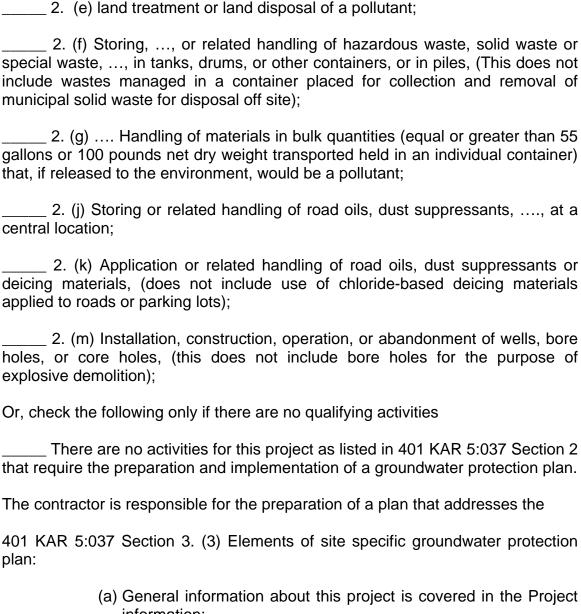
All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:



- information:
- (b) Activities that require a groundwater protection plan have been identified above:
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of

- employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

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KyTC BMP Plan for Project PCN ## -

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer sig	gnature		
Signed Typed or printe	title ed name ²	,signature	-
(3) Signed	title	,	
Typed or printed	name ¹	signature	

- 1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.
- 2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

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KyTC BMP Plan for Project PCN ## -

Sub-Contractor Certification

Subcontractor

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Name: Address: Address:			
Phone:			
The part of BMP plan this	subcontractor is respons	ible to implement is:	
Kentucky Pollutant Discha discharges, the BMP plan discharged as a result of s	rge Elimination System p that has been developed storm events associated	e terms and conditions of the goermit that authorizes the storm to manage the quality of water with the construction site activitientified as part of this certification.	n water er to be vity and
Signed Typed or printed n	title ame ¹	signature	

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

SPECIAL NOTE

KPDES Stormwater Permit eNOI Process

Hardin County Item No. 4-8103.30

Effective August 1, 2009, the Kentucky Division of Water implemented a new process for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10). Notices of Intent should be submitted electronically using their form (eNOI) which is located at the following link:

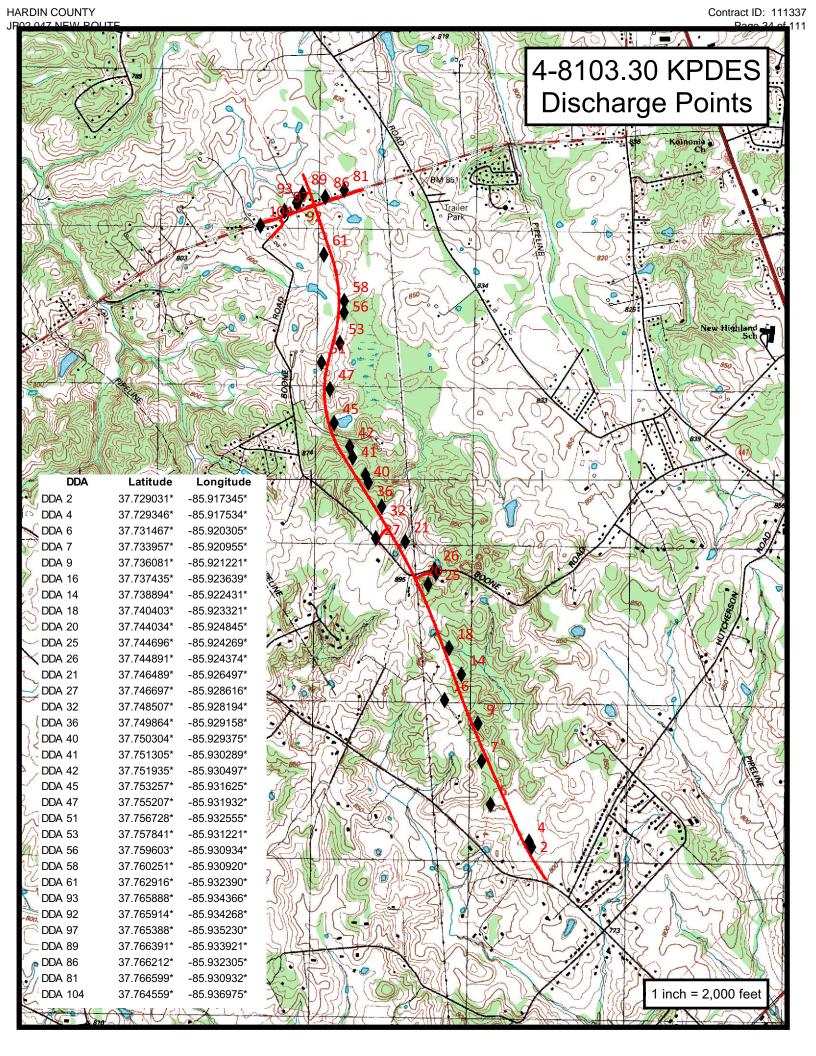
https://dep.gateway.ky.gov/eForms/default.aspx?FormID=7.

The eNOI for this project has been initiated by the District 4 KYTC Project Development Branch and can be retrieved for completion using the following transaction ID number:

294f8bb8-5347-4a35-a4bb-7f5a19d70760

Please be advised that the eNOI will be completed and submitted by District 4 personnel at some time after the project is let to construction and that no earth-disturbing activities can occur on the project until an official approval is obtained from the Kentucky Division of Water.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, TCOB, 200 Mero Street, Frankfort, KY 40622, Phone: (502) 564-7250.



HARDIN COUNTY JP02**5)47-784/6/2**ROUTE **19 AUG 2011**

KENTUCKY TRANSPORTATION CABINET COMMUNICATING ALL PROMISES (CAP) ACTIVE

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<u>Item No.</u> 4 - 8103.3 <u>Project Mgr.</u> JOHN W. MOORE

County HARDIN Route -

<u>CAP # Date of Promise</u> <u>Promise made to:</u> <u>Location of Promise</u>

1 18-AUG-11 John Moore District 4

CAP Description

NO CAPS

N O T I C E

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT AUTHORIZATION Kentucky Division of Water 401 WQC

PROJECT: Hardin County, Item No. 4-8103.3

The Section 404 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Crossings" as the project impacts are BELOW NOTIFICATION THRESHOLDS. Specifically all stream impacts are below 300', less than 0.10 acres and no special aquatic sites will be impacted. Impacts include:

Mainline	
706+00	Construct 155 feet of 42" culvert pipe below the roadway to convey an UT to
R23	Otter Creek. The total impact including ditching, headwall and channel lining is 285 feet (0.03 acres). The watershed area is 29.19 acres. LAT 37.766205 LONG -85.933295
WW 220	LAT 57.700205 LONG -05.955295
KY 220	
63+80	Construct 120 feet of 30" culvert pipe below the roadway to convey an UT to
R23	Otter Creek. The total impact including ditching, headwall and channel lining
	is 160 feet (0.01 acres). The watershed area is 12.17 acres.
	LAT 37.765147 LONG -85.935098
73+30	Construct 123 feet of 42" culvert pipe below the roadway to convey an UT to
R323	Otter Creek. The total impact including ditching, headwall and channel lining
	is 149feet (0.01 acres). The watershed area is 18.70 acres.
	LAT 37 765990 LONG -85 931980

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

NATIONWIDE PERMIT GENERAL CONDITIONS

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. <u>Shellfish Beds.</u> No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.
- 6. <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work

below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
- 15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance

with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add

species-specific regional endangered species conditions to the NWPs.

- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.html respectively.
- 18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the

appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-

Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource

waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse

effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 22. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 24. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 25. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

- 26. <u>Compliance Certification</u>. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
 - (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
 - (c) The signature of the permittee certifying the completion of the work and mitigation.

27. <u>Pre-Construction Notification</u>. (a) <u>Timing</u>. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity:

(1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delipeation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the

United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.



STEPHEN L. BESHEAR GOVERNOR

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

ATTENTION APPLICANT

If your project involves one or more of the following activities, you may need more than one permit from the Kentucky Division of Water.

*building in a floodplain *road culvert in a stream

*streambank stabilization *stream cleanout

*utility line crossing a stream

*construction sites an acre or more

• If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) stormwater permit shall be required from the Operational Permits Section. This permit requires the creation of an erosion control plan.

Contact Allen Ingram.

• Projects that involve filling in the floodplain will require a stream construction permit from the Floodplain Management Section.

Contact Barry Elmore.

 Projects that involve work <u>IN</u> a stream, such as bank stabilization, road culverts, utility line crossings, and stream alteration will require a stream construction permit <u>and</u> a Water Quality Certification from the Water Quality Certification Section.

Contact Alan Grant.

All three contacts listed above can be reached at 502/564-3410. A complete listing of environmental programs administered by the Kentucky Department for Environmental Protection is available from Pete Goodman by calling 502/564-3410.



GENERAL CONDITIONS FOR WATER QUALITY CERTIFICATION

- 1. Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- 2. All dredged material shall be removed to an upland location and/or graded on adjacent areas (so long as such areas are not regulated wetlands), to obtain original streamside elevations, i.e. overbank flooding shall not be artificially obstructed.
- 3. In areas not riprapped or other wise stabilized, revegetation of stream banks and riparian zones shall occur concurrently with project progression. At a minimum, revegetation will approximate pre-disturbance conditions.
- 4. To the maximum extent practicable, all instream work under this certification shall be performed during low flow.
- 5. Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances where such instream work is unavoidable, then it shall be performed in such a manner and duration as to minimize resuspension of sediments and disturbance to substrates and bank or riparian vegetation.
- 6. Any fill or riprap including refuse fill, shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If riprap is utilized, it is to be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- 7. If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when work will be done.
- 8. Removal of existing riparian vegetation should be restricted to the minimum necessary for project construction.
- 9. Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380.

PART II SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to the *Standard Specifications for Road and Bridge Construction, Edition of 2004*, and *Standard Drawings, Edition of 2000* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2008* and *Standard Drawings, Edition of 2003 with the 2008 Revision.*

CLIDCE CTION.	101.02 411
SUBSECTION: REVISION:	101.02 Abbreviations. Insert the following abbreviation and text into the section:
ALL VISIOIV.	insert the following above viation and text into the section.
	KEPSC Kentucky Erosion Prevention and Sediment Control
SUBSECTION:	101.03 Definitions.
REVISION:	Replace the definition for Specifications – <i>Special Provisions</i> with the following:
	Additions and revisions to the Standard and Supplemental Specifications covering conditions
	peculiar to an individual project.
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SUBSECTION: REVISION:	102.03 Contents of the Bid Proposal Form. Replace the first sentence of the first paragraph with the following:
REVISION.	The Bid Proposal form will be available on the Department internet website
	(http://transportation.ky.gov/contract/).
	Delete the consent consents
	Delete the second paragraph.
	Delete the last paragraph.
SUBSECTION:	102.04 Issuance of Bid Proposal Form.
REVISION:	Replace Heading with the following:
	102.04 Bidder Registration.
	Replace the first sentence of the first paragraph with the following:
	The Department reserves the right to disqualify or refuse to place a bidder on the eligible bidder's list for a project for any of the following reasons:
	Replace the last sentence of the subsection with the following:
	The Department will resume placing the bidder on the eligible bidder's list for projects after the bidder improves his operations to the satisfaction of the State Highway Engineer.
SUBSECTION: REVISION:	102.06 Examination of Plans, Specifications, Special Provisions, Special Notes, and Site of Work. Replace the first paragraph with the following:
	Examine the site of the proposed work, the Bid Proposal, Plans, specifications, contract forms, and bulletins and addendums posted to the Department's website and the Bid Express Bidding Service Website before submitting the Bid Proposal. The Department considers the submission of a Bid Proposal prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the Contract.
SUBSECTION: REVISION:	102.07.01 General.
REVISION:	Replace the first sentence with the following:
	Submit the Bid Proposal on forms furnished on the Bid Express Bidding Service website (www.bidx.com).
	Replace the first sentence of the third paragraph with the following:
	Bid proposals submitted shall use an eligible Digital ID issued by Bid Express.

SUBSECTION:	102.07.02 Computer Bidding.
REVISION:	Replace the first paragraph with the following:
	Subsequent to registering for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement (http://transportation.ky.gov/contract/). Download the bid file from the Bid Express Bidding Service Website to prepare a Bid Proposal for submission to the Department. Submit Bid Proposal electronically through Bid Express Bidding Service.
	Delete the second and third paragraph.
SUBSECTION: REVISION:	102.08 Irregular Bid Proposals. Delete the following from the first paragraph: 4) fails to submit a disk created from the Highway Bid Program.
	Replace the second paragraph with the following: The Department will consider Bid Proposals irregular and may reject them for the following reasons:
	 when there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the Bid Proposal incomplete, indefinite, or ambiguous as to its meaning; or when the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a Contract pursuant to an award; or any failure to comply with the provisions of Subsection 102.07; or Bid Proposals in which the Department determines that the prices are unbalanced; or when the sum of the total amount of the Bid Proposal under consideration exceeds the bidder's Current Capacity Rating.
SUBSECTION: REVISION:	102.09 Bid Proposal Guaranty. Insert the following after the first sentence:
	Bid Proposals must have a bid proposal guaranty in the amount indicated in the bid proposal form accompany the submittal. A guaranty in the form of a paper bid bond, cashier's check, or certified check in an amount no less than the amount indicated on the submitted electronic bid is required when the electronic bid bond was not utilized with the Bid Express Bidding Service. Paper bid bonds must be delivered to the Division of Construction Procurement prior to the time of the letting.
SUBSECTION: REVISION:	102.10 Delivery of Bid Proposals. Replace paragraph with the following:
	Submit all Bid Proposals prior to the time specified in the Notice to Contractors. All bids shall be submitted electronically using Bid Express Bidding Services. Electronically submitted bids must be done in accordance with the requirements of the Bid Express Bidding Service.
SUBSECTION: REVISION:	102.11 Withdrawal or Revision of Bid Proposals. Replace the paragraph with the following:
	Bid Proposals can be withdrawn in accordance the requirements of the Bid Express Bidding Service prior to the time of the Letting.

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SUBSECTION:	102.13 Public Opening of Bid Proposals.
REVISION:	Replace Heading with the following: 102.13 Public Announcement of Bid Proposals.
	102.13 Public Almouncement of Bid Proposals.
	Replace the paragraph with the following:
	The Department will publicly announce all Bid Proposals at the time indicated in the Notice to
	Contractors.
SUBSECTION:	103.02 Award of Contract.
REVISION:	Replace the first sentence of the third paragraph with the following:
	The Department will normally award the Contract within 10 working days after the date of
	receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all
	bidders for a period not to exceed 60 calendar days for final disposition of award.
SUBSECTION:	105.02 Plans and Working Drawings.
REVISION:	Insert the following after the fourth paragraph:
	Submit electrical shop drawings, design data, and descriptive literature for materials in electronic
	format to the Division of Traffic Operations for approval. Drawings and literature shall be
	submitted for lighting and signal components. Notify the Engineer when submitting information to
	the Division of Traffic Operations. Do not begin work until shop drawings are approved.
	Submit shop drawings for traffic counting equipment and materials in electronic format to the
	Engineer or the Division of Planning. Notify the Engineer when submitting information directly to the Division of Planning. Do not begin work until shop drawings are reviewed and approved.
	the Division of Framming. Do not begin work until shop drawings are reviewed and approved.
SUBSECTION:	105.03 Record Plans.
REVISION:	Replace the section with the following:
	Record Plans are those reproductions of the original Plans on which the accepted Bid Proposal was
	based and, and signed by a duly authorized representative of the Department. The Department will
	make these plans available for inspection in the Central Office at least 24 hours prior to the time of
	opening bids and up to the time of letting of a project or projects. The quantities appearing on the
	Record Plans are the same as those on which Bid Proposals are received. The Department will use
	these Record Plans as the controlling plans in the prosecution of the Contract. The Department will
	not make any changes on Record Plans subsequent to their issue unless done so by an approved contract modification. The Department will make 2 sets of Record Plans for each project, and will
	maintain one on file in the Central Office and one of file in the District Office. The Department
	will furnish the Contractor with the following: 1 full size, 2 half size and an electronic file copy of
	the Record Plans at the Pre-Construction conference.
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(Effective with the July15, 2011 Letting)

SUBSECTION: REVISION:

105.12 Final Inspection and Acceptance of Work.

Insert the following paragraphs after the first paragraph:

Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completion.

Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work.

Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspection(s). The 90 calendar day allowance is cumulative regardless of the number of follow-up electrical inspections required.

The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repairing damage done by other contractors during the construction of the remaining project.

Failure to complete the electrical corrective work within the 90 calendar day allowance will result in penalties assessed to the project. Penalties will be assessed at ½ the rate of liquidated damages established for the contract.

Replace the following in the second sentence of the second paragraph:

Replace Section 213 with Section 212.

Delete the fifth paragraph from the section.

SUBSECTION: REVISION:

105.13 Claim Resolution Process.

Replace the last sentence of the 3. Bullet with the following:

If the Contractor did not submit an as-bid schedule at the Pre-Construction Meeting or a written narrative in accordance with Subsection 108.02, the Cabinet will not consider the claim for delay.

Delete the last paragraph from the section.

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SUBSECTION: REVISION:

106.04 Buy America Requirement.

Replace the section with the following:

106.04 Buy America Requirement. Follow the "Buy America" provisions as required by Title 23 Code of Federal Regulations § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

SUBSECTION: REVISION:

106.10 Field Welder Certification Requirements.

Insert the following sentence before the first sentence of the first paragraph:

All field welding must be performed by a certified welder unless otherwise noted.

SUBSECTION: REVISION:

108.02 Progress Schedule.

Insert the following prior to the first paragraph:

Specification 108.02 applies to all Cabinet projects except the following project types:

- Right of Way Mowing and/or Litter Removal
- Waterborne Paint Striping
- Projects that contain Special Provision 82
- Projects that contain the Special Note for CPM Scheduling

Insert the following paragraph after paragraph two:

Working without the submittal of a Written Narrative is violation of this specification and additionally voids the Contractor's right to delay claims.

Insert the following paragraph after paragraph six:

The submittal of bar chart or Critical Path Method schedule does not relieve the Contractor's requirement to submit a Written Narrative schedule.

	Insert the following at the beginning of the first paragraph of A) Written Narrative.:
	Submit the Written Narrative Schedule using form TC 63-50 available at the Division of Construction's website (http://www.transportation.ky.gov/construction/ResCenter/ResCenter.htm).
	Replace Part A) Written Narrative 1. And 2. with the following:
	 Provide a description that includes how the Contractor will sequence and stage the work, how the Contractor plans to maintain and control traffic being specific and detailed, and what equipment and crew sizes are planned to execute the work. Provide a list of project milestones including, if applicable, winter shut-downs, holidays, or special events. The Contractor shall describe how these milestones and other dates effect the prosecution of the work. Also, include start date and completion date milestones for the contract, each project if the contract entails multiple projects, each phase of work, site of work, or segment of work as divided in the project plans, proposal, or as subdivided by the Contractor.
SUBSECTION: REVISION:	109.07.01 Liquid Asphalt. Add the following to the Adjustable Contract Items:
REVISION.	Stone Matrix Asphalt for Base
	Stone Matrix Asphalt for Surface
SUBSECTION: REVISION:	110.01 Mobilization. Replace paragraph three with the following:
	Do not bid an amount for Mobilization that exceeds 5 percent of the sum of the total amounts bid for all items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposals that are in excess of this amount down to 5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for Mobilization is less than 5 percent, or the Department will award the Contract for the adjusted bid amount of 5 percent when the amount bid for Mobilization is greater than 5 percent. If any errors in unit bid prices for other Contract items in a Contractor's Bid Proposal are discovered after bid opening and such errors reduce the total amount bid for all other items, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives, so that the percent bid for Mobilization is larger than 5 percent, the Department will adjust the amount bid for Mobilization to 5 percent of the sum of the corrected total bid amounts.
SUBSECTION: REVISION:	110.02 Demobilization. Replace the third paragraph with the following:
	Bid an amount for Demobilization that is a minimum of \$1,000 or 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposal that is less than this amount up to \$1,000 or 1.5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for demobilization exceeds 1.5 percent, or the Department will award the Contract for the adjusted bid amount when the amount bid for demobilization is less than the minimum of \$1,000 or less than 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives.
SUBSECTION: REVISION:	110.04 Payment. Insert the following paragraph following the demobilization payment schedule (4 th paragraph):
	The Department will withhold an amount equal to \$1,000 for demobilization, regardless of the schedule listed above. The \$1,000 withheld for demobilization will be paid when the final estimate is paid.

SUBSECTION: REVISION:	112.03.01 General Traffic Control. Replace paragraph three with the following:
	All flaggers shall be trained in current MUTCD flagging procedures. Proof of training must be available for review at the Department's request. Flagging credentials must be current within the last 5 years.
SUBSECTION: PART: REVISION:	112.03.11 Temporary Pavement Markings. B) Placement and Removal of Temporary Striping. Replace the 2 nd sentence of the first paragraph with the following:
	On interstates and parkways, and other roadways approved by the State Highway Engineer, install pavement striping that is 6 inches in width.
SUBSECTION: REVISION:	112.03.12 Project Traffic Coordinator (PTC). Add the following at the end of the subsection:
	After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task.
SUBSECTION: REVISION:	112.03.15 Non-Compliance of Maintain and Control of Traffic. Add the following section:
	112.03.15 Non-Compliance of Maintain and Control of Traffic. It is the Contractor's responsibility to conform to the traffic control requirements in the TCP, Proposal, plan sheets, specifications, and the Manual on Uniform Traffic Control Devices.
	Unless specified elsewhere in the contract, a penalty will be assessed in the event of non-compliance with Maintain and Control of Traffic requirements. These penalties will be assessed when the Contractor fails to correct a situation or condition of non-compliance with the contract traffic control requirements after being notified by the Engineer. The calculation of accrued penalties for non-compliance will be based upon the date/time of notification by the Engineer.
	The amount of the penalty assessed for non-compliance will be determined based upon the work zone duration, as defined by the MUTCD, and will be the greatest of the different calculation methods indicated below:
	A) Long-term stationary work that occupies a location more than 3 days.
	Correct the non-compliant issue within 24 hours from initial notification by the Engineer. If the issue is not corrected within 24 hours from the initial notification, a penalty for non-compliance will be assessed on a daily basis beginning from the initial notification of non-compliance. The Contractor will be assessed a \$1,000 daily penalty or the amount equal to the contract liquidated damages in Section 108.09, whichever of the 2 is greater. The penalty for non-compliance will escalate as follows for continued non-compliance after the initial notification.
	3 Days after Notification \$1,500 daily penalty or 1.5 times the contract liquidated damages daily charge rate in Section 108.09, whichever is greater.
	7 Days after Notification \$2,000 daily penalty or double the contract liquidated damages daily charge rate in Section 108.09, whichever is greater.

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B) Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.

Correct the non-compliant issue within 4 hours from initial notification by the Engineer. If the issue is not corrected within 4 hours from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at \$200 per hour.

C) Short-term stationary is work that occupies a location for more than 1 hour within a single 24-hour period.

Correct the non-compliant issue within 1 hour from initial notification by the Engineer. If the issue is not corrected within 1 hour from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at \$200 per hour.

If the Contractor remains in violation of the Maintain and Control of Traffic requirements, or if the Department determines it to be in the public's interest, work will be suspended in accordance with Section 108.08 until the deficiencies are corrected. The Department reserves the right to correct deficiencies by any means available and charge the Contractor for labor, equipment, and material costs incurred in emergency situations.

SUBSECTION:

206.03.02 Embankment

REVISION:

Replace the last paragraph with the following:

When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A).

SUBSECTION: REVISION:

213.03.03 Inspection and Maintenance.

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

Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7 calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event.

Insert the following paragraph after the second paragraph:

When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure compliance with the inspection and maintenance requirements of the permit. The Engineer will perform verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will provide copies of the inspection only when improvements to the BMP's are required. Verification inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event.

SUBSECTION: PART: REVISION:	213.03.05 Temporary Control Measures. E) Temporary Seeding and Protection. Replace the first paragraph with the following:
	Apply an Annual Rye seed mix at a rate of 100 pounds per acre during the months of March through August. In addition to the Annual Rye, add 10 pounds of German Foxtail-Millet (Setaria italica), when performing temporary seeding during the months of June through August. During the months of September through February, apply Winter Wheat or Rye Grain at a rate of 100 pounds per acre. Obtain the Engineer's approval prior to the application of the seed mixture.
SUBSECTION: PART:	213.03.05 Temporary Control Measures. F) Temporary Mulch.
REVISION:	Replace the last sentence with the following:
	Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and anchor it into the soil by mechanically crimping it into the soil surface or applying tackifier to provide a protective cover. Regardless of the anchoring method used, ensure the protective cover holds until disturbance is required or permanent controls are in installed.
SUBSECTION: REVISION:	303.05 Payment. Replace the second paragraph of the section with the following:
	The Department will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay Adjustment Schedule for Specialty Mixtures in Section 402.
SUBSECTION: PART:	401.02.04 Special Requirements for Dryer Drum Plants. F) Production Quality Control.
REVISION:	Replace the first sentence with the following:
	Stop mixing operations immediately if, at any time, a failure of the automatic electronic weighing system of the aggregate feed, asphalt binder feed, or water injection system control occurs.
SUBSECTION: REVISION:	401.02.04 Special Requirements for Dryer Drum Plants. Add the following:
	Part G) Water Injection System. Provided each system has prior approval as specified in Subsection 402.01.01, the Department will allow the use of water injection systems for purposes of foaming the asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA).
	Ensure the equipment for water injection meets the following requirements: 1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted);
	Injection equipment has variable controls that introduce water ratios based on production rates of mixtures; Triggets water into the flow of carbolt binder price to control the accessory.
	 3) Injects water into the flow of asphalt binder prior to contacting the aggregate; 4) Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate.
SUBSECTION: REVISION:	401.03.01 Preparation of Mixtures. Replace the last sentence of the second paragraph with the following:
	Do not use asphalt binder while it is foaming in a storage tank.
L	

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SUBSECTION: REVISION:

401.03.01 Preparation of Mixtures.

Replace the third paragraph and Mixing and Laying Temperature table with the following:

Maintain the temperature of the component materials and asphalt mixture within the ranges listed in the following table:

MIXING AND LAYING TEMPERATURES (°F)					
Material		Minimum	Maximum		
Aggregates		240	330		
Aggregates used with Recycle (RAP)	ed Asphalt Pavement	240	_		
Asphalt Binders	PG 64-22	230	330		
	PG 76-22	285	350		
Asphalt Mixtures at Plant	PG 64-22 HMA	250	330		
(Measured in Truck)	PG 76-22 HMA	310	350		
	PG 64-22 WMA	230	275		
	PG 76-22 WMA	250	300		
Asphalt Mixtures at Project	PG 64-22 HMA	230	330		
(Measured in Truck	PG 76-22 HMA	300	350		
When Discharging)	PG 64-22 WMA	210	275		
	PG 76-22 WMA	240	300		

SUBSECTION: REVISION:

402.01 Description.

Replace the paragraph with the following:

Provide the process control and acceptance testing of all classes and types of asphalt mixtures which may be furnished either as hot mix asphalt (HMA) or warm mix asphalt (WMA) produced with water injection systems.

SUBSECTION REVISION:

402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.

Add the following subsection:

402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.

The Department will evaluate trial production of WMA by use of a water injection system provided the system is installed according to the manufacturer's requirements and satisfies the requirements of Section 401. Evaluation will include production and placement of WMA to demonstrate adequate mixture quality including volumetric properties and density by Option A as specified in Subsection 402.03.02 D). Do not place WMA for evaluation on Department projects. Provided production and placement operations satisfy the applicable quality levels, the Department will approve WMA production on Department projects using the water injection system as installed on the specific asphalt mixing plant evaluated.

SUBSECTION: REVISION:

402.05.02 Asphalt Mixtures and Mixtures With RAP.

Replace Subsection Title as below:

402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.

SUBSECTION: REVISION:

402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Replace the paragraph with the following:

The Department will pay for the mixture at the Contract unit bid price and apply a Lot Pay Adjustment for each lot placed based on the degree of compliance with the specified tolerances. Using the appropriate Lot Pay Adjustment Schedule, the Department will assign a pay value for the applicable properties within each sublot and average the sublot pay values to determine the pay value for a given property for each lot. The Department will apply the Lot Pay Adjustment for each lot to a defined unit price of \$50.00 per ton. The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

SUBSECTION: PART: REVISION:	C) Conventional and RAP Mixtures Placed on Shoulders.			
	C) HMA, WMA and RAP Mixtures Placed on Shoulders or Placed as Asphalt Pavement Wedge.			
	 Placed monolithically with the Mainline – Width of 4 feet or less. The Department will pay as mainline mixture. Placed monolithically with the Mainline – Width of greater than 4 feet. The Department will pay as mainline mixture but use 1.00 for the Lane and Joint Density Pay Value for shoulder or Asphalt Pavement Wedge quantities. Placed Separately. The Department will use 1.00 for the Lane and Joint Density Pay Value. 			
SUBSECTION: PART:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.			
REVISION:	Replace the title with the following:			
	D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.			
	Delete the following: D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge. The Department will pay as mainline mixture but use a 1.00 pay value for all properties.			
SUBSECTION: PART:	402.05.02 Asphalt Mixtures for Temporary Pavement.			
REVISION:	E) Asphalt Mixtures for Temporary Pavement. Replace E) Asphalt Mixtures for Temporary Pavement with the following:			
	D) Asphalt Mixtures for Temporary Pavement.			
SUBSECTION: PART: TABLES: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures VMA Replace the VMA table with the following:			
	VMA			
	Pay Value Deviation			
	From Minimum			
	0.95 0.1-0.5 below min.			
	0.90 0.6-1 0 below min.			
SUBSECTION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.			
PART:	Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures			
TABLES: REVISION:	VMA Replace the VMA table with the following:			
	VMA			
	Pay Value Deviation			
	From Minimum			
	1.00 ≥ min. VMA			
	0.95 0.1-0.5 below min. 0.90 0.6-1.0 below min.			
	(1) > 1.0 below min.			
	> 1.0 colon lillin.			

SUBSECTION: PART: TABLE: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option B Mixtures VMA Replace the VMA table with the following:							
	VMA		7					
			Pay Value	De	viation	1		
					Minimum			
			1.00	_	n. VMA			
			0.95		0.5 bel w min.			
			0.9		below min.			
			(2)	> 1.0 t	elow min.			
SUBSECTION: PART: NUMBER: REVISION:	 403.03.03 Preparation of Mixture. C) Mix Design Criteria. 1) Preliminary Mix Design. Replace the last two sentences of the paragraph and table with the following: Complete the volumetric mix design at the appropriate number of gyrations as given in the table below for the number of 20-year ESAL's. The Department will define the relationship between ESAL classes, as given in the bid items for Superpave mixtures, and 20-year ESAL ranges as follows: 							
						er of Gyr]
		Class	ESAL's (millio	ons)	N _{initial}	N _{design}	N _{max}	
		3	< 3.0 3.0 to < 30.0)	6 7	50 75	75 115	
		4	≥ 30.0		8	100	160	
SUBSECTION: PART: REVISION:	403.03.09 Leveling and Wedging, and Scratch Course. A) Leveling and Wedging. Replace the first sentence of the first paragraph with the following: Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.							
SUBSECTION:			ing, and Scratch Co	ourse.				
PART: REVISION:	B) Scratch Cou Replace the sec		of the first paragraph	n with the	e followir	ng:		
	Replace the second sentence of the first paragraph with the following: Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.							
SUBSECTION:	407.01 DESCR		ha managnanh with th	follo	in a.			
REVISION:			he paragraph with the composed of a hot-i			xed aspha	alt mixtu	ire.
SUBSECTION:	409.01 DESCR							
REVISION:	Replace the firs	st sentence of the	he paragraph with the	ne follow	ing:			
	mix asphalt (H	MA) or warm i	ent (RAP) from Dep mix asphalt (WMA)					
SUBSECTION:	410.01 DESCR		the never and the					
REVISION:	Delete the seco	nu sentence of	me paragraph.					

SUBSECTION:	410.03.01 Corrective Work.				
REVISION:	Replace the last sentence of the paragraph with the following:				
	Provide a final surface comparable to the adjacent pavement that does not require corrective work				
	in respect to texture, appearance, and skid resistance.				
SUBSECTION:	410.03.02 Ride Quality.				
PART:	B) Requirements.				
NUMBER: REVISION:	1) Category A. Replace the last sentence of the first paragraph with the following:				
112 (1810) (
	At the Department's discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be applied in lieu of corrective work.				
SUBSECTION:	410.03.02 Ride Quality.				
PART: NUMBER:	B) Requirements. 2) Category B.				
REVISION:	Replace the second and third sentence of the first paragraph with the following:				
	When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and				
	replace the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of \$750 per 0.1-lane-mile section may be applied in lieu of corrective work.				
SUBSECTION: REVISION:	410.05 PAYMENT.				
REVISION.	Add the following sentence to the end of the first paragraph:				
	The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.				
SUBSECTION: REVISION:	413.05.02 CL3 SMA BASE 1.00D PG76-22.				
REVISION:	Insert the following sentence between the first and second sentence of the first paragraph:				
	The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.				
	·				
SUBSECTION: TABLE:	413.05.02 CL3 SMA BASE 1.00D PG 76-22. JOINT DENSITY TABLE				
REVISION:	Replace the joint density table with the following:				
	LANE DENSITY				
	Pay Value Test Result (%)				
	1.05 95.0-96.5				
	1.00 93.0-94.9				
	0.95 92.0-92.9 or 96.6-97.0				
	0.90 91.0-91.9 or 97.1-97.5				
	< 91.0 or > 97.5				
SUBSECTION:	413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.				
REVISION:	Insert the following sentence between the first and second sentence of the first paragraph:				
	The Department will calculate the Lot Pay Adjustment using all possible incentives and				
	disincentives but will not allow the overall pay value for a lot to exceed 1.00.				

SUBSECTION: TABLE:	413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.				
REVISION:	JOINT DENSITY TABLE Replace the joint density table with the following:				
			DENSITY		1
		Pay Value	Lane Density Test Result (%)	Joint Density Test Result (%)	
		1.05	95.0-96.5	92.0-96.0	1
		1.00	93.0-94.9	90.0-91.9	
		0.95	92.0-92.9 or 96.6-97.0	89.0-89.9 or 96.1-96.5	1
		0.90	91.0-91.9 or 97.1-97.5	88.0-88.9 or 96.6-97.0	
		0.75		< 88.0 or > 97.0]
		(1)	< 91.0 or > 97.5]
SUBSECTION: REVISION:	501.05.02 Ride (Add the followin		end of the first paragraph	:	
	The sum of the p whole.	ay value adjustmo	ents for the ride quality sh	all not exceed \$0 for the	e project as a
SUBSECTION: REVISION:	505.03.04 Detectable Warnings. Replace the first sentence with the following:				
	Install detectable Standard Drawin		nt all sidewalk ramps and o	on all commercial entra	nces according to the
SUBSECTION: REVISION:	505.04.04 Detectable Warnings. Replace the paragraph with the following:				
	projects will requapplicable to the incidental to the	ire the removal o project. The cost	quantity in square feet. A of existing sidewalks to me associated with the removes bid item or incidental to enoted.	eet the requirements of t val of the existing sidev	the standard drawings valk will be
SUBSECTION: REVISION:	505.05 PAYMENT. Add the following to the bid item table:				
	<u>Code</u> 23158ES505	Pay Item Detectable Wa	Pay Unit Square Foot	t	
SUBSECTION: REVISION:	509.01 DESCRII Replace the seco	PTION. nd paragraph with	n the following:		
	Research Program the Standard Dra length, material,	m (NCHRP) 350 wings. Obtain the drain slot dimenset or less from the	e of similar units that conf Test Level 3 (TL-3) require Engineers approval priorions and locations typical NCHRP 350 TL-3 for Te	rements and the typical r to use. Ensure the bar features are met and the	features depicted by rier wall shape, e reported maximum

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SUBSECTION: REVISION:	601.03.02 Concrete Producer Responsibilities. Replace the first sentence with the following:
	Obtain the concrete from producers that are in compliance with KM 64-323 and on the Department's List of Approved Materials.
	Add the following to the first paragraph:
	If a concrete plant becomes unqualified during a project and there are no other qualified plants in the region, the Department will provide qualified personnel to witness and ensure the producer follows the required specifications. The Department will assess the Contractor a \$100 per hour charge for this service.
SUBSECTION:	601.03.02 Concrete Producer Responsibilities.
PART:	B) Certified Personnel.
REVISION:	Replace the second sentence with the following:
	Ensure that the concrete technicians are certified as ACI Level I (Level I) and KRMCA Level II (Level II).
SUBSECTION:	601.03.02 Concrete Producer Responsibilities.
PART:	C) Quality Control.
REVISION:	Replace the second sentence with the following:
	Ensure that the Level II concrete technician is present when work is in progress and is responsible for
	inspecting trucks, batch weight calculations, monitoring batching, making mixture adjustments,
	reviewing the slump, air content, unit weight, temperature, and aggregate tests, all to provide conforming
	concrete to the project.
SUBSECTION:	601.03.02 Concrete Producer Responsibilities.
PART: REVISION:	D) Producer Testing. Replace with the following:
KE VISION.	Replace with the following.
	When producing for state work, have a Qualified Concrete Aggregate Technician or KYTC Qualified Aggregate Technician perform, at a minimum, weekly gradations and minus 200 wash tests and daily moisture contents of coarse and fine aggregate (Fine aggregates will not require a minus 200 wash test). Using the daily moisture contents, adjust the approved mix design accordingly prior to production. Ensure that the Level II concrete technician is present when work is in progress and is responsible for inspecting trucks, batch weight calculations, monitoring batching, making mixture adjustments, reviewing the slump, air content, unit weight, temperature, and aggregate tests, all to provide conforming concrete to the project.
SUBSECTION:	601.03.02 Concrete Producer Responsibilities.
PART:	E) Trip Tickets.
REVISION:	Replace the second sentence with the following:
	Include on the trip ticket the Sample ID for the approved mix design and a statement certifying that the data on the ticket is correct and that the mixture conforms to the mix design.
SUBSECTION:	601.03.03 Proportioning and Requirements.
PART:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
NUMBER: REVISION:	2) Mineral Admixtures. Replace the second sentence with the following:
REVISION.	Topiace the second sentence with the following.
	Reduction of the total cement content by a combination of mineral admixtures will be allowed, up to a maximum of 40 percent.

SUBSECTION: PART: NUMBER: LETTER: REVISION: SUBSECTION:	601.03.03 Proportioning and Requirements. C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures 2) Mineral Admixtures. a) Fly Ash. Delete the last sentence of the third paragraph. 601.03.03 Proportioning and Requirements.
PART: NUMBER: LETTER: REVISION:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures 2) Mineral Admixtures. b) Ground Granulated Blast Furnace Slag (GGBF Slag). Delete the second sentence of the third paragraph.
SUBSECTION: PART: REVISION:	601.03.03 Proportioning and Requirements. E) Measuring. Add the following sentence: Conform to the individual ingredient material batching tolerances in Appendix A.
SUBSECTION: PART: REVISION:	601.03.09 Placing Concrete. A) General. Replace the last sentence of the fourth paragraph with the following: Do not use aluminum or aluminum alloy troughs, pipes, or chutes that have surface damage or for lengths greater than 20 feet. Replace the second sentence of the fifth paragraph with the following: When pumping, equip the delivery pipe with a nozzle, having a minimum of 2 right angles, at the discharge end. Alternate nozzles or restriction devices may be allowed with prior approval by the Engineer.
SUBSECTION: REVISION:	605.02.05 Forms. Delete the last sentence.
SUBSECTION: REVISION:	605.03.04 Tack Welding. Replace with the following: The Department does not allow tack welding.
SUBSECTION: REVISION:	606.02.11 Coarse Aggregate. Replace with the following: Conform to Section 805, size No. 8 or 9-M.
SUBSECTION: PART: REVISION:	609.03.04 Expansion and Fixed Joints. D) Preformed Neoprene Joint Seals. Replace the last sentence of paragraph seven with the following: Field splices will not be allowed during partial width construction. It is Contractor's responsibility to determine and install the length of seal required for the joint to barrier wall as per the standard drawing.
SUBSECTION: REVISION:	609.03.09 Finish with Burlap Drag. Delete the entire section.
SUBSECTION: REVISION:	609.04.06 Joint Sealing. Replace Subsection 601.04 with the following: Subsection 606.04.08.

GLIDGEGETON	(00.05 P
SUBSECTION: REVISION:	609.05 Payment. Replace the Pay Unit for Joint Sealing with the following:
KE VISION:	Replace the Lay Onit for Joint Scannig with the following.
	See Subsection 606.05.
SUBSECTION:	701.03.06 Initial Backfill.
REVISION:	Replace the first sentence of the last paragraph with the following:
	When the Contract specifies, perform quality control testing to verify compaction according to KM 64-
	512.
SUBSECTION:	701.03.08 Testing of Pipe.
REVISION:	Replace and rename the subsection with the following:
	701.03.08 Inspection of Pipe. The engineer will visually inspect all pipe. The Department will
	require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe
	structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of
	the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining
	pipe structures on the project to provide for the minimum inspection requirement. The pipe will be
	selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be
	inspected is at least 50 percent of the total linear feet of all installed pipe on the project.
	Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after
	completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the
	final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete
	inspection is possible.
	Notify the Engineer immediately if distresses or locations of improper installation are discovered.
	When camera testing shows distresses or improper installation in the installed pipe, the Engineer may
	require additional sections to be tested. Provide the video and report to the Engineer when testing is
	complete in accordance with KM 64-114. Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the
	Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation,
	sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and
	installation thresholds indicated in the table below, provide the Department with an evaluation of each
	location conducted by a Professional Engineer addressing the severity of the deflection, structural
	integrity, environmental conditions, design service life, and an evaluation of the factor of safety using
	Section 12, "Buried Structures and Tunnel Liners," of the AASHTO LRFD Bridge Design Specifications. Based on the evaluation, the Department may allow the pipe to remain in place at a
	reduced unit price as shown in the table below. Provide 5 business days for the Department to review the
	evaluation. When the pipe shows deflection of 10 percent or greater, remove and replace the pipe. When
	the camera/video or laser inspection results are called into question, the Department may require direct
	measurements or mandrel testing.
	The Cabinet may elect to conduct Quality Assurance verifications of any pipe inspections.
SUBSECTION:	701.04.07 Testing.
REVISION:	Replace and rename the subsection with the following:
	•
	701.04.07 Pipeline Video Inspection. The Department will measure the quantity in linear feet
	along the pipe invert of the structure inspected. When inspection above the specified 50 percent is
	performed due to a disagreement or suspicion of additional distresses and the Department is found in
	error, the Department will measure the quantity as Extra Work according to Subsection 104.03. However, if additional distresses or non-conformance is found, the Department will not measure the
	additional inspection for payment.

SUBSECTION: REVISION:	701.05 PAYMENT. Add the following pay item to the	e list of pay items:			
RE (15101 W	Code Pay 1		<u>Pay Unit</u> Linear Foot		
SUBSECTION: TABLE: REVISION:	701.05 PAYMENT PIPE DEFLECTION DETERMINATION Replace this table with the follow		ING		
		PIPE DEFLECTI	ON		
	Amount of Deflection	(%) Pa	yment		
	0.0 to 5.0	10	0% of the Unit Bid Price		
	5.1 to 9.9	50	% of the Unit Bid Price (1)		
	10 or greater	Re	emove and Replace		
	(1) Provide Structural Analysi allowed to remain in place at the		d on the structural analysis, pipe may be		
SUBSECTION: TABLE: REVISION:	701.05 PAYMENT PIPE DEFLECTION DETERMING Delete this table.	NED BY MANDREL TES	TING		
SUBSECTION: REVISION:	713.02.01 Paint. Replace with the following:				
REVISION.	Replace with the following.				
	Conform to Section 842 and Sect	ion 846.			
SUBSECTION:	713.03 CONSTRUCTION.				
REVISION:	Replace the first sentence of the second paragraph with the following:				
	On interstates and parkways, and striping that is 6 inches in width.	other routes approved by the	ne State Highway Engineer, install pavement		
SUBSECTION: REVISION:	713.03.03 Paint Application. Replace the second paragraph wit	th the following table:			
	Material	Paint Application Rate			
	4 inch waterborne paint	Min. of 16.5 gallons/mi			
	6 inch waterborne paint 6 inch durable waterborne paint	Min. of 24.8 gallons/mile	Min. of 6 pounds/gallon Min. of 6 pounds/gallon		
SUBSECTION:	713.03.04 Marking Removal.	Willi. of 30 gallolis/lillie	Willi. of o poulids/gallon		
REVISION:	Replace the last sentence of the p	aragraph with the following	j: -		
	Vacuum all marking material and	removal debris concurrent	ly with the marking removal operation.		
SUBSECTION:	713.05 PAYMENT.				
REVISION:	Insert the following codes and pa	y items below the Pavemen	t Striping – Permanent Paint:		
	Code Pay Item		Pay Unit		
	24189ER Durable Waterb	orne Marking – 6 IN W	Linear Foot		
	24190ER Durable Waterb	orne Marking – 6 IN Y	Linear Foot		
	24191ER Durable Waterb	orne Marking – 12 IN W	Linear Foot		
	241)1ER Durable Waterb	offic Marking 12 HV W	Linear 1 oot		

SUBSECTION:	714.03 CONSTRUCTION.
REVISION:	Insert the following paragraph at the end of the third paragraph:
	Use Type I Tape for markings on bridge decks, JPC pavement and JPC intersections. Thermoplastic should only be used for markings on asphalt pavement.
SUBSECTION: REVISION:	714.03.07 Marking Removal. Replace the third sentence of the paragraph with the following:
	Vacuum all marking material and removal debris concurrently with the marking removal operation.
SUBSECTION: REVISION:	716.01 DESCRIPTION. Insert the following after the first sentence:
	Energize lighting as soon as it is fully functional and ready for inspection. Ensure that lighting remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.
SUBSECTION: REVISION:	716.02.01 Roadway Lighting Materials. Replace the last two sentences of the paragraph with the following:
AB (1525)	Submit for material approval an electronic file of descriptive literature, drawings, and any requested design data to the Division of Traffic Operations. Do not begin work until shop drawings are approved. Notify the Engineer when submitting any information to the Division of Traffic Operations. Do not make substitutions for approved materials without written permission as described above.
SECTION: REVISION:	717 – THERMOPLASTIC INTERSECTION MARKINGS. Replace the section name with the following:
	INTERSECTION MARKINGS.
SUBSECTION.	717.01 DESCRIPTION:
SUBSECTION: REVISION:	Replace the paragraph with the following:
	Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion process or by applying preformed thermoplastic intersection marking material.
SUBSECTION: REVISION:	717.02 MATERIALS AND EQUIPMENT. Insert the following subsection:
	717.02.06 Type I Tape. Conform to Section 836.
SUBSECTION: REVISION:	717.03.03 Application. Insert the following part to the subsection:
	B) Type I Tape Intersection Markings. Apply according to the manufacturer's recommendations. Cut all tape at pavement joints when applied to concrete surfaces.

SUBSECTION:	717.03.05 Proving Period.		
PART:	A) Requirements.		
REVISION:	Insert the following to this section	ion:	
	of failure due to blistering, excepavement materials, drippings, retroreflectivity, vehicular dama warranted by the manufacturer adequately bonded to the surfact Subsection 714.03.06 A) 1), ret	oving period, ensure that the pavement marking materies is cracking, bleeding, staining, discoloration, oil conchipping, spalling, poor adhesion to the pavement, los age, and normal wear. Type I Tape is manufactured on to meet certain retroreflective requirements. As long are and shows no signs of failure due to the other items roreflectivity readings will not be required. In the abserbased on a nighttime visual observation.	ontent of the s of ff site and as the material is listed in
SUBSECTION: REVISION:		e paragraph with the following:	
	Vacuum all marking material and	nd removal debris concurrently with the marking remo	oval operation.
SUBSECTION: REVISION:	717.05 PAYMENT. Insert the following bid item co	des:	
SUBSECTION: REVISION:	miscellaneous metal v For the SCI100GM fe		to ASTM A 123. SCI100GM fender
SUBSECTION: REVISION:	725.02.04 Type VII Class C. Replace bullet 2) with the follor 2) The SCI100GM Syste miscellaneous metal v For the SCI100GM fe		Illinois. For all to ASTM A 123. SCI100GM fender
SUBSECTION: REVISION:		e first paragraph and add the following to the second p SO ₃ content above the value in table I of ASTM C 150	
		SO ₃ content above the value in table I of ASTM C 150 ay expansion test data for the supplied SO ₃ content on	

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SUBSECTION: REVISION:	805.01 GENERAL. Replace the second paragraph with the following:
	The Department's List of Approved Materials includes the Aggregate Source List, the list of Class A and Class B Polish-Resistant Aggregate Sources, and the Concrete Restriction List.
SUBSECTION: REVISION:	805.04 CONCRETE. Delete footnote (1) The permissible lightweight particle content of gravel coarse aggregate for reinforced
	concrete box culvert sections, concrete pipe, pipe arches, or for use only in concrete that will be permanently protected from freezing by 2 feet or more of cover is 10.0 percent.
SUBSECTION:	
REVISION:	Replace the "AASHTO T 160" reference in first sentence of the third paragraph with "KM 64-629"
SUBSECTION:	805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.
TABLE:	AGGREGATE SIZE USE
PART:	Cement Concrete Structures and Incidental Construction
REVISION:	Replace "9-M for Waterproofing Overlays" with "8 or 9-M for Waterproofing Overlays"

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SUBSECTION: 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE. REPlace the "SIZES OF COARSE AGGREGATES" table in with the following:

					S	ZES C	SIZES OF COARSE AGGREGATES	RSE AC	GREG	ATES							
	Sieve		Al	STNUOM	AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT	AN EACE	I LABORAT	ORY SII	EVE (SQU,	ARE OPEN	INGS) PEF	CENTAG	BY WEI	THE			
Aggregate Size	Nominal (3) Maximum Aggregate Size	4 inch	3 1/2 inch	3 inch	2 1/2 inch	2 inch	1 1/2 inch	1 inch	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
1	3 1/2 inch	100	90-100		25-60		0-15		0-5								
2	2 1/2 inch			100	90-100	35-70	0-15		0-5								
23	2 inch			100		40-90		0-15		0-5							
3	2 inch				100	90-100	35-70	0-15		0-5							
357	2 inch				100	95-100		35-70		10-30		0-5					
4	1 1/2 inch					100	90-100	20-55	0-15		0-5						
467	1 1/2 inch					100	95-100		35-70		10-30	0-5					
5	1 inch						100	90-100	20-55	0-10	0-5						
57	1 inch						100	95-100		25-60		0-10	0-5				
610	1 inch						100	85-100		40-75		15-40					
67	3/4 inch							100	90-100		20-55	0-10	0-5				
68	3/4 inch							100	90-100		30-65	5-25	0-10	0-5			
710	3/4 inch							100	80-100		30-75	0-30					
78	1/2 inch								100	90-100	40-75	5-25	0-10	0-5			
8	3/8 inch									100	85-100	10-30	0-10	0-5			
9-M	3/8 inch									100	75-100	0-25	0-5				
$10^{(2)}$	No. 4										100	85-100				10-30	
11 ⁽²⁾	No. 4										100	40-90	10-40			0-5	
DENSE GRADED AGGREGATE (1)	3/4 inch							100	70-100		50-80	30-65			10-40		4-13
CRUSHED STONE BASE (1)	1 ½ inch				100		90-100		60-95		30-70	15-55			5-20		0-8
(I) Gradation	Gradation northwest with stime KM 62 for A NEHTO T 11 T 27	wind cin	VM 61	000	ACUTY	7117	77										

3 2

Gradation performed by wet steve KM 04-050 or AASH1O 1-11/1-27.

Sizes shown for convenience and are not to be considered as coarse aggregates.

Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained.

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

CLIDGECTION	00% 1 C CAMPLING AND TERTING				
SUBSECTION: REVISION:		ongion			
KEVISION.	Test.	alisioli			
	Test.				
	Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.				
SUBSECTION:	810.04.01 Coating Requirements.				
REVISION:					
SUBSECTION:					
PART:					
REVISION:	Replace the title with the following:				
	B) Culvert Pipe, Storm Sewer, and Entrance Pipe.				
SUBSECTION:	823.02 LIQUID MEMBRANE FORMING COMPOUNDS.				
REVISION:					
REVISION.	ridd tile following.				
	Effective July 1, 2011, to remain on or be added to the Department's approved list, products must	have			
	completed testing or been submitted for testing through the National Transportation Product Evalu	ation			
	Program (NTPEP) for Concrete Curing Compounds.				
SUBSECTION:					
REVISION:	Replace the last sentence with the following:				
	The Department will sample and evaluate for approval each lot of thermoplastic material delivered	l for			
	use per contract prior to installation of the thermoplastic material. Do not allow the installation of				
	thermoplastic material until it has been approved by the Division of Materials. Allow the Departm				
	minimum of 10 working days to evaluate and approve thermoplastic material.				
SUBSECTION:					
REVISION:					
	Replace Lead Chromate 0.0 max. 4.0 min.				
	with				
	Heavy Metals Content Comply with 40 CFR 261				
SUBSECTION:	842.02 APPROVAL.				
TABLE:					
REVISION:	Revise the following in the table:				
	Doubood the 2.0 AE's valves in the table with 4.0 AE's fan beth Valley, and White Doint on both the				
	Replace the 2.0 Δ E* values in the table with 4.0 Δ E* for both Yellow and White Paint on both the Daytime and Nighttime Color Spectrophotometer.				
	Baytime and regittime color spectrophotometer.				
SECTION:	DIVISION 800 MATERIAL DETAILS				
REVISION:					
	SECTION 846 – DURABLE WATERBORNE PAINT				
	846.01 DESCRIPTION. This section covers quick-drying durable waterborne pavement stripin	a naint			
	for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic water				
	striping paint suitable for application on such traffic-bearing surfaces as Portland cement co	oncrete,			
	bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.				
	94C 02 Amount Colors waterials that confirm to the				
	846.02 Approval. Select materials that conform to the composition requirements below. Provide independent analysis data and cartification for each formulation stating the total concentration of a				
	independent analysis data and certification for each formulation stating the total concentration of e heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 f				
	leachable heavy metals content. Submit initial samples for approval before beginning striping	i OI			
Î.	Treachaore nearly metars content. Submit initial samples for approval before beginning striping				

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operations. The initial sample may be sent from the manufacture of the paint. The Department will randomly sample and evaluate the paint each week that the striping operations are in progress.

The non-volatile portion of the vehicle shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis. The acrylic resin used shall be a 100% cross-linking acrylic as evidenced by infrared peaks at wavelengths 1568, 1624, and 1672 cm-1 with intensities equal to those produced by an acrylic resin known to be 100% cross-linking.

	PAINT COMPOSITION	
Property and Test Method	Yellow	White
Daytime Color (CIELAB)	L* 81.76	L* 93.51
Spectrophotometer using	a* 19.79	a* -1.01
illuminant D65 at 45°	b* 89.89	b* 0.70
illumination and 0° viewing with	Maximum allowa le	Maximum allowable variation
a 2° observer	variation 4.0∆E*	4.0ΔE*
Nighttime Color (CIELAB)	L* 86.90	L* 93.45
Spectrophotometer using	a* 24.80	a* -0.79
illuminant A at 45° illumination	b* 95.45	b* 0.43
and 0° viewing with a 2° observer	Maximum allowable variation	Maximum allowable variation
	4.0ΔE*	4.0ΔE*
Heavy Metals Content	Comply with 40 CFR 261	Comply with 40 CFR 261
Titanium Dioxide	NA	10% by weight of pigment
ASTM D 4764		min.
VOC	1.25 lb/gal max.	1.25 l /gal ma .
ASTM D 2369 and D 4017		
Contrast Ratio	0.97	0.99
(at 15 mils wft)		

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

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

DURABLE W	ATERBORN	IE PAVEME	NT STRIPIN	G PAINT RI	EDUCTION S	CHEDULE
Non- conforming Property	Resin	Color	Contrast	TiO ₂	VOC	Heavy Metals Content
Reduction Rate	60%	10%	10%	10%	60%	60%

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APPENDIX A:	TABLUATION OF CONSTRUCTION TOLERANCES.
PART:	601.03.03
REVISION:	Replace with the following:
	Concrete accuracy of individual ingredient material for each batch. ± 2.0% for aggregates ± 1.0% for water ± 1.0% for cement in batches of 4 cubic yards or greater ± 1.0% for total cementitious materials in batches of 4 cubic yards or greater 0.0% to + 4.0% for cement in batches less than 4 cubic yards 0.0% to + 4.0% for total cementitious materials in batches less than 4 cubic yards ± 3.0% for admixtures
APPENDIX A: PART: REVISION:	TABLUATION OF CONSTRUCTION TOLERANCES. 601.03.03 C) 2) Delete

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED or flip disk/LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- 1) Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- 6) Allow direct wiring for operation of the sign or arrow board from an external power source when desired.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 8) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 9) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- 10) Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.

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- 11) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 12) Provide a photocell control to provide automatic dimming.
- 13) Allow an on-off flashing sequence at an adjustable rate.
- 14) Provide a sight to aim the message.
- 15) Provide a LED display color of approximately 590 nm amber.
- 16) Provide a controller that is password protected.
- 17) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 18) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

/KEEP/RIGHT/⇒⇒⇒/ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/⇐⇐⇐/ LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

- **2.3 Requirements for Flip-Disc Type Signs.** Flip-disc type signs will have the following additional requirements:
 - 1) Disc faces are fluorescent yellow on one side, and flat black on the reverse.
 - 2) Discs are at least 3.5 square inches with a minimum character size of 5 discs horizontally by 7 discs vertically.
 - 3) Discs are designed to operate without lubrication for at least 200 million operations.
 - 4) Line change speed of 600 milliseconds or less.
 - When power is lost, the sign automatically becomes blank or displays a preprogrammed default message.

2.4 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- 2) Diesel Power Source. Ensure the following is provided for:
 - At least 24 spare bulbs available on the project for quick replacement of burned out bulbs.
 - Black light at both top and bottom of each line to illuminate discs for visibility at night or under adverse weather conditions, for flip disk signs.

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- c) Diesel generator and electric start assembly, including batteries and a fuel capacity adequate to provide at least 72 hours continuous operation without refueling.
- d) Fuel gage.
- e) Provide all other specific features, such as bulb size, protection from sun glare, and shock protection for electronics and bulbs, to the satisfaction of the Engineer.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater. Unless the Contract specifies flip-disk signs, use Class I signs on interstates and parkways.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel or disk.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

- **4.0 MEASUREMENT.** The final quantity of Variable Message Sign will be the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.
- **5.0 PAYMENT.** The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

January 5, 2010

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SPECIAL NOTE FOR MATERIAL TRANSFER VEHICLE

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

- **1.0 DESCRIPTION.** Provide and use a Material Transfer Vehicle (MTV) to place asphalt mixtures.
- **2.0 MATERIALS AND EQUIPMENT.** In addition to the equipment specified in Subsection 403.02, provide a MTV with the following minimum characteristics:
 - 1) A system to independently deliver asphalt mixtures from the hauling equipment to the paving equipment;
 - A high capacity truck unloading system, capable of 600 tons per hour, that will receive asphalt mixtures from the hauling equipment;
 - 3) A minimum combined capacity, including the MTV storage bin and paver hopper, of 25 tons of asphalt mixture;
 - 4) An auger system in the storage bin to continuously blend the asphalt mixture prior to discharge to the conveyor system; and
 - 5) A discharge conveyor, with the ability to swivel, to deliver the mixture to the paving spreader while allowing the MTV to operate from an adjacent lane.
- **3.0 CONSTRUCTION.** When constructing driving lanes, use a MTV to place asphalt mixtures. When the Engineer determines the use of the MTV is not practical for a portion of the project he may waive its requirement for that portion.

4.0 MEASUREMENT.

- **4.1 Asphalt Placement with MTV.** The Department will not measure the MTV for payment and will consider its use incidental to the asphalt mixture.
- **4.2 Asphalt Mixture.** The Department will measure the quantity according to Section 402.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> ---- Asphalt Mixture, Type Ton

March 12, 2008

SPECIAL NOTE FOR ACCEPTANCE OF JPC PAVEMENT THICKNESS

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. This Special Note covers the requirements for thickness of JPC pavement. Contrary to Subsection 501.03.21 and 501.05.01, the Department will accept JPC pavement thickness from cores based on a percent within limits (PWL) per lot. The PWL will not apply for projects involving less than 2,500 square yards of pavement per bid item. For quantities less than 2,500 square yards of pavement per bid item, acceptance will be in accordance with 3.1.2 of this note.

2.0 MATERIALS. Reserved

3.0 CONSTRUCTION.

3.1 Pavement Thickness. The Engineer will determine random sampling locations according to KM 64-113. Obtain 8 cores per lot at the randomly selected locations under the observance of the Engineer. Cut cores with a nominal diameter of not less than 4 inches. Take all cores after any corrective grinding. Provide the cores to the Engineer immediately. The Department will measure cores according to KM 64-308, taking 5 measurements for all cores. Furnish all tools, labor, and materials for cutting samples and filling the cored hole. Fill core holes with a non-shrink grout approved by the Engineer within one day after sampling.

When a core thickness is deficient by one inch or more, the Department will not accept the pavement. Remove and replace the deficient pavement. Take another random core from the sublot as the Engineer directs to determine the PWL.

3.1.1 Lot Size. The Department will divide each pavement bid item into lots of 6,000 linear feet of paved width. The lot will be divided into 8 sublots of equal length (750 feet). Take a core from each sublot for determination of pavement thickness.

For bid items with over 2,500 square yards and less than 6,000 linear feet of paved width, project area will be divided into 4 equal sublots for determination of PWL.

For a remainder lot of less than 3,000 feet, the Department will add the quantity of pavement to the previous lot and the 8 sublots will be equally divided over the increased length. For a remainder lot of 3,000 feet or greater, the Department will divide the remainder lot into 8 equal sublots for acceptance.

- **3.1.2 Small Quantities and Miscellaneous Areas.** For quantities less than 2,500 square yards per bid item and for miscellaneous areas, the acceptance may be based on either of the following:
 - 1) Engineer's inspection of the base grade elevation in relation to the forms, or
 - 2) Engineer's monitoring of the yield rate and visual inspection of the placement,

Miscellaneous areas are entrances and tapers less than 10 feet wide. Furnish cores for areas where there are indications of deficient thickness as the Engineer directs. Replace areas found deficient by one inch or more at no cost. The Engineer will evaluate areas found deficient by 0.50 to 0.99 inches according to Subsection 105.04 for acceptance.

3.1.3 Statistical Evaluation. The Department will use the Variability-Unknown/Standard Deviation Method to determine the estimate percentage of the lot that is within the specification limits (PWL). The Engineer will calculate the lower quality index (QL)

$$QL = \underbrace{Average - LSL}_{S}$$

Where: Average = the arithmetic mean of the test values. The average

will be determined to the nearest tenth of an inch.

LSL the specified thickness minus 0.20 inch.

Standard Deviation = [Sum (Individual Measurement - Average) 2 / (n-1)] $^{1/2}$, determined to 2 decimal places.

N Number of measurements.

QL will be determined to 2 decimal places.

For calculation of PWL, core thickness greater than 0.75 inches more than the specified thickness will be rounded down to the specified thickness plus 0.75 inch.

Percent Within Limits (PWL) will be determined by the attached tables with QL, for n = the number of tests for the Lot. PWL will be determined to 2 decimal places.

For all calculations round down when the last significant digit is followed by a number less than 5 and round up when the last significant digit is followed by a number equal to or greater than 5.

- **4.0 MEASUREMENT.** The Department will not measure for payment any work or materials required to supply the cores or grout the holes and will consider it incidental to JPC Pavement.
- 5.0 PAYMENT. The Department will base acceptance of each lot of material on the percentage of material within specification limits (PWL). The following equation will determine the pay factor for thickness: PF % = 52.5 + 0.5 PWL. The Department will round the Pay Factor to 2 decimal places as noted above.

January 1, 2008

PERCENT WITHIN LIMITS ESTIMATION TABLE Variability - Unknown Procedure Standard Deviation Method Sample Size 4

Q	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	50.00	50.33	50.67	51.00	51.33	51.67	52.00	52.33	52.67	53.00
0.1	53.33	53.67	54.00	54.33	54.67	55.00	55.33	55.67	56.00	56.33
0.2	56.67	57.00	57.33	57.67	58.00	58.33	58.67	59.00	59.33	59.67
0.3	60.00	60.33	60.67	61.00	61.33	61.67	62.00	62.33	62.67	63.00
0.4	63.33	63.67	64.00	64.33	64.67	65.00	65.33	65.67	66.00	66.33
0.5	66.67	67.00	67.33	67.67	68.00	68.33	68.67	69.00	69.33	69.67
0.6	70.00	70.33	70.67	71.00	71.33	71.67	72.00	72.33	72.67	73.00
0.7	73.33	73.67	74.00	74.33	74.67	75.00	75.33	75.67	76.00	76.33
0.8	76.67	77.00	77.33	77.67	78.00	78.33	78.67	79.00	79.33	79.67
0.9	80.00	80.33	80.67	81.00	81.33	81.67	82.00	82.33	82.67	83.00
1.0	83.33	83.67	84.00	84.33	84.67	85.00	85.33	85.67	86.00	86.33
1.1	86.67	87.00	87.33	87.67	88.00	88.33	88.67	89.00	89.33	89.67
1.2	90.00	90.33	91.67	91.00	91.33	91.67	92.00	92.33	92.67	93.00
1.3	93.33	93.67	94.00	94.33	94.67	95.00	95.33	95.67	96.00	96.33
1.4	96.67	97.00	97.33	97.67	98.00	98.33	98.67	99.00	99.33	99.67
1.5	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

PERCENT WITHIN LIMITS ESTIMATION TABLE Variability - Unknown Procedure Standard Deviation Method Sample Size 8

Q	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	50.00	50.38	50.76	51.14	51.51	51.89	52.27	52.65	53.03	53.41
0.1	53.78	54.16	54.54	54.92	55.29	55.67	56.04	56.42	56.79	57.17
0.2	57.54	57.92	58.29	58.66	59.03	59.41	59.78	60.15	60.52	60.89
0.3	61.25	61.62	61.99	62.35	62.72	63.08	63.45	63.81	64.17	64.53
0.4	64.89	65.25	65.61	65.96	66.32	66.67	67.03	67.38	67.73	68.08
0.5	68.43	68.78	69.13	69.47	69.82	70.16	70.50	70.84	71.18	71.52
0.6	71.85	72.19	72.52	72.85	73.18	73.51	73.84	74.17	74.49	74.81
0.7	75.14	75.46	75.77	76.09	76.41	76.72	77.03	77.34	77.65	77.96
0.8	78.26	78.56	78.86	79.16	79.46	79.76	80.05	80.34	80.63	80.92
0.9	81.21	81.49	81.77	82.05	82.33	82.61	82.88	83.15	83.43	83.69
1.0	83.96	84.22	84.49	84.75	85.00	85.26	85.51	85.76	86.01	86.26
1.1	86.51	86.75	86.99	87.23	87.46	87.70	87.93	88.16	88.39	88.61
1.2	88.83	89.06	89.27	89.49	89.70	89.91	90.12	90.33	90.53	90.74
1.3	90.94	91.13	91.33	91.52	91.71	91.9	92.09	82.27	92.45	92.63
1.4	92.81	92.98	93.15	93.32	93.49	93.65	93.81	93.97	94.13	94.29
1.5	94.44	94.59	94.74	94.88	95.03	95.17	95.31	95.44	95.58	95.71
1.6	95.84	95.97	96.09	96.21	96.33	96.45	96.57	96.68	96.79	96.90
1.7	97.01	97.11	97.21	97.31	97.41	97.51	97.60	97.69	97.78	97.87
1.8	97.96	98.04	98.12	98.20	98.28	98.35	98.42	98.49	98.56	98.63
1.9	98.69	98.76	98.82	98.88	98.93	98.99	99.04	99.09	99.14	99.19
2.0	99.24	99.28	99.33	99.37	99.41	99.45	99.48	99.52	99.55	99.58
2.1	99.61	99.64	99.67	99.7	99.72	99.74	99.77	99.79	99.81	99.83
2.2	99.84	99.86	99.87	99.89	99.90	99.91	99.92	99.93	99.94	99.95
2.3	99.96	99.96	99.97	99.98	99.98	99.98	99.99	99.99	99.99	100.00

SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

- 2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.
 - A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
 - B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
 - C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical

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structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Turf Reinforcement Matting						
Properties ¹	Type 1	Type 2	Type 3	Type 4	Test Method	
Minimum tensile Strength	125	150	175	3000 by 1500	ASTM D6818 ²	
lbs/ft						
UV stability (minimum %	80	80	80	90	ASTM D4355 ³	
tensile retention)					(1000-hr exposure)	
Minimum thickness (inches)	0.25	0.25	0.25	0.40	ASTM D6525	
Slopes applications	2H:1V	1.5H:1V	1H:1V or	1 H: 1V or		
	or flatter	or flatter	flatter	greater		
Shear stress lbs/ft ²	6.0^{4}	8.0^{4}	10.0^4	12.0^4	ASTM D6459	
Channel applications					ASTM D6460-07	

¹ For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting alone.

2.3 Quality Assurance Sampling, Testing, and Acceptance

- A) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- B) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- C) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

²Minimum Average Roll Values for tensile strength of sample material machine direction.

³Tensile Strength percentage retained after stated 1000 hr duration of exposure under ASTM D4355 testing. Based on nondegradable components exclusively.

⁴Maximum permissible shear design values based on short-term (0.5 hr) vegetated data obtained by full scale flume testing ASTM D6459, D6460-07. Based on nondegradable components exclusively. Testing will be done at Independent Hydraulics Facility such as Colorado State University hydraulics laboratory, Utah State University hydraulics laboratory, Texas Transportation Institute (TTI) hydraulics and erosion control laboratory.

Current mats meeting the above criteria are shown on the Department's List of Approved Materials.

- **2.4 Fasteners.** When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer's Representative. Provide staples with colored tops when requested by the Engineer.
- **3.0 CONSTRUCTION.** When requested by the Engineer, provide a Manufacturer's Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department's criteria and the Manufacturer's criteria, construct using the more restrictive. The Engineer and Manufacturer's Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer's recommendations and the following as minimum installation technique:
- **3.1 Site Preparation.** Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.
- **3.2 Installation.** Install mats according to Standard Drawing Sepias "Turf Mat Channel Installation" and "Turf Mat Slope Installation." Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer's Representative. The mat should be in direct contact with the soil surface.
- **4.0 MEASUREMENT.** The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer's Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

HARDIN COUNTY JP02 047 NEW-ROUTE

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

I. Application

II. Nondiscrimination of Employees (KRS 344)

III. Payment of Predetermined Minimum Wages

IV. Statements and Payrolls

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual

because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

- 1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.
- 2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

- 1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.
- 2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.
- 3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

- 4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.
- 5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.
- 6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.
- 7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.
- 8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.
- 9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.
- 10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

- 11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.
- 12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or

mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

HARDIN COUNTY JP02 047 NEW-ROUTE

Contract ID: 111337 Page 86 of 111

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information*, *Standard Attachments and General Terms* at the following address: https://www.eProcurement.ky.gov.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

General Decision Number: KY100211 08/26/2011 KY211

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Modification Numb	er Publication Date
0	10/22/2010
1	11/05/2010
2	12/03/2010
3	12/17/2010
4	12/31/2010
5	01/28/2011
6	03/25/2011
7	05/06/2011
8	06/03/2011
9	07/01/2011
10	07/22/2011
11	07/29/2011
12	08/12/2011
13	08/26/2011

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER	\$ 24.11	10.07
BRKY0001-005 06/01/2011		

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE COUNTIES:

	Rates	Fringes	
BRICKLAYER	\$ 24.11	10.07	
BRKY0002-006 06/01/2011			

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER	.\$ 26.57	10.26
BRKY0007-004 06/01/2011		
BOYD, CARTER, ELLIOT, FLEMING, G	REENUP, 1	LEWIS & ROWAN COUNTIES:
	Rates	Fringes
BRICKLAYER	.\$ 28.29	16.80
BRKY0017-004 06/01/2009		
ANDERSON, BATH, BOURBON, BOYLE, HARRISON, JESSAMINE, MADISON, ME OWEN, SCOTT, WASHINGTON & WOODFO	RCER, MOI	NTGOMERY, NICHOLAS,
	Rates	Fringes
BRICKLAYER	.\$ 24.11	9.97
CARP0064-001 07/01/2011		
	Rates	Fringes
CARPENTER Diver PILEDRIVERMAN	.\$ 39.30	13.26 13.26 13.26
ELEC0212-008 05/31/2011		
BRACKEN, GALLATIN and GRANT COUN	TIES	
	Rates	Fringes
ELECTRICIAN	.\$ 26.11	14.94
* ELEC0212-014 06/27/2011		
BRACKEN, GALLATIN & GRANT COUNTI	ES:	
	Rates	Fringes
Sound & Communication Technician		8.46
ELEC0317-012 06/01/2010		
BOYD, CARTER, ELLIOT & ROWAN COU	NTIES:	
	Rates	Fringes
Electricians: Cable Splicer Electrician	.\$ 31.87	18.13 19.58
ELEC0369-007 05/26/2010		

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN	\$ 29.27	13.08
ELEC0575-002 05/31/2010		

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN	\$ 30.69	12.48

ENGI0181-018 07/01/2011

I	Rates	Fringes
Operating Engineer:		
GROUP 1\$	26.50	13.00
GROUP 2\$	24.08	13.00
GROUP 3\$	24.46	13.00
GROUP 4\$	23.82	13.00

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0044-009 06/01/2009

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON, BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); CARROLL (Eastern third, including the Township of Ghent); FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington); NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

IRONWORKER

IRON0070-006 06/01/2011

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris); CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville); CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte); OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill); SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

Rates Fringes

IRONWORKER.....\$ 25.77 18.28

IRON0372-006 06/26/2011

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, Excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains,

Ringos Mills, Tilton & Wallingford);
MASON (Western two-thirds, including Townships of Dover,
Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,
Murphysville, Ripley, Sardis, Shannon, South Ripley &

Washington);
NICHOLAS (Townships of Barefoot, Barterville, Carlisle,
Ellisville, Headquarters, Henryville, Morningglory, Myers &
Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) COUNTIES

Rates Fringes

IRONWORKER, REINFORCING

Beyond 30-mile radius of

Hamilton County, Ohio

Courthouse	\$ 2	6.75	17.40
Up to & including	30-mile		
radius of Hamilton	County,		
Ohio Courthouse	\$2	6.50	17.40

IRON0769-007 06/01/2011

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

	Rates	Fringes
IRONWORKER	\$ 30.96	18.07
ZONE 1	\$ 29.59	18.07
ZONE 2	\$ 31.36	18.07
ZONE 3	\$ 32.96	18.07

ZONE 1 - Up to 10 mi. radius of union hall, Ashland, Ky., 1643 Greenup Avenue

ZONE 2 - 10 to 50 mi. radius of union hall;

ZONE 3 - 50 mi. radius and beyond

LABO0189-003 07/01/2010

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	20.61	10.35
GROUP	2\$	20.86	10.35
GROUP	3\$	20.91	10.35
GROUP	4\$	21.51	10.35

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer;

Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2010

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	20.91	10.05
GROUP	2\$	21.16	10.05
GROUP	3\$	21.21	10.05
GROUP	4\$	21.81	10.05

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-009 07/01/2010

BRECKINRIDGE & GRAYSON COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	21.16	9.80
GROUP	2\$	21.41	9.80
GROUP	3\$	21.46	9.80
GROUP	4\$	22.06	9.80

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;

Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER Bridge/Equipment Tender	4 10 00	5.00
<pre>and/or Containment Builder Brush & Roller Elevated Tanks; Steeplejack Work; Bridge &</pre>	•	5.90 5.90
Lead Abatement	\$ 22.30	5.90
Waterblasting Spray		5.90 5.90

PAIN0012-017 06/01/2010

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

F	Rates	Fringes
PAINTER (Heavy & Highway		
Bridges - Guardrails -		
Lightpoles - Striping)		
Bridge Equipment Tender		
and Containment Builder\$	20.27	8.10
Brush & Roller\$	22.85	8.10
Elevated Tanks;		
Steeplejack Work; Bridge &		
Lead Abatement\$	23.85	8.10
Sandblasting & Water		
Blasting\$	23.60	8.10
Spray\$		8.10

PAIN0118-004 05/01/2010

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER Brush & Roller Spray, Sandblast, Power Tools, Waterblast & Steam	\$ 18.50	10.30
Cleaning	\$ 19.50	10.30
PAIN1072-003 12/01/2010		
BOYD, CARTER, ELLIOTT, GREENUP,	LEWIS and R	OWAN COUNTIES
	Rates	Fringes
Painters: Bridges; Locks; Dams; Tension Towers & Energized Substations	\$ 29.03	11.90 11.90
PLUM0248-003 06/01/2011		
BOYD, CARTER, ELLIOTT, GREENUP,	LEWIS & ROW	AN COUNTIES:
	Rates	Fringes
Plumber and Steamfitter	\$ 32.00	16.24
ROBERTSON COUNTIES:	Rates	Fringes
Plumbers and Pipefitters	\$ 28.39	14.30
PLUM0502-003 08/01/2011		
BRECKINRIDGE, BULLITT, CARROLL (Western three-fourths), GRAYSOLARUE, MARION, MEADE, NELSON, OWASHINGTON COUNTIES	ON, HARDIN, H	ENRY, JEFFERSON,
	Rates	Fringes
PLUMBER		Fringes 16.13
PLUMBER		J
		J

GROUP 4.....\$ 16.96 7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- \ast a Wage and Hour Division letter setting forth a position on a wage

determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries

of surveys, should be with the Wage and Hour Regional Office for the area in $% \left(1\right) =\left(1\right) +\left(1\right$

which the survey was conducted because those Regional Offices have

responsibility for the Davis-Bacon survey program. If the response from this

initial contact is not satisfactory, then the process described in 2.) and

3.) should be followed.

With regard to any other matter not yet ripe for the formal process

described here, initial contact should be with the Branch of Construction

Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an
interested party
(those affected by the action) can request review and
reconsideration from
the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR
Part 7).
Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the

Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-11-III- HWY dated August 04, 2011

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Ryan Griffith, Director Division of Construction Procurement Frankfort, Kentucky 40622

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

Contract ID: 111337 Page 104 of 111

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 111337 COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE

PAGE: 1 LETTING: 09/23/11 CALL NO: 314

| APPROXIMATE UNIT | UNIT | AMOUNT | QUANTITY | PRICE | LINE | ITEM DESCRIPTION ______ SECTION 0001 PAVING ALT GROUP AA1 ASPHALT ALTERNATE 0010 | 00001 DGA BASE 95,410.000 TON 0020 | 00013 LIME STABILIZED ROADBED 117,138.000 SOYD 0030 | 00014 LIME 2,109.000 TON 0040 | 00018 DRAINAGE BLANKET-TYPE II-ASPH 18,416.000 TON 0050 | 00100 ASPHALT SEAL AGGREGATE 440.000 TON CL2 ASPH BASE 1.00D PG64-22 12.581.000 TON 0070 | 00214 CL3 ASPH BASE 1.00D PG64-22 47,107.000 TON 0080 | 00291 53.000 TON EMULSIFIED ASPHALT RS-2 0090 | 00301 CL2 ASPH SURF 0.38D PG64-22 2,658.000 TON 642.000 TON 0110 | 00358 ASPHALT CURING SEAL 117.000 TON 0120 | 02200 ROADWAY EXCAVATION 484,018.000 CUYD 0130 | 02223 GRANULAR EMBANKMENT 4.185.000 CUYD 0140 | 02600 FABRIC GEOTEXTILE TY IV FOR PIPE 26,650.000 SQYD 2.00 | 53,300.00 292.000 TON | 0150 | 02702 SAND FOR BLOTTER (1.00) LS | 0160 | 10203ND PAVEMENT ADJUSTMENT 589,633.00 589,633.00 (ASPHALT) 6,716.000 TON | SECTION 0002 PAVING ALT GROUP AA2 CONCRETE ALTERNATE WITH CONCRETE SHOULDERS 0180 |00001 89,700.000 TON DGA BASE 0190 | 00013 LIME STABILIZED ROADBED | 121,224.000 SQYD|

Contract ID: 111337 Page 105 of 111

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 111337

COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE

PAGE: 2 LETTING: 09/23/11

LINE NO	ITEM 	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0200	00014 	LIME	2,183.000 TON		
0210	00018 	DRAINAGE BLANKET-TYPE II-ASPH	18,611.000 TON		
0220	00100 	ASPHALT SEAL AGGREGATE	440.000 TON		
0230	00212 	CL2 ASPH BASE 1.00D PG64-22	8,354.000 TON		
0240	 00291 	EMULSIFIED ASPHALT RS-2	53.000 TON		
0250	 00301 	CL2 ASPH SURF 0.38D PG64-22	897.000 TON		
0260	 00307 	CL2 ASPH SURF 0.38B PG64-22	642.000 TON		
0270	 00358 	ASPHALT CURING SEAL	121.000 TON		
0280	 02073 	JPC PAVEMENT-9 IN	89,053.000 SQYD		
0290	02078	JPC PAVEMENT-6 IN SHLD	25,621.000 SQYD		
0300	02082	JPC PAVEMENT-9 IN SHLD	8,634.000 SQYD		
0310	02200 	ROADWAY EXCAVATION	480,651.000 CUYD		
0320	 02702 	SAND FOR BLOTTER	304.000 TON		
0330	 10203ND 	PAVEMENT ADJUSTMENT (CONCRETE)	(1.00) LS	301,335.00	301,335.00
0340	 24276EC 	SUBGRADE REINFORCEMENT	13,325.000 SQYD		
	 SECTION 0003 ROUP AA3	PAVING CONCRETE ALTERNATE WITH ASPHALT SHOULDERS	5		
0350	 00001 	DGA BASE	92,095.000 TON	 	
0360	 00013 	LIME STABILIZED ROADBED	111,224.000 SQYD 		
0370	00014	LIME	2,183.000 TON		
0380	00018	DRAINAGE BLANKET-TYPE II-ASPH	18,611.000 TON		
0390	00100 	ASPHALT SEAL AGGREGATE	440.000 TON	 	
				-	

CONTRACT ID: 111337

COUNTY: HARDIN
PROPOSAL: JP02 047 NEW-ROUTE

PAGE: 3
LETTING: 09/23/11

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNI	T UNIT PRICE	AMOUNT
0400	00212	CL2 ASPH BASE 1.00D PG64-22	12,592.000 TO	N	
0410	00214	CL3 ASPH BASE 1.00D PG64-22	1,931.000 TO	 N	
0420	00291 	EMULSIFIED ASPHALT RS-2	53.000 TO	 N	
0430	00301	CL2 ASPH SURF 0.38D PG64-22	2,658.000 TO	N	
0440	00307	CL2 ASPH SURF 0.38B PG64-22	642.000 TO	 N	
 0450	00358	ASPHALT CURING SEAL	121.000 TO	 N	
 0460	02073	JPC PAVEMENT-9 IN	89,053.000 SQ	 YD 	
0470	02200	ROADWAY EXCAVATION	480,928.000 CU	 YD 	
0480	02702	SAND FOR BLOTTER	304.000 TO	N	
 0490	10203ND 	PAVEMENT ADJUSTMENT (CONCRETE)	(1.00) LS		301,335.00
0500	22906ES403 	CL3 ASPH SURF 0.38A PG64-22	594.000 TO	N	
0510	24276EC 	SUBGRADE REINFORCEMENT	13,325.000 SQ	 YD	
	SECTION 0004	ROADWAY			
0520	00078	CRUSHED AGGREGATE SIZE NO 2	95.000 TO	N	
0530	01000	PERFORATED PIPE-4 IN	32,751.000 LF		
 0540	01010	NON-PERFORATED PIPE-4 IN	4,844.000 LF		
 0550	01020	PERF PIPE HEADWALL TY 1-4 IN	22.000 EA		
 0560	01024	PERF PIPE HEADWALL TY 2-4 IN	5.000 EA		
 0570	01028	PERF PIPE HEADWALL TY 3-4 IN	65.000 EA		
 0580	01032	PERF PIPE HEADWALL TY 4-4 IN	3.000 EA		
	 01740	CORED HOLE DRAINAGE BOX CON-4 IN	34.000 EA		

CONTRACT ID: 111337

COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE

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LINE NO	 ITEM 	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0600	01895 	VALLEY GUTTER	1,041.000 LF		
0610	01982 	DELINEATOR FOR GUARDRAIL-WHITE	10.000 EAC	 н 	
0620	02014 	BARRICADE-TYPE III	10.000 EAC	 н 	
0630	02091 	REMOVE PAVEMENT	670.000 SQY	D 	
0640	02159 	TEMP DITCH	14,875.000 LF		
0650	02160	CLEAN TEMP DITCH	14,875.000 LF		
0660	02223 	GRANULAR EMBANKMENT	3,490.000 CUY	D 	
0670	02242 	WATER	1.000 MGA	ட 	
0680	02262 	FENCE-WOVEN WIRE TYPE 1	26,500.000 LF		
0690	02360 	GUARDRAIL TERMINAL SECTION NO 1	7.000 EAC	 н 	
0700	02369 	GUARDRAIL END TREATMENT TYPE 2A	8.000 EAC	 н 	
0710	02373	GUARDRAIL END TREATMENT TYPE 3	2.000 EAC	 н 	
0720	02391 	GUARDRAIL END TREATMENT TYPE 4A	6.000 EAC	 н 	
0730	02429 	RIGHT-OF-WAY MONUMENT TYPE 1	204.000 EAC	 н 	
0740	02432	WITNESS POST	3.000 EAC	i	
0750	02475 	PLUG WATER WELL	6.000 EAC	 н 	
0760	02483 	CHANNEL LINING CLASS II	1,149.000 TON		
0770	02484 	CHANNEL LINING CLASS III	329.000 TON		
0780	 02545 	CLEARING AND GRUBBING (103 ACRES)	(1.00) LS		
	02562		261.000 SQF	 г	
0800	 02585 	EDGE KEY	173.000 LF	 	

CONTRACT ID: 111337 COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE

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LINE NO	ITEM 	DESCRIPTION	APPROXIMATE (QUANTITY	 NIT 	UNIT PRICE	AMOUNT
0810	02599 	FABRIC-GEOTEXTILE TYPE IV	5,150.000	SQYD		
0820	02600 	FABRIC GEOTEXTILE TY IV FOR PIPE	180,033.000	SQYD	2.00	360,066.00
0830	02650 	MAINTAIN & CONTROL TRAFFIC	(1.00)	LS		
0840	02671 	PORTABLE CHANGEABLE MESSAGE SIGN	2.000	EACH		
0850	02690 	SAFELOADING	8.000	CUYD		
0860	02701 	TEMP SILT FENCE	14,875.000	LF		
0870	02703	SILT TRAP TYPE A	94.000	EACH		
0880	02704 	SILT TRAP TYPE B	94.000	EACH	 	
0890	02705 	SILT TRAP TYPE C	94.000	EACH		
0900	 02706 	CLEAN SILT TRAP TYPE A	282.000	EACH		
0910	 02707 	CLEAN SILT TRAP TYPE B	282.000	EACH		
0920	 02708 	CLEAN SILT TRAP TYPE C	282.000	EACH		
0930	 02709 	CLEAN TEMP SILT FENCE	14,875.000	LF		
0940	 02714 	SHOULDERING	14,875.000	LF		
0950	 02726 	STAKING	(1.00)	LS		
0960	 05950 	EROSION CONTROL BLANKET	40,285.000	j		
0970	 05952 	TEMP MULCH	454,960.000			
0980	05953 	TEMP SEEDING AND PROTECTION	30,492.000	SQYD		
0990	 05966 	TOPDRESSING FERTILIZER	16.000	TON		
1000	 05985 	SEEDING AND PROTECTION	304,920.000		- -	
1010	 05989 	SPECIAL SEEDING CROWN VETCH	24,196.000	SQYD	<u>-</u> -	
		DEBELIO CHONI VEICH				

CONTRACT ID: 111337 COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE

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LINE NO	 ITEM 	DESCRIPTION	APPROXIMATE U QUANTITY		UNIT PRICE	AMOUNT
1020	 05990 	SODDING	1,294.000	SQYD		
1030	06510 	PAVE STRIPING-TEMP PAINT-4 IN	17,524.000 	LF		
1040	 06514 	PAVE STRIPING-PERM PAINT-4 IN	90,693.000	LF		
1050	06567 	PAVE MARKING-THERMO STOP BAR-12IN	232.000	LF		
1060	06568 	PAVE MARKING-THERMO STOP BAR-24IN	96.000	LF		
1070	06574 	PAVE MARKING-THERMO CURV ARROW	29.000	EACH		
1080	21802EN 	G/R STEEL W BEAM-S FACE (7 FT POST)	9,443.750	LF		
1090	23131ER701 	PIPELINE VIDEO INSPECTION	2,630.000	LF		
1100	23274EN11F 	TURF REINFORCEMENT MAT 1	12,527.000	SQYD		
1110	23791EC 	PAVE STRIPING-CHEVRON MARKINGS	3,956.000	SQFT		
	SECTION 0005	DRAINAGE				
1120	00440	ENTRANCE PIPE-15 IN	244.000	LF		
1130	00441 	ENTRANCE PIPE-18 IN	104.000	LF		
1140	00445 	ENTRANCE PIPE-30 IN	30.000	LF		
1150	00461 	CULVERT PIPE-15 IN	235.000	LF		
	00462 	CULVERT PIPE-18 IN	1,038.000	LF		
		CULVERT PIPE-24 IN	759.000 	LF		
1180	00466 	CULVERT PIPE-30 IN	659.000	LF		
1190	00468	CULVERT PIPE-36 IN	359.000	LF		
1200	00471	CULVERT PIPE-54 IN	231.000	LF		
1210	00472 	CULVERT PIPE-60 IN	170.000	LF		

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KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 111337 COUNTY: HARDIN

PROPOSAL: JP02 047 NEW-ROUTE CALL NO: 314

LINE NO	 ITEM 	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT		
1220	00498 	CULVERT PIPE-42 IN EQUIV	130.000 LF				
1230	00521 	STORM SEWER PIPE-15 IN	583.000 LF		 		
1240	00522 	STORM SEWER PIPE-18 IN	915.000 LF				
1250	 00524 	STORM SEWER PIPE-24 IN	127.000 LF	 	 		
1260	 00528 	STORM SEWER PIPE-36 IN	122.000 LF	 	 		
1270	 01416 	METAL END SECTION TY 4-42 IN	2.000 EACH	 	 		
1280	 01432 	SLOPED BOX OUTLET TYPE 1-15 IN	 5.000 EACH 	 	 		
1290	 01433 	SLOPED BOX OUTLET TYPE 1-18 IN	 5.000 EACH 	 	 		
1300	 01434 	SLOPED BOX OUTLET TYPE 1-24 IN	6.000 EACH	 	 		
1310	 01450 	S & F BOX INLET-OUTLET-18 IN	 4.000 EACH 		 		
1320	 01451 	S & F BOX INLET-OUTLET-24 IN	2.000 EACH		 		
1330	 01452 	S & F BOX INLET-OUTLET-30 IN	6.000 EACH	 	 		
1340	 01453 	S & F BOX INLET-OUTLET-36 IN	2.000 EACH	 	 		
1350	 01490 	DROP BOX INLET TYPE 1	2.000 EACH	 	 		
1360	 01496 	DROP BOX INLET TYPE 3	 1.000 EACH 	 	 		
1370	 01505 	DROP BOX INLET TYPE 5B	 21.000 EACH 		 		
		DROP BOX INLET TYPE 10	2.000 EACH	 	 		
1390		DROP BOX INLET TYPE 15	5.000 EACH		 		
	08100	CONCRETE-CLASS A	81.280 CUYD		 		
		STEEL REINFORCEMENT	4,532.000 LB				
	SECTION 0006 MOBILIZATION / DEMOBILIZATION						

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KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 111337
COUNTY: HARDIN

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LETTING: 09/23/11

PROPOSAL: JP02 047 NEW-ROUTE CALL NO: 314

LINE NO	 ITEM 	DESCRIPTION		APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
1420	02568	MOBILIZATION	(NO MORE THAN 5%)	LUMP		
1430	02569 	DEMOBILIZATION	(AT LEAST 1.5%)	LUMP		
	 	TOTAL BID				