

CALL NO. 424

CONTRACT ID. 122650

HENDERSON COUNTY

FED/STATE PROJECT NUMBER 051GR12M03-FE02

DESCRIPTION TWO BRIDGES ON US 60 OVER US 41 AND ONE BRIDGE ON KY 351

WORK TYPE BRIDGE DECK RESTORATION & WATERPROOFING

PRIMARY COMPLETION DATE 8/1/2012

LETTING DATE: March 23, 2012

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME March 23, 2012. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

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

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# PART I SCOPE OF WORK

CONTRACT ID - 122650

ADMINISTRATIVE DISTRICT - 02

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - HENDERSON

051GR12M03-FE02

TWO BRIDGES ON US 60 OVER US 41 AND ONE BRIDGE ON KY 351

COUNTY - HENDERSON PES - MB05100601201

FE02 051 0060 B00010N

HENDERSON TO OWENSBORO (US 60) (MP 10.304) BRIDGE OVER US 41 (MP 16.048). BRIDGE DECK

RESTORATION & WATERPROOFING.

GEOGRAPHIC COORDINATES LATITUDE 37^51'26" LONGITUDE 87^34'23"

COUNTY - HENDERSON

PES - MB05100601202

FE02 051 0060 B00011N

HENDERSON TO OWENSBORO (US 60) (MP 10.364) BRIDGE OVER US 41 NB RAMP (MP 16.048).

BRIDGE DECK RESTORATION & WATERPROOFING.

GEOGRAPHIC COORDINATES LATITUDE 37^51'29" LONGITUDE 87^34'18"

COUNTY - HENDERSON

PES - MB05103511202

FE02 051 0351 B00123N

US 41 TO US 60 (KY 351) (MP 0.763) BRIDGE OVER 4TH STREET, HEILMAN AVENUE, AND CANOE

CREEK ON 2ND STREET. BRIDGE REPAIRS EXPANSION JOINTS.

GEOGRAPHIC COORDINATES LATITUDE 37^50'04" LONGITUDE 87^34'33"

COMPLETION DATE(S):

COMPLETION DATE - August 01, 2012

APPLIES TO ENTIRE CONTRACT

9 CALENDAR DAYS

APPLIES TO B10

9 CALENDAR DAYS

APPLIES TO B11

21 WORKING DAYS

APPLIES TO B123

## **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. (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>)

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.

## <u>REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN</u> ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

## 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 <a href="mailto:kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. 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 (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

## **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for

production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/18/2011



Steven L. Beshear Governor Lori H. Flanery Secretary

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785

OFFICE OF THE SECRETARY

#### **SECRETARY'S ORDER 11-004**

#### FINANCE AND ADMINISTRATION CABINET

#### **Vendor Document Disclosure**

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

**NOW, THEREFORE**, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

## 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.

# SPECIAL NOTE FOR REPLACING EXISTING EXPANSION JOINT WITH ASPHALT PLUG JOINTS ON BRIDGES

**I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install asphalt plug joint as specified; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

## II. MATERIALS.

**A. Asphalt Plug Joint System.** Use either "Wabo Expandex", "Matrix 502", or "Thorma-Joint" in accordance with the manufacturers specifications and ASTM D6297. Detailed specification are attached for each system. The detailed specifications, for the chosen manufacturer, must be followed completely.

## III. CONSTRUCTION.

- **A. Remove Existing Materials.** Remove the existing expansion dam and bridge end as specified. Only hammers weighing 40lbs or less shall be used. Remove debris and/or expansion joint filler as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Asphalt Plug Joint".
- **B. Place New Asphaltic Plug Joint.** After all specified existing materials have been removed, saw cut area between 20" and 24" wide and 2 \(^1\)4" to 3" in depth. Complete installation of asphaltic plug joint in accordance with manufacturer's specifications.
- C. Shop Plans and As-built Plans. Shop plans will <u>not</u> be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work. The Contractor shall provide as-built plans after construction is complete, showing detailed dimensions and materials used.

## IV MEASUREMENT.

**A. Asphalt Plug Joint System.** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.

## V. PAYMENT.

**A. Asphalt Plug Joint System.** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new asphaltic plug joint, and all incidental items necessary to complete the work within the specified pay limits as specified by this note.

The Department will consider payment as full compensation for all work required by this note and the attached manufacturer's specifications.

# SPECIAL NOTE FOR REPLACING EXISTING EXPANSION JOINT WITH ASPHALT PLUG JOINTS ON BRIDGES

**I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install asphalt plug joint as specified; (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

## II. MATERIALS.

**A. Binder.** The bridge joint binder shall be a polymer modified asphalt and shall meet the following requirements as set forth is ASTM D6297-01 and when independently tested according to those standards.

decorating to those standards.	TEST METHOD	TYPICAL VALUES
Cone Penetration @ 77 <sup>C</sup> F	ASTM D5/D3407	7.5 Max
Cone Penetration @ 0°F,	ASTM D5/D3407	1.0 Minimum
Flow @ 140°F, 5 Hours, (MM)	<b>ASTM D5329</b>	3.0 Max
Non-Immersed Bond @ 20°F,	<b>ASTM D5329</b>	Pass 3 cycles
Three Cycles		•
Resilience @ 77CF	<b>ASTM D5329</b>	40-70
Asphalt Compatibility	<b>ASTM D5329</b>	Pass
Softening Point	ASTM D36	180 Minimum
Flexibility/Pliability @ -10°F	<b>ASTM D5329</b>	Pass
Ductility @77C F	ASTM D113	400 Minimum
Tensile Adhesion @ 77CF	<b>ASTM D5329</b>	700 Minimum
Recommended Pouring		390° F
Temperature		(199°C)
Safe Heating Temperature		410° F
		(210°C)
<b>D A</b> 4 <b>C D</b> 1	1 1 11 ' '1	· · · · · · · · · · · · · · · · · · ·

**B.** Aggregate. The stone used shall primarily consist of Granite, Basalt, Gabbro, Porphyry or Gritstones. The specified aggregate shall be crushed, double washed, and shall meet the following gradation requirements:

## **GRADATION**

Sieve Size	34" Percent Passing
7/8	95-100
5/8	40-60
1/2	15-40
3/8	0-15
1/4	0-7
#8	-

C. Backer Rod. The backer rod shall be a closed cell, foam expansion joint filler, capable of withstanding the elevated temperature of the polymeric binder. The backer rod shall have the following typical physical properties using a 2" specimen and test method ASTM D545:

2.0Lbs/Cu.Ft, min Density: Tensile Strength: 30 psi, min. Compression:

5 psi @ 25%, min 0.03 g/cc by weight, min (1% Max) No Melting Water Absorption:

Temperature @ 410°F (210°C)

D. Bridging Plate. The bridging plate shall be a mild steel plate, 1/4" thick by 8" wide, cut in 4' lengths. Spike holes shall be drilled on a longitudinal centerline at 1' intervals.

**EQUIPMENT.** Provide all equipment needed to complete this work. The following is a III. partial list of equipment needed. A small concrete saw capable of cutting the pavement to specific depth, compressor. A hot-compressed air lance capable of delivering flame retarded air stream with a temperature of 3000° F. Truck mounted vented mixer and a truck mounted unvented drum type mixer with a hot-compressed air lance. Melter unit equipped with agitation and an automatic temperature control which can accurately maintain the material temperature from 100°F - 650°F. Vibratory roller or plate capable of compacting up to 1" in one pass. All other equipment required to complete the work.

#### IV. CONSTRUCTION.

- **Remove Existing Materials.** Remove the existing expansion joints and bridge end as specified on the plans. Only power driven hammers lighter than nominal 45 lbs class shall be used. Remove debris and/or expansion joint filler as directed by the Engineer. Note that Saw shall be set to cut the full depth required for the asphalt plug joint as shown on the drawings. Dispose of all removed material entirely away from the job site in approved landfill(s). This work is incidental to the contract unit price for "Asphalt Plug Joint".
- B. **Excavation and Cleaning.** After all specified existing materials have been removed, and a level uniform channel created, blast clean the channel to remove all debris on the vertical walls as well as the bottom of the channel.
- **C. Caulking and Curb:** The gap shall be caulked with the backer rod, allowing for approximately 1" of binder in the gap on top of the rod. If the previous caulking is intact and will hold the binder, it may be used to take the place of the backer rod. A small amount of hot binder should be placed onto the caulking to insure that the gap is adequately plugged. The backer rod is to be extended through the curb. The curb is to be additionally sealed with Silicon Joint Sealer. This is incendental to asphalt plug joint bid item.
- **D.** Tanking: Immediately after cleaning and caulking, the entire channel shall be coated with a thin layer of hot binder. If significant delay occurs, the channel shall be inspected to determine if re-cleaning is necessary.
- **E.** Plating: The gap shall be bridged with the steel plates centered over the gap by placing locating pins in the centerline of the plate. There must be at least 2" between the edge of the steel plate and the wall of the channel. Once the locating pins are in place, the top of the plate shall be coated with a thin layer of hot binder.

- **F. Aggregate:** The aggregate must be heated in a vented rotating drum mixer by the use of a hot compressed air lance (HCA Lance), or a pressure air injection torch (PAT torch). Once the aggregate has been heated to a temperature of 370°- 380°F, it is then dropped into a second un-vented mixer and coated with a small quantity of binder. One gallon of binder per 100 lbs. of stone is recommended to coal stone.
- **G. Binder:** The binder shall be heated to the recommended pouring temperature, 370°-385°F. Do not exceed safe heating temperature of 400°F.
- **H. Material Installation:** Layers of hot pre-coated aggregate not more than 2" thick shall be placed in the channel and immediately covered to the level of the coated aggregate. This will ensure that the 3:1 weight ratio of aggregate to binder has been achieved. Layers shall be raked to insure the aggregate is completely coated and that all air pockets are eliminated. This process shall cease approximately three-quarters of an inch (3/4") from the top of the channel.
- **I. Surface Layer:** The final layer shall be applied as other layers except that the precoated aggregate is not flooded with binder. The pre-coated aggregate shall be transferred to the joint and leveled slightly higher than the adjacent scarified surface. On a standard 2" deep joint, the topcoat should be one quarter inch (1/4") higher than the road surface. Deeper joints will require higher levels before tamping.
- **J.** Compaction: Compaction should take place after the joint has cooled to approximately 225° F (107°C). The joint surface shall be made approximately level with the adjoining scarified surface by using the vibratory plate or roller.
- **K. Shop Plans and As-built Plans.** Shop plans will <u>not</u> be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work. The Contractor shall provide as-built plans after construction is complete, showing detailed dimensions and materials used. This work is considered incidental to bid item listed below.

## IV MEASUREMENT.

**A. Asphalt Plug Joint System.** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.

## V. PAYMENT.

**A. Asphalt Plug Joint System.** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new asphaltic plug joint, and all incidental items necessary to complete the work within the specified pay limits as specified by this note.

The Department will consider payment as full compensation for all work required by this note and the attached drawings.



# SPECIFICATION FOR THE INSTALLATION OF THE THORMA-JOINT® ASPHALTIC PLUG EXPANSION JOINT SYSTEM

## **SCOPE**

This work shall consist of supplying and installing a binder and aggregate system composed of specially blended polymer modified asphalt and specific aggregate placed in layers into a prepared expansion joint block-out. When properly installed, the **THORMA-JOINT** system by DSA will provide a flexible waterproof bridge joint, which will allow for a joint movement of 1" in expansion and 1" in compression.

## **LIMITS OF WARRANTED WORK**

The warranted work includes all **THORMA-JOINT** system joints within the project limits unless otherwise indicated on the proposal or by the manufacturer.

#### **WARRANTED PERIOD**

The length of the warranty will be three (3) years from the date of installation, as specified in the following section of this specification.

## **AMOUNT OF WARRANTY BOND**

The Contractor will supply a warranty bond equal to 100% of the warranted work for the THORMA-JOINT system, as described in the above section "Limits of Warranted Work."

#### **MATERIALS**

## BJ Super™ Binder

The bridge joint binder shall be a polymer modified asphalt, as manufactured by Dynamic Surface Applications, and shall meet the following requirements as set forth is ASTM D6297-01 and when independently tested according to those standards.

	TEST METHOD	TYPICAL VALUES	
Cone Penetration @ 77F Cone Penetration @ 0F, Flow @ 140F, 5 Hours, (MM) Non-Immersed Bond @ 20F, Three Cycles Resilience @ 77F	ASTM D5/D3407 ASTM D5/D3407 ASTM D5329 ASTM D5329	7.5 Max 1.0 Minimum 3.0 Max Pass 3 cycles 40-70	
Asphalt Compatibility Softening Point Flexibility/Pliability @ -10F Ductility @77°F Tensile Adhesion @ 77F Recommended Pouring Temperature Safe Heating Temperature	ASTM D5329 ASTM D36 ASTM D5329 ASTM D113 ASTM D5329	Pass 180 Minimum Pass 400 Minimum 700 Minimum 390°F (199°C) 410°F (210°C)	

#### **Aggregate**

The stone used shall primarily consist of Granite, Basalt, Gabbro, Porphyry or Gritstones. The specified aggregate shall be crushed, double washed, and shall meet the following gradation requirements:

#### **GRADATION**

Sieve Size	%" Percent Passing
7/8	95-100
5/8	40-60
1/2	15-40
3/8	0-15
1/4	0-7
#8	-

#### **Backer Rod**

The backer rod shall be a closed cell, foam expansion joint filler, capable of withstanding the elevated temperature of the polymeric binder. The backer rod shall have the following typical physical properties using a 2" specimen and test method ASTM D545:

Density: 2.0Lbs/Cu.Ft, min Tensile Strength: 30 psi, min. Compression: 5 psi @ 25%, min

Water Absorption: 0.03 g/cc by weight, min (1% Max)

Temperature @ 410 € (210 ℃) No Melti ng

## **Bridging Plate**

The bridging plate shall be a mild steel plate, ¼" thick by 8" wide, cut in 4' lengths. Spike holes shall be drilled on a longitudinal centerline at 1' intervals.

#### **INSTALLATION CREWS**

The **THORMA-JOINT** system is to be installed only by factory trained and certified installation professionals.

## **EQUIPMENT**

## The equipment will consist of:

1. Small walk-behind dry cut saw

0:----

- 2. Pneumatic compressor of 185 CFM capacity.
- 3. One Hot-Compressed Air Lance (HCA Lance), capable of delivering flame retarded air stream with a temperature of 3,000°F (1648°C), at a speed of 3,000 feet per second.
- 4. One (1) truck mounted 9 cubic foot rotating vented mixer and one (1) truck mounted 9 cubic foot un-vented drum type mixer with a Hot-Compressed Air Lance (HCA Lance), or a pressure air injection torch (PAT torch).
- 5. Melter unit equipped with agitation and an automatic temperature control which can accurately maintain the material temperature from 100°F 650°F (38°C 343°C). A thermometer to monitor the material temperature must be provided. The burner system shall have a safety pilot capable of shutting off the gas supply in the event of a flame-out.
- 6. 100 lb. bottles of propane

- 7. Vibratory roller or plate capable of compacting up to 1" in one pass.
- 8. Hand held calibrated digital temperature sensor.
- 9. Chop-saw with carbide blade, if needed.
- 10. Sandblasting equipment.
- 11. Safety clothing and equipment as required by OSHA.

## **CONSTRUCTION METHODS**

The following procedures are to be followed to ensure a successful installation:

**Note: THORMA-JOINT** must be installed at a minimum depth of two and one quarter inches (2 1/4") in order to perform correctly.

**Marking out**: The **THORMA-JOINT** system shall be located centrally over the deck expansion gap or fixed joint and marked out to the recommended width of 20".

**Excavation:** The joint shall be excavated by the use of saws and pneumatic hand tools. Where possible, saws shall be set to cut the full required depth of the wearing surface and any membrane present. Variations in the depth of the wearing surface across the road should be considered to insure, where possible, that the deck is not damaged. All debris from the excavation channel shall be removed to allow the full volume of new joint to be installed.

**Cleaning:** The entire channel must be thoroughly cleaned and dried. Small debris will be removed by using compressed air. A sandblaster will then be applied throughout the length of the channel, to clean any remaining debris on the vertical walls and adjacent deck area.

**Repairs:** Spalled and defective concrete should be repaired with an approved material as agreed upon by the Project Engineer.

**Caulking:** The gap shall be caulked with the backer rod, allowing for approximately 1" of binder in the gap on top of the rod. If the previous caulking is intact and will hold the binder, it may be used to take the place of the backer rod. A small amount of hot binder should be placed onto the caulking to insure that the gap is adequately plugged.

**Tanking:** Immediately after cleaning and caulking, the entire channel shall be coated with a thin layer of hot binder. If significant delay occurs, the channel shall be inspected to determine if re-cleaning is necessary.

**Plating:** The gap shall be bridged with the steel plates centered over the gap by placing locating pins in the centerline of the plate. There must be at least 2" between the edge of the steel plate and the wall of the channel. Once the locating pins are in place, the top of the plate shall be coated with a thin layer of hot binder.

**Aggregate:** The aggregate must be heated in a vented rotating drum mixer by the use of a hot compressed air lance (HCA Lance), or a pressure air injection torch (PAT torch). Once the aggregate has been heated to a temperature of 370°- 380°F (188°- 193°C), it is then dropped into a second un-vented mixer and coated with a small quantity of binder. One gallon of binder per 100 lbs. of stone should be sufficient to coat the stone.

**Binder:** The binder shall be heated to the recommended pouring temperature, 370°- 385°F (188°- 196°C). At no time shall the recommended safe heating temperature of 400°F (204°C) be exceeded.

**Material Installation:** Layers of hot pre-coated aggregate not more than 2" thick shall be placed in the channel and immediately covered to the level of the coated aggregate. This will ensure that the 3:1 weight ratio of aggregate to binder has been achieved. Layers shall be raked to insure the aggregate is completely coated and that all air pockets are eliminated. This process shall cease approximately three-quarters of an inch (3/4") from the top of the channel.

**Surface Layer:** The surface layer shall be applied as other layers except that the pre-coated aggregate is not flooded with binder. The pre-coated aggregate shall be transferred to the joint and leveled slightly higher than the adjacent road surface. On a standard 2" deep joint, the topcoat should be one quarter inch (1/4") higher than the road surface. Deeper joints will require higher levels before tamping.

**Compaction:** Compaction should take place after the joint has cooled to approximately 225° F (107°C). The joint surface shall be made approx imately level with the existing road surface by using the vibratory plate or roller.

**Top Coating:** After compaction, lines of 3" tape are placed one inch beyond the joint width on each side of the joint to insure evenness of appearance. The joint and at least one inch of the road surface shall be top-coated with the hot binder until the surface is smooth and absent of voids.

**Note:** If it is impossible to topcoat the joint during the same working day/night, it is allowable that the topcoat step be completed on the next working day/night. However, the surface must be cleaned, dried, and heated with the HCA Lance.

**Surface Dressing:** Immediately after top-coating, an anti-skid material is spread evenly over the joint to eliminate material tracking.

**Final Preparation:** Prior to departure the crew will insure that the entire work area is clean of debris.

**Temporary Joint:** In the event of a work stoppage while constructing a joint, the following procedure can be used for low ADT roadways (<20,000). Fill the cavity with cold uncoated aggregate to the level of the road surface and top the aggregate with binder to form a temporary riding surface. Roadways with an ADT greater than 20,000 will require materials similar to a cold patch asphalt. Be sure whatever is used is approved by the controlling agency.

## **QUALITY CONTROL**

Upon request, certifications of the materials will be provided.

The Project Engineer may require the contractor to provide samples during the course of the work for laboratory test of any or all of the properties specified.

Quality of every **THORMA-JOINT** system will reflect the quality put forth by Dynamic Surface Applications and shall receive the highest priority in contractual obligation.

#### **EVIDENCE OF COMPLIANCE**

Dynamic Surface Applications is prepared to provide with its bid evidence of successful installations of this system over the past several years.

## **WARRANTY PARAMETERS**

Condition parameters are used to measure the performance of the **THORMA-JOINT** during the warranty period. Each condition parameter has a threshold limit that defines when corrective action (warranty work) is required.

## **DEFINITIONS**

- **1. Debonding** Separation of the **THORMA-JOINT** from the adjacent vertical wall of the pavement or the bridge deck.
- 2. Cracking Any open crack that extends greater than two (2) feet.
- 3. Perviousness Absence of water tightness.
- **4. Rutting** Depression, displacement, or dislodgment of the THORMA-JOINT surface.

## **CORRECTIVE ACTIONS**

The following corrective actions are required to outline typical acceptable treatments for the various condition parameters. All corrective actions include labor, equipment and materials **only** at the expense of the Contractor. Associated costs for Traffic Control are the responsibility of the Owner.

Condition Parameters Debonding:	Required Action Sawcut and remove the affected area. Replace with new THORMA-JOINT material in accordance with manufacturers recommendation.	
Cracking:	Clean and seal in accordance with manufacturers recommendation.	
Perviousness:	Clean and seal in accordance with manufacturers recommendation.	
Rutting:	Sawcut and remove the affected area. Replace with new THORMA-JOINT material in accordance with manufacturers recommendation.	

#### Thorma-Joint® Limited Product Warranty

Project:		
Buyer(name and address):		

**PRODUCT DESCRIPTION:** Thorma-Joint® is a polymer modified asphaltic plug expansion joint system composed of a specific matrix of BJ Super $^{\mathbb{N}}$ , our specially formulated bridge joint binder material, and aggregate (the "Product").

LIMITED WARRANTY: Subject to the terms of this Limited Warranty, Dynamic Surface Applications, Ltd. ("DSA") warrants to the above-named Buyer that for a period of THREE (3) years upon completion of installation of the Product that it will repair or replace the Product to the extent that the Product is defective as per the conditions set forth in this specification. DSA DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, NON-INFRINGEMENT CONCERNING THE PRODUCT, OR WITH RESPECT ANY TECHNICAL INFORMATION PROVIDED WITH THE PRODUCT. NO EMPLOYEE OR REPRESENTATIVE OF DSA HAS AUTHORITY TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE STATED IN THIS WARRANTY. IN THE EVENT AN EXPRESS OR IMPLIED WARRANTY IS REQUIRED BY LAW DESPITE THIS DISCLAIMER, THE BUYER AGREES THAT SUCH WARRANTY AND REMEDIES FOR THE BREACH OF SUCH WARRANTY SHALL BE EXPRESSLY LIMITED TO THE TERMS OF THE WARRANTY SET FORTH IN THIS LIMITED WARRANTY. Buyer's sole and exclusive remedy against DSA shall be replacement or repair of the non-compliant or deficient Product and the cost of reinstallation of the Product. In the event surface cracks occur, before the warranty expires, the joint manufacturer will be responsible for repairing or replacing the joint at no cost. If the joint needs to be repaired or replaced by the manufacturer before the warranty expires.

EXCLUSIONS FROM WARRANTY: This Limited Warranty does not cover damage to the Product as a result of: (a) failure of the material to which the Product is installed upon or adjacent to, including but not limited to, cracking or movement of vertical edges of joint cavity, cracking due to excessive movement of structure, or cracking due to vertical shifting of structure, (b) unusual weather conditions or natural disasters, including without limitation, earthquakes, flooding, hurricanes, and tornadoes, (c) acts of war or terrorism, civil disobedience, vandalism, animals or insects, (d) substances that are not deemed by DSA to be normal wear and tear such as chemicals and fire, (e) faulty or inadequate installation of the Product by Buyer or any other person or entity, (f) abuse by machinery, equipment or any persons, or (g) acts of negligence or misuse by Buyer or any other person or entity.

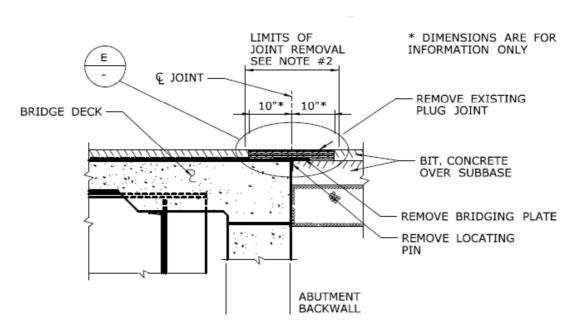
<u>EFFECTIVENESS OF WARRANTY</u>: This Limited Warranty shall not become effective unless and until DSA receives full and final payment for the Product. To assure that DSA technical representatives can determine the cause of any alleged defect or damage to the Product so that DSA can take appropriate steps for timely corrective measures, if applicable, any claim for breach of warranty hereunder shall be made and presented to DSA in writing within a period of 30 days following the discovery of the alleged defect or damage, failing which the foregoing warranty shall be void and of no effect whatever. Furthermore, DSA shall be entitled to inspect the Product at any time during the lifetime of the foregoing warranty upon reasonable notice to the Buyer or its end user, it being understood that said warranty shall be invalid and of no effect in the event DSA shall be denied such right of inspection.

LIMITATION OF LIABILITY: DSA SHALL NOT BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY INCIDENTAL, SPECIAL, EXCEPTIONAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS,

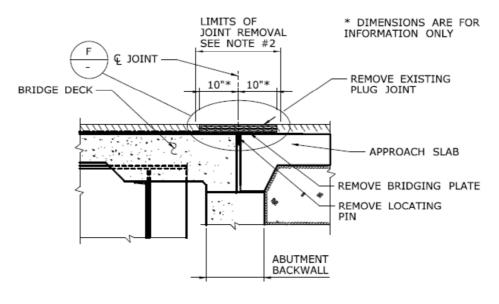
# PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE, UNDER ANY LEGAL THEORY, EVEN IF DSA HAS BEEN ADVISED OF THE POSSIBILITY OF DAMAGES.

MISCELLANEOUS: Rights under this Limited Warranty may be transferable by Buyer to a third party only with the prior written consent of DSA and the payment of the then-current transfer fees, inspections services and subsequent repair or replacement of the Product, if necessary, by Buyer. Failure by DSA to enforce any of the terms or conditions in this Limited Warranty shall not be interpreted to be a waiver of any terms and conditions of this Limited Warranty. If any portion of this Limited Warranty is unenforceable under applicable law, such portion shall be deemed reformed or deleted, but only to the extent necessary to comply with such law, and the remaining provisions shall remain in full force and effect. This warranty shall be construed in accordance with, and shall be governed by, the laws of the State of Ohio without reference to its conflict of law principles and Buyer agrees to submit to the exclusive jurisdiction of the appropriate state or federal court within Cuyahoga County, OH or purpose of resolving any dispute or claim arising in connection with this Limited Warranty.

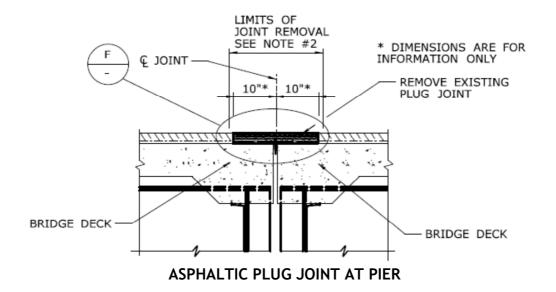
## **COMMON ASPHALTIC PLUG JOINT DETAILS**



# ASHALTIC PLUG JOINT AT BRIDGE DECK AND ROADWAY (TYPICAL BOX BEAM)



ASPHALTIC PLUG JOINT AT BRIDGE DECK AND APPROACH



Please call DSA at 800-491-5663 with any questions.

HENDERSON COUNTY 051GR12M03-FE02

## INSTALLATION PROCEDURE



# **Wabo<sup>®</sup>Expandex**

Asphaltic Plug Joint System for Bridge & Highway Applications

## A. General

The work shall consist of furnishing and installing a Wabo®Expandex joint system in accordance with the details shown on the plans and the requirements of the specifications. Placement of the Wabo®Expandex joint system shall consist of proper surface preparations, material and application of materials. The Wabo®Expandex joint system is shipped by length and volume of joint. The steel traffic wearing plates are cut and shipped 8"(203 mm) wide by 72"(1828 mm) lengths. The elastomeric binder and granite aggregate are calculated on a volume basis and shipped by weight. One kit of Wabo®Expandex is comprised of 30 lb. (13.6 kg) elastomeric binder, 40 lb. (18 kg) bag of B granite aggregate and 40 lb. (18 kg) bag of C granite aggregate.

## B. Joint Preparation

The blockout shall be constructed to the dimensions on the drawings. The blockout base shall be of sound material with no vertical misalignment and parallel with the plane of the roadway. Should repairs be required to the blockout an agency approved repair material shall be used.

Minimum blockout width is to be 20" (500 mm) but not exceeding 24" (610 mm). Minimum blockout depth is to be 2" (50 mm).

Before installation of the Wabo<sup>®</sup>Expandex material, all blockout surfaces shall be dry, then abrasive-blasted to remove contaminants and loose aggregate. Blockout should then be heated and cleaned using a hot compressed air lance capable of producing 3000°F (1648°C) and a directional velocity of 90,000 cps (3000 fps) to insure the removal of any residue from the abrasive-blast operation. Care should be taken to insure that the abrasive blast and compressed air cleaning does not contaminate the blockout.

Note: Installation of the Wabo<sup>®</sup>Expandex should not be done unless the deck temperature is a minimum of 40°F (5°C) and rising.

## C. Backer Rod Placement

Once the joint opening and blockout have been properly prepared, the backer rod is placed in the joint opening to a depth of approximately 1" (25mm). A closed-cell, high temperature, expanded polyethylene foam rod is recommended. The size of the backer rod should be 25% greater than the joint opening to be sealed.

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## **INSTALLATION PROCEDURE**



## **Wabo<sup>®</sup>Expandex**

Asphaltic Plug Joint System for Bridge & Highway Applications

#### D. Modified Elastomeric Binder Placement

Melt the elastomeric binder in a double jacketed kettle and heat to a minimum of 380°F (193°C) but Do Not exceed 400°F (204°C). Pour the heated binder over the backer rod in the joint opening to seal the gap. This binder shall be poured level with the base of the blockout. Apply the heated binder over the entire blockout (base and sidewalls) to form a monolithic membrane approximately 1/16" (1.5 mm) to 1/8" (3 mm) thick.

## E. Traffic Wearing Plate Placement

The steel traffic wearing plates are centered over the joint opening end-to-end along the joint with no overlapping. Centering pins (16D common nail is recommended) are installed in the pre-drilled holes and inserted directly into the modified elastomeric binder plug. These pins are designed to hold the plates in place. The heated binder shall be poured over the closure plate to encapsulate it.

## F. Binder and Granite Aggregate Placement

Pre-measured granite aggregate, one 40 lb (18 kg) bag B and one pre-measured granite aggregate 40 lb. (18 kg) bag C is placed in a rotating drum mixer and heated to a minimum of 250°F (121°C) not exceeding 375°F (190°C). A correct volume, 2.5 gallons (9.5 Liters), of heated Wabo®Expandex binder, 380°F (193°C) not exceeding 400°F (204°C), is added to this heated granite aggregate.

This blend of elastomeric binder and granite aggregate is mixed for approximately 3 minutes or until all granite aggregate is coated and there are no "dry pockets" of aggregate. A hot air lance may be used to maintain the mix temperature on cooler days. Do not let the mix temperature exceed 400°F (204°C) if applying heat. Never apply direct flame to the liquid binder. The mixture is ready for placement in the blockout. Pour the Wabo®Expandex into the blockout to the road surface and level with rakes.

Once the blockout is filled, the Wabo®Expandex is to be compacted perpendicular to the joint. A minimum two-ton, water cooled drum roller is acceptable for this work. Care shall be taken to insure that the compaction process does not transfer material to the roller. Water can be used to prevent this should material transfer occur. The application of water should be kept to a minimum. Do not allow the material mixture to cool prior to beginning the compacting operation. This step should be ongoing during the installation process. Complete final compaction process by rolling the joint longitudinally.

HENDERSON COUNTY 051GR12M03-FE02

# **INSTALLATION PROCEDURE**



## **Wabo<sup>®</sup>Expandex**

Asphaltic Plug Joint System for Bridge & Highway Applications

## G. Final Treatment

After compacting, the Wabo<sup>®</sup>Expandex is ready for final treatment. The top surface shall be heated with a hot air lance until the surface becomes tacky. Duct tape should be placed 1" (25 mm) away from the joint edges and parallel to the joint. Pour heated elastomeric binder over the top surface to form a membrane.

Broadcast Black Beauty to eliminate possible tackiness. (Do not use silica sand) The installed Wabo<sup>®</sup>Expandex joint will be ready to accept traffic once the joint has cooled to the touch. Minimum cooling time 1 hour.

# SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES

**I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

## II. MATERIALS.

- **A. Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
- **B. Structural Steel.** Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. See Standard Drawing BJE-001, current edition.
- **C. Stud Anchors.** The armored edge stud anchors are 3/4" x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).
- **D. Steel Reinforcement.** Use Grade 60. See Section 602.
- **E. Epoxy Bond Coat.** See Section 511.
- F. Neoprene Joint Sealers (Compression Seals). See Section 807.
- **G. Neoprene Strip Seals.** See attached detail drawings and Section 807.

## III. EQUIPMENT.

- **A. Hammer.** Provide Power driven Hammers lighter than nominal 45 lb. class.
- **B. Sawing Equipment**. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- **C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.

## IV. CONSTRUCTION.

**A. Remove Existing Materials.** Remove existing Expansion Dam, Bridge End, Armored Edges and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

**B. Place New Concrete and Armored Edges.** After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay or to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the scarified grade and finish to receive the new overlay or place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb.

All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete are not to be painted.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

- C. Additional Steel Reinforcement. Furnish for replacement, as directed by the Engineer, 1600 linear feet of #4 steel reinforcing bars in 20' lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.
- **D. Stage Construction.** Installation of concrete and armored edges in two (or more if specified) stages is necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld and grind smooth.
- **E. Preformed Neoprene Joint Seal.** Place the preformed joint seal in one continuous, unbroken length. Place neoprene compression seals as recommended by the manufacturer and in accordance with Section 609.03.04 (D). Place neoprene strip seals as recommended by the manufacturer and in accordance with Section 609.03.04 (E), except that shop drawings will not be required.
- **F. Shop Plans.** Shop plans will <u>not</u> be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

#### V. MEASUREMENT.

- **A. Expansion Joint Replacement 1 ½", 2", 4".** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.
- **B.** Armored Edge for Concrete. The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.
- C. Steel Reinforcement. See Section 602.

## VI. PAYMENT.

A. Expansion Joint Replacement - 1½", 2", 4". Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing

- and installing the new armored edges, concrete, neoprene joint seal, and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- **B.** Armored Edge for Concrete. Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- C. Steel Reinforcement. See Section 602.

## SPECIAL NOTE FOR USE OF HYDRODEMOLITION METHOD

## **Description**

This work consists of bridge surface deck preparation using Hydrodemolition to provide a uniform depth, highly bondable surface and to remove all variable depth, unsound material. This item also includes the removal and disposal of all concrete and debris, vacuuming, shielding, water control, additional jack hammering and all other aspects of work necessary to prepare the deck for the placement of the new latex modified concrete overlay.

## **Equipment**

Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.

Mechanical Scarifying Equipment. The scarifying equipment shall be a power operated mechanical scarifier capable of uniformly scarifying or removing the old concrete wearing surface from the bridge deck to the depths required in the plans or as directed by the Engineer. The equipment shall be self-propelled with sufficient power, traction and stability to maintain accurate depth of cut and slope. The equipment shall be capable of accurately and automatically establishing profile grades along each edge of the machine by referencing the existing bridge deck by means of a ski or matching shoe, or from an independent grade control; in addition, it shall be equipped with an integral loading means to remove the material being cut from the bridge deck and to discharge the cuttings into a truck all in a single operation.

Hydro-Demolition Equipment. The Hydrodemolition equipment shall consist of a filtering and pumping unit operating with a self-propelled computerized robot that utilizes a high pressure water jet capable of removing concrete to the depth specified on the plans or as directed by the Engineer and be capable of removing rust and concrete particles from reinforcing steel. The equipment shall provide a rough and bondable surface and remove all unsound concrete during the initial pass. The minimum water usage shall be 43 gal/min operating at 13,000 psi minimum.

Vacuum Cleanup Equipment. The vacuum cleanup equipment shall be equipped with fugitive dust control devices and be capable of removing wet debris and water all in the same pass. Provide equipment capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface.

Hand Held Blast Cleaning Equipment. Hand held blast shall be either sand or water as necessary to expose fine and coarse aggregates; thoroughly clean all exposed reinforcing steel; and remove any unsound concrete or laitance layers from the proposed concrete overlay surface. If sand blasting equipment is utilized, the equipment shall have oil traps. If water blasting equipment is utilized, the equipment must be capable of delivering a minimum of 5,000 psi.

Power Driven Hand Tools. Power driven hand tools and jackhammers will be permitted, but shall not be heavier than the nominal 35 lb class. Chipping hammers shall not be heavier than the nominal 15 lb class. Only hand chipping tools shall be used when removing concrete within 1 in. of reinforcing steel. Mechanically driven tools shall be operated at a maximum angle of 45 degrees from the bridge floor surface.

#### **Construction Methods**

General: Perform Hydrodemolition surface preparation over the entire top surface of the reinforced concrete bridge deck to provide a rough and bondable surface and to remove all unsound concrete during the initial Hydrodemolition surface preparation pass. The use of hand chipping tools, either hand or mechanically driven, shall be limited to trim work and areas inaccessible or inconvenient for the hydro-demolition equipment.

Description: This work shall consist of furnishing the necessary labor, materials and equipment to completely remove the top surface of the Portland cement concrete bridge deck surface in accordance with these Specifications and in reasonably close conformity with the grades, thickness, or sections shown on the Plans or as directed by the Engineer. This work shall include the removal of patches other than sound Portland cement concrete and all loose and unsound concrete by Hydrodemolition; preparation of the sound existing concrete surface; removal, forming and concrete for full depth repairs; blast cleaning or high pressure water cleaning the existing deck prior to placement of the modified concrete overlay; and all other operations necessary to complete this work according to these specifications and to the satisfaction of the Engineer.

## Preparation of Existing Deck

No operations without reasonably available engineering controls that limit fugitive dust will be acceptable.

The Contractor shall be aware that there are federal, state, regional, and local government agencies that have requirements regarding the control of fugitive dust generated by concrete removal and blasting operations.

The Contractor is responsible for protecting traffic traveling adjacent to and under the work zone while removing bridge deck concrete.

Where the deck is sound for less than one third of its original depth, the concrete shall be removed full depth for limited areas as designated by the Engineer. Full depth repairs shall be completed as specified for Full Depth Repair.

## Removal of Existing Modified Concrete Overlays

Use conventional methods to remove any and all existing concrete overlay prior to commencement of the Hydrodemolition operation. Clean the bridge deck. Use "Total Surface Hydrodemolition" method to provide a rough & highly bondable surface and to remove partial depth deteriorated concrete with a minimum depth of ¼" below the original deck elevation. If Hydrodemolition does not leave a bondable surface, the Engineer can require mechanical scarification to his satisfaction at no additional cost to the Cabinet. The cost of removal of the existing overlay shall be included as a portion of the pay item for Hydrodemolition.

Existing overlay material which is sound and bonded may be left in patch areas with approval of the Engineer. If determined the existing patches are to be removed, jackhammers, not to be heavier than the nominal 35 lb class shall be used to remove debonded areas.

If the use of mechanical scarifying equipment results in the snagging of the top mat of steel reinforcement, the scarifying equipment shall be immediately stopped and the depth of removal adjusted. Damaged or dislodged reinforcing steel shall be repaired or replaced at the Contractor's expense. Replacement shall include the removal of any additional concrete.

## Bridge Decks with No Existing Concrete Overlay

If Hydrodemolition is to be performed on an original bridge deck surface without an overlay, the Contractor may use mechanical scarification equipment conforming to these specifications to remove an initial portion of the hydro-demolition depth. The scarification depth shall be ½". Total surface Hydrodemolition is used to provide a highly bondable surface and to remove partial depth deteriorated concrete. The cost of the scarification shall be included as a portion of the pay item for Hydrodemolition.

If the use of mechanical scarifying equipment results in the snagging of the top mat of steel reinforcement, the scarifying equipment shall be immediately stopped and the depth of removal adjusted. Damaged or dislodged reinforcing steel shall be repaired or replaced at the Contractor's expense. Replacement shall include the removal of any additional concrete required to position the new reinforcing steel at the correct height and required lap splice lengths.

## Concrete Removal by Hydro-Demolition

General: The total surface area of the reinforced concrete bridge deck shall be completely prepared by Hydrodemolition as necessary to provide a highly roughened and bondable surface prior to placement of the proposed bridge deck overlay while removing any deteriorated and unsound concrete in the initial pass. Unsound concrete is defined as existing bridge deck concrete that is deteriorated, spalled, or determined by the engineer to be unsound.

With the use of Hydrodemolition surface preparation, the requirement to provide a minimum ¾" clearance around all reinforcing bars that are more than 50% diameter exposed is waived, providing that the existing concrete is sound. The amount of steel exposed shall be kept to a minimum.

Damaged or dislodged reinforcing steel shall be repaired or replaced at the Contractor's expense. Replacement shall include the removal of any additional concrete required to position the new reinforcing steel at the correct height and to provide the required lap splice lengths as required.

Calibration: Prior to commencement of the Hydrodemolition removal operation, the Hydrodemolition equipment shall be calibrated on an existing **sound** concrete surface as designated by the Engineer. The calibration area shall be a minimum of 7 feet wide by 7 feet long to demonstrate the desired result of this specification.

Move the Hydrodemolition equipment to a second area (7'x7') that is unsound as designated by the Engineer to demonstrate the desired result of this specification which is providing a highly rough and bondable surface and removing all unsound concrete during the initial pass is being achieved.

The Engineer shall verify the following settings:

- 1. Water pressure gauge (13,000 psi minimum)
- 2. Machine staging control (step)
- 3. Nozzle size
- 4. Nozzle speed (travel)
- 5. Depth of removal
- 6. Minimum water usage (43 gallons per minute)

During the Hydrodemolition operations, any or all of the above settings may be modified in order to achieve removal of all unsound concrete and to provide a highly bondable surface. The settings may be changed by the Contractor to achieve total removal of unsound concrete, but the Engineer must be notified of all changes. The Engineer may change any or all of the settings in order to achieve the desired results with Hydrodemolition. The removals and depth shall be verified, as necessary, and at least every 30 feet along the cutting path. The readings shall be documented and, if necessary, the equipment recalibrated to insure the Hydrodemolition process achieves the desired results and removal of unsound concrete.

Calibration shall be required on each structure; each time Hydrodemolition is performed and as required to achieve the results specified by the plan.

Debris and Fluid Containment: Prior to commencement of the Hydrodemolition operation, the Contractor shall submit a plan for approval to the engineer for control and filtering of all water discharged during operation. The Contractor, at a minimum, shall block all drains on the deck and install aggregate dams every 150 feet; 6 inches high by 1 foot wide minimum, to strain runoff. The deck shall be used as a settlement basin within itself unless an alternate method of water control, satisfactory to the Engineer and meeting the environmental requirements of any associated Regulatory Agency, is provided.

The Contractor shall provide shielding, as necessary, to insure containment of all dislodged concrete within the removal area in order to protect the public from flying debris both on and under the work site.

## Cleaning

Cleaning shall be performed with a vacuum system capable of removing wet debris and water all in the same pass. The vacuum equipment shall be capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface. Cleaning shall be done in a timely manner, before debris and water is allowed to dry on the deck surface.

## Resounding

After the Hydrodemolition operation has completed the removal, and the deck is cleaned and allowed to dry, the deck shall be resounded to assure that the all unsound concrete deck material has been removed. The final sounding of the deck shall be done by the Engineer and shall only be performed when the deck is completely dry and frost-free. Final sounding shall consist of as many successive resounding as required to ensure that all deteriorated and fractured concrete has been removed. Additional removal shall be performed with 35 lb maximum weight jackhammers operated at an angle of no more than 45 degrees from horizontal. Aerosol spray paint for outlining and sounding chains shall be provided by the Contractor.

## Full Depth Repair

Where the deck is sound for less than one third of its original depth, the concrete shall be removed full depth except for limited areas as may be designated by the Engineer. Forms shall be provided to support concrete placed in full depth repair areas. The forms for areas of up to 4 square feet may be suspended from wires from the reinforcing steel. For areas greater than 4 square feet, the forms shall be suspended from the primary members of the superstructure or by shoring below. Areas of full depth repair shall have the concrete faces and reinforcing steel cleaned. Only those areas marked in the field by the Engineer as full depth repair will be paid for as full depth repair.

## Preparation Prior to Overlay Placement

Vehicles other than approved construction equipment will not be permitted on those sections of the deck where Hydrodemolition has begun. Contamination of the deck by construction equipment or from any other source shall be prevented.

#### **Method of Measurement**

Surface Preparation Using Hydrodemolition shall be measured as the actual deck area in square yards overlaid and shall include the costs of removal of an existing overlay if one exists, surface preparation including ¼" (min.) milling into the original concrete bridge deck surface, Hydrodemolition to a depth of ¼" (min.) below the surface after surface preparation milling is completed, removal of the surface preparation debris, cleaning, any incidental materials, and all labor and equipment necessary to

complete the work as described in this specification, but not specifically included in other items for payment.

## **Basis of Payment**

Payment for completed and accepted quantities as measured above will be made at the contract price for:

ItemUnitDescription08550Square yardHydrodemolition

# SPECIAL NOTE FOR BRIDGE RESTORATION AND WATERPROOFING WITH CONCRETE OVERLAYS

**I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, and this Note. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Surface Preparation; (3) Complete full-depth and partial depth repairs as directed by the Engineer; (4) Place new concrete overlay and epoxy-sand slurry in accordance with Section 606; (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

All construction will be in accordance with Section 606 unless otherwise specified.

## II. MATERIALS.

- **A. Latex Concrete.** See Section 606.03.17.
- **B.** Class "M" Concrete. Use either "M1" or "M2". See Section 601.
- C. Epoxy-Sand Slurry. See Section 606.03.10.
- **D.** Bituminous asphalt. See special note for placing bridge overlay approach pavement.

## III. EQUIPMENT.

- **A. Hammer.** Provide power driven hammers lighter than nominal 45 lb. class.
- **B. Sawing Equipment**. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- **C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.

## IV. CONSTRUCTION.

- **A. Surface Preparation.** Prepare surface as specified by the Standard Specifications and Special Note for Hydrodemolition. Hydrodemolition is mandatory for all decks.
- **B. Full Depth Slab Repair.** After the existing slab has been machine prepared in accordance to Section 606.03.03, perform full depth patching in accordance with section 606.03.05. The Department will not measure material removal, forming, blast cleaning, or retying steel reinforcement in the patches and will consider this work incidental to the pay item "Concrete Class M Full Depth Patch."
- **D. Partial Depth Slab Repair.** Perform partial depth patching in accordance with section 606.03.06. The pay item "PARTIAL DEPTH PATCHING" measured in cubic yards of material placed and accepted will include removal of existing material by any means including Hydrodemolition, forming, blast cleaning, retying steel reinforcement in the patches, and disposal of waste off of construction site.
- **E. Surface Texturing.** Texture the concrete surface of the overlay in accordance with Section 609.03.10.

- **V. MEASUREMENT.** See Section 606 and the following:
  - **A.** Concrete Overlay- Latex. The Department will measure the quantity in cubic yards using the theoretical volume required for the overlay shown in the Plans.
  - B. **Partial Depth Patching.** The Department will measure the quantity in cubic yards by deducting the theoretical volume of bridge deck overlay (LMC) from the total volume (as indicated by the batch quantity tickets) of Concrete required to obtain the finished grade shown on the Plans or established by the Engineer.
  - C. Concrete Class M for Full Depth Patching. See Section 606.
- **VI. PAYMENT.** See Section 606 and the following:
  - 1. Concrete Overlay- Latex. See Section 606.
  - **2. Partial Depth Patching.** The Department will pay for accepted quantities of partial depth patching at the contract unit price in cubic yard for bid item "PARTIAL DEPTH PATCHING".
  - 3. Concrete Class M for Full Depth Patching. See Section 606.

## SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT B10 AND 11

**I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawing. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Mill the existing approach pavement; (3) Place new asphalt surface; (4) Repair the roadway shoulders, if needed; (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

NOTE: Existing Bridge has existing overlay. The contractor shall match grade of existing bridge. The extent of the asphalt overlay pavement will be determined by the Engineer.

## II. MATERIALS.

- **A.** Class 4 Asphalt Surface 0.5D PG76-22. This material shall be in accordance with the Standard Specifications.
- **B.** Tack Coat. This material shall be in accordance with the Standard Specifications.

## III. CONSTRUCTION.

A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1.5" new pavement surface from the bridge end extending approximately 100 feet into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge and matches the original cross section of the approach. Mill a 3-foot edge key to tie the new surface into the existing surface approximately 100 feet from the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.

Backfill the area of pavement removed for placing the new armored edges with Class "M" Concrete to within 2" +/- of the top of the bridge end. Allow this concrete to wet cure prior to placing the new asphalt surface on it.

- **B.** Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" asphalt surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "Class 4 Asphalt Surface 0.5D PG76-22". Place the new asphalt surface to the original roadway cross section or as directed by the Engineer.
- **C. Treatment of Shoulders.** On roadways with paved shoulders, the shoulders shall receive identical treatment to the mainline pavement. On roadways with earth or rock shoulders, the Contractor shall attempt to protect the shoulder from damage. Any damage to earth or rock shoulders shall be repaired by the Contractor to the satisfaction of the Department at no additional cost. These repairs may consist of re-

grading, re-compacting, and/or placing millings to return the shoulder to its original cross section.

**D. Pavement Markings.** At the direction of the engineer, restripe the approaches and bridge to provide equal shoulders for both lanes once the sidewalk has been constructed. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be paid accordingly.

Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

### IV. MEASUREMENT.

**A. Bridge Overlay Approach Pavement.** The Department will measure the quantity in square yards. The Department will measure along the centerline from each end of the structure to the point where the new pavement ties into the existing pavement and across the width of the new pavement perpendicular to the centerline of the roadway.

## V. PAYMENT.

**A. Bridge Overlay Approach Pavement.** Payment at the contract unit price per square yard is full compensation for backfilling at the end of the structure, removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, furnishing and installing the asphalt tack coat, producing and placing the new asphalt surface, shoulder treatment, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawing.

The Department will consider payment as full compensation for all work required by these notes and detail drawings.

## SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS

I. COMPLETION DATE. The Contractor has the option of selecting the starting date for this Contract. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work. All work is to be completed in the 2012 construction season by August 1, 2012. An allotted number of working days or calendar days are assigned to each structure in this contract as shown below.

<u>STRUCTURE</u>	NUMBER OF CALENDAR DAYS
FE02-051-0060-B00010L & B00011L (PHASE I)	9
FE02-051-0060-B00010R & B00011R (PHASE II)	9
STRUCTURE	NUMBER OF WORKING DAYS
FE02-051-0351-B123N (PHASE III)	21

Contrary to Section 108.07.02, the Engineer will begin charging calendar days or working days for a structure or Phase on the day the Contractor closes the structure to traffic.

The portions of Friday and Monday at the start and end of Phase One and Phase Two will not count as a Calendar Day.

II. LIQUIDATED DAMAGES. Liquidated damages will be assessed the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2008 Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days, working days, or the August 1, 2012 date is exceeded. In addition to the Liquidated Damages specified in Section 108.09, Liquidated Damages in the amount of \$500.00 every HOUR OR PORTION OF AN HOUR will be assessed when the US 60 EAST OR US 60 WEST is closed beyond the time as specified in the Traffic Control Plan.

Contrary to the Standard Specifications, liquidated damages will be assessed the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge or bridges. Contract time will be charged during these months.

All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

## SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

## I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2008 Standard Specifications, Section 112. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

## II. MAINTAIN & CONTROL TRAFFIC

Will be measured only once for payment for each structure.

## III. SIGNS

Contrary to Section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

The contractor shall provide signing layout with dimensions to the Engineer prior to being paid for signing.

## IV. LANE CLOSURES \ ROAD CLOSURE

The lengths of lane closures shall be only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Do not use cones for lane closures; use barrels or barricades only. Leave lane closures in place only during working hours.

Lane closures \ Road Closure will not be measured for payment but will be incidental to Maintain and Control Traffic. This is to include ramp closures and lane shifts.

## V. TEMPORARY TRAFFIC CONTROL UNDER PROJECT BRIDGES

Traffic control on existing roadways located under the project bridges shall be provided when necessary in order to insure the safety of the traveling public. Whenever the danger of falling debris exists, set up temporary lane closures in accordance with Standard Drawings, as approved by the Engineer. A minimum clear lane width of 12 feet shall be maintained at all times during these temporary closures. Traffic control on these roadways shall be maintained only while required for construction activities on the bridge above them and shall be removed as soon as the danger of falling debris has been eliminated. These temporary lane closures and traffic control shall be considered incidental to the pay item "Maintain and Control Traffic".

## VI. PROJECT PHASING & CONSTRUCTION PROCEDURES

Bridge closure / Lane Closure will not be permitted on these days:

Memorial Day Weekend (Friday-Monday) Independence Day, when July 4<sup>th</sup>

Phase I and Phase II to be completed prior to July 4th and can not start until after May 28<sup>th</sup>.

**Phase I** (051B00010 and 051B00011 East) will consist of closing US 60 East as shown in attached Drawings. Traffic control signs, portable changeable message boards to be charged to 051B00010N.

Bridge closure / Lane Closure will be allowed during the following days and hours:

Friday 7:00 PM to the following (9 calendar days later) Monday 6:00 AM (CST)

Phase one will have nine calendar days. The portion of days on Monday and Friday will not be counted. (Traffic control may be set up week prior to closing. All signs shall be covered till closure and after closure until removed.) For every hour or portion of an hour US 60 East is closed outside the allotted time the contractor shall pay the agreed upon liquidated damages of 500 dollars.

**Phase II** (051B00010 and 051B00011 West) will consist of closing US 60 West as shown in attached Drawings. Phase II shall be started Friday following Phase one completion. Traffic control signs, portable changeable message boards, and flashing arrow to be charged to 051B00011N.

Bridge closure / Lane Closure will be allowed during the following days and hours:

Friday 7:00 PM to the following (9 calendar days later) Monday 6:00 AM (CST)

Phase II will have nine calendar days. The portion of days on Monday and Friday will not be counted. (Traffic control may be set up prior to closing. Three days at completion of project to remove traffic control. All signs shall be covered till closure and after closure until removed.) For every hour or portion of an hour US 60 West is closed beyond the allotted time the contractor shall pay the agreed upon liquidated damages of 500 dollars.

**Phase III** (051B00123N) KY 351 maintain and control traffic according to standard drawing ttc-115. Minimum of a 12 ft lane will be maintained in both directions at all times.

Temporary striping and barrier wall will not be required unless contractor stays at the same area (Joint) more than three days. Temporary striping and barrier wall will be incidental to maintain and control traffic.

## VII. VARIABLE MESSAGE SIGNS

To warn the public VMS shall be placed three days in advance of all closures.

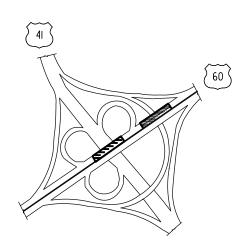
Variable message signs shall only be paid once per phase. Regardless how many times reset or moved as directed by the engineer.

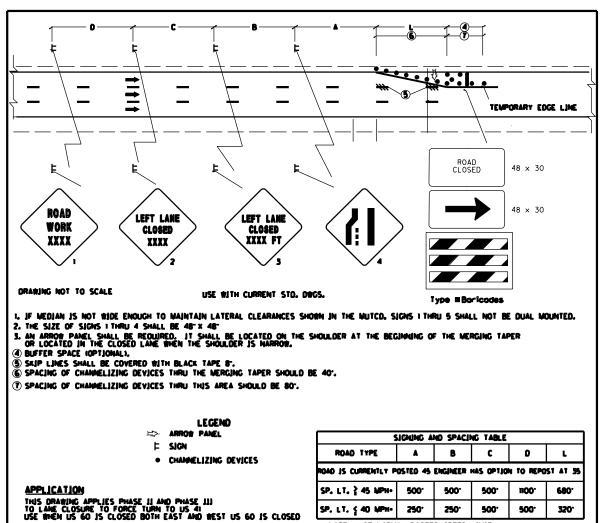
## VIII. TRAFFIC COORDINATOR

Furnish a Traffic Coordinator as per Section 112. The Traffic Coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the Engineer, during the Contractor's operations and at any time a lane closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

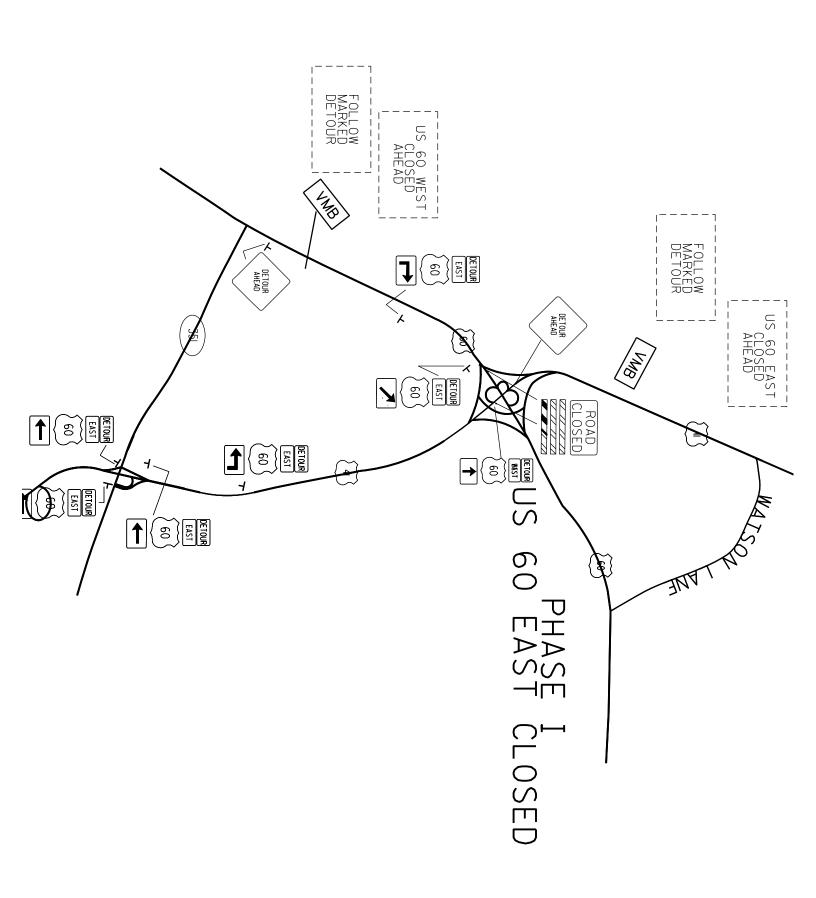
The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

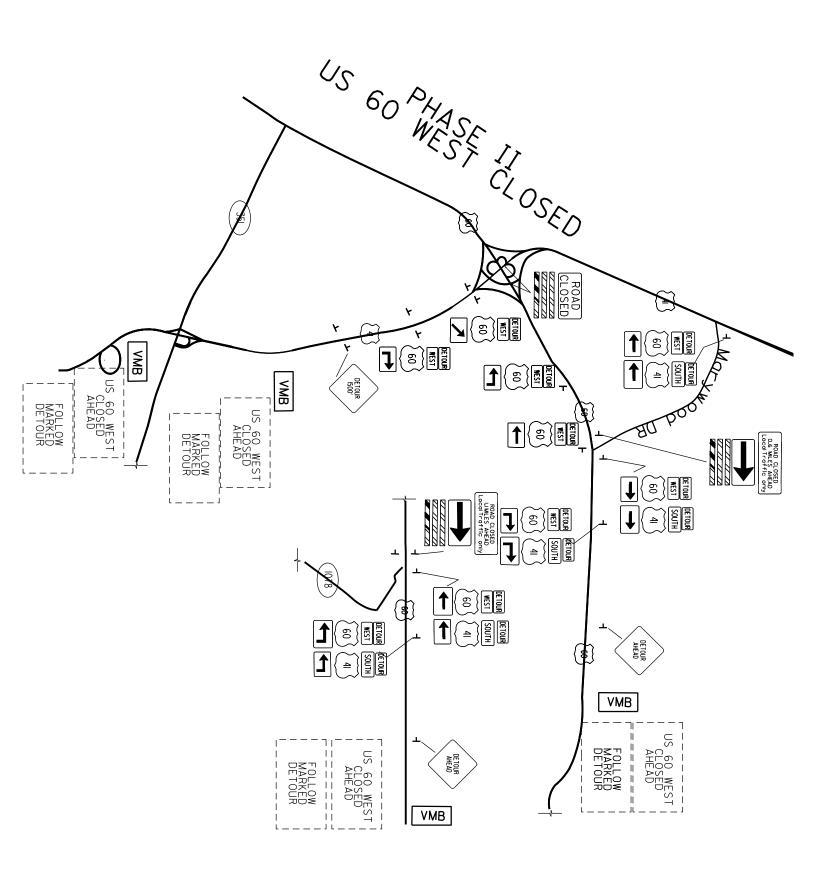
## PHASE I US 60 EAST CLOSED (REVERSE FOR PHASE II

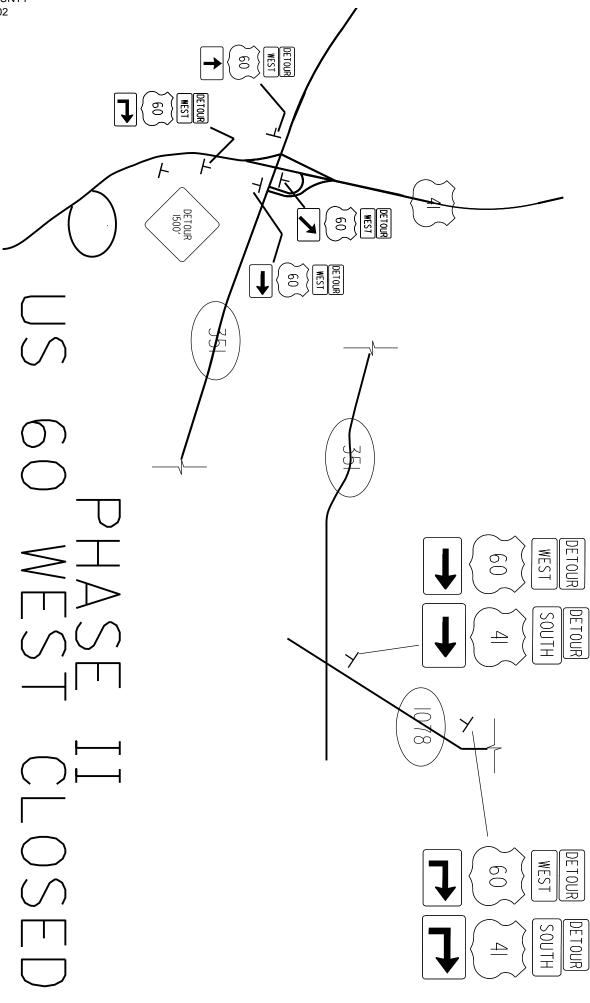


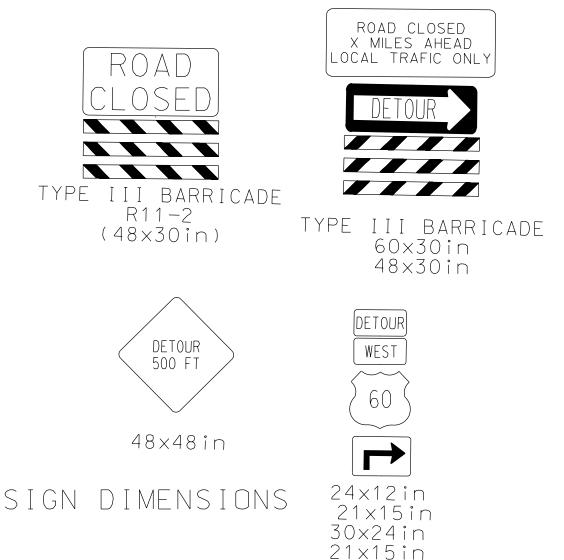


-NOTE: USE NORMAL POSTED SPEED LIMIT

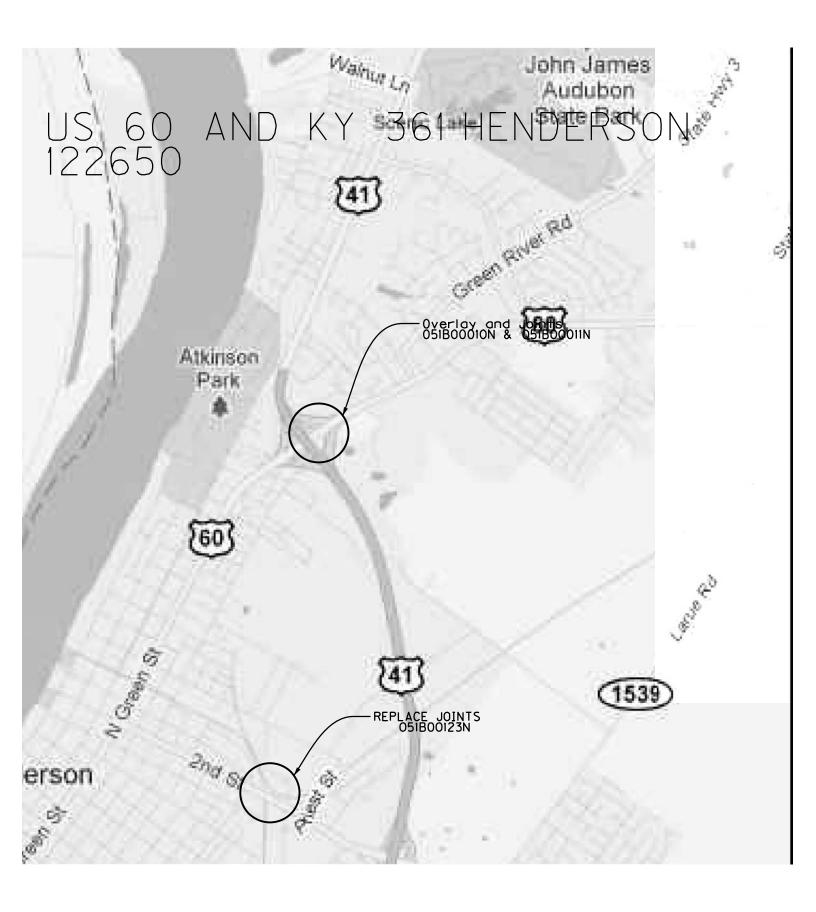








- 1.) ALL TRAFFIC CONTROL DEVICES AND OPERATIONS SHALL CONFORM TO THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
- 2.) SIGN SPACING MAY BE ADJUSTED TO FIT THE PHYSICAL CONDITIONS ENCOUNTERED SUCH AS DRIVEWAYS, APPROACH ROADS, ETC. APPROACH ROADS AND INTERSECTING STREETS MAY REQUIRE ADDITIONAL SIGNING NOT SHOWN ON THE STANDARD DRAWINGS.
- 3.) SIGNS LARGER THAN 10 SQUARE FEET SHALL BE MOUNTED ON TWO POSTS.
- 4.) AN ARROW PANEL SHALL BE LOCATED ON THE SHOULDER AT THE BEGINNING OF THE MERGING TAPER OR LOCATED IN THE CLOSED LANE WHEN THE SHOULDER IS NARROW. IF INSTALLED ON THE SHOULDER, A SHOULDER TAPER SHALL BE REQUIRED. TAPER LENGTH SHALL BE 0.33L. SPACING OF CHANNELIZED DEVICES THROUGH THE SHOULDER TAPER SHALL NOT EXCEED A DISTANCE EQUAL TO THE NORMAL POSTED SPEED LIMIT.
- 5.) SIGNS SHALL BE MADE INACCESSIBLE TO THE VIEW OF TRAFFIC WHENEVER SIGN MESSAGE DOES NOT APPLY.



MATERIAL SUMMARY CONTRACT ID: 122650

FE02 051 0060 B00010N PES NO: MB05100601201 HENDERSON TO OWENSBORO (US 60) (MP 10.304) BRIDGE OVER US 41 (MP 16.048)

LINE NO 0010 0020 0030	BID CODE 02014 02562 02650	DESCRIPTION BARRICADE-TYPE III SIGNS MAINTAIN & CONTROL TRAFFIC B 10	QUANTITY 6.00 315.00 1.00	UNIT EACH SQFT LS
0040	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH
0050	02775	ARROW PANEL	1.00	EACH
0060	03295	EXPAN JOINT REPLACE 2 IN	63.50	LF
0070	03298	EXPAN JOINT REPLACE 4 IN	63.50	LF
0800	03299	ARMORED EDGE FOR CONCRETE	110.00	LF
0090	03304	BRIDGE OVERLAY APPROACH PAVEMENT	1,200.00	SQYD
0100	06514	PAVE STRIPING-PERM PAINT-4 IN	1,475.00	LF
0110	08150	STEEL REINFORCEMENT	534.40	LB
0120	08504	EPOXY SAND SLURRY	400.00	SQYD
0130	08526	CONC CLASS M FULL DEPTH PATCH	8.00	CUYD
0140	08534	CONCRETE OVERLAY-LATEX	89.00	CUYD
0150	08549	BLAST CLEANING	1,780.00	SQYD
0160	08550	HYDRODEMOLITION	1,380.00	SQYD
0170	24094EC	PARTIAL DEPTH PATCHING	33.00	CUYD
0180	02569	DEMOBILIZATION	1.00	LS

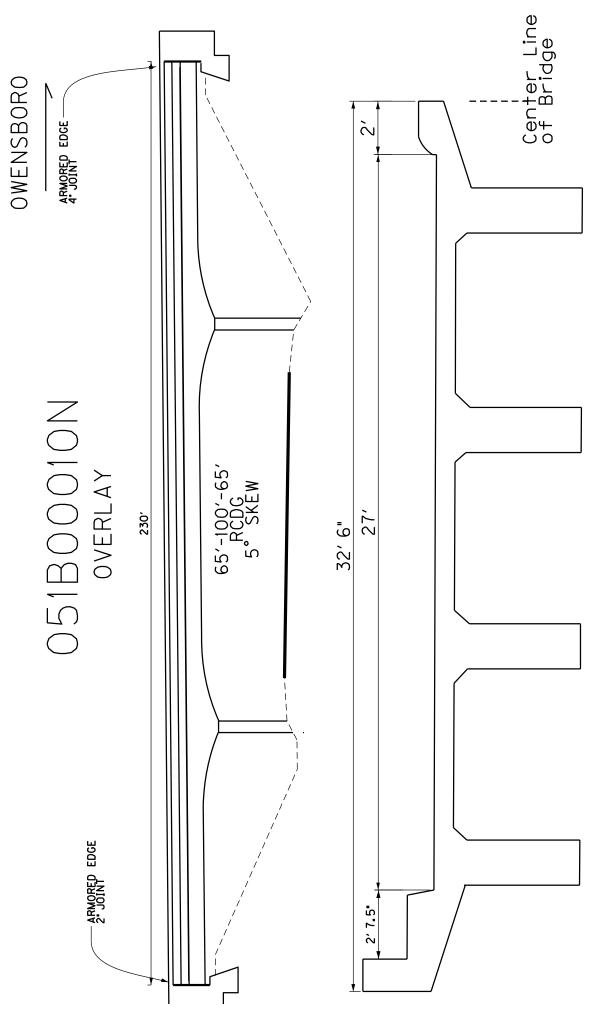
FE02 051 0060 B00011N  $$\operatorname{PES}$$  NO: MB05100601202 HENDERSON TO OWENSBORO (US 60) (MP 10.364) BRIDGE OVER US 41 NB RAMP (MP 16.048)

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02014	BARRICADE-TYPE III	8.00	EACH
0020	02562	SIGNS	550.00	SQFT
0030	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
		В 11		
0040	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0050	02775	ARROW PANEL	1.00	EACH
0060	03294	EXPAN JOINT REPLACE 1 1/2 IN	69.00	LF
0070	03299	ARMORED EDGE FOR CONCRETE	60.00	LF
0800	03304	BRIDGE OVERLAY APPROACH PAVEMENT	667.00	SQYD
0090	06514	PAVE STRIPING-PERM PAINT-4 IN	1,040.00	LF
0100	08150	STEEL REINFORCEMENT	534.40	LB
0110	08504	EPOXY SAND SLURRY	270.00	SQYD
0120	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
0130	08534	CONCRETE OVERLAY-LATEX	35.00	CUYD
0140	08549	BLAST CLEANING	800.00	SQYD
0150	08550	HYDRODEMOLITION	530.00	SQYD
0160	24094EC	PARTIAL DEPTH PATCHING	15.00	CUYD
0170	02569	DEMOBILIZATION	1.00	LS

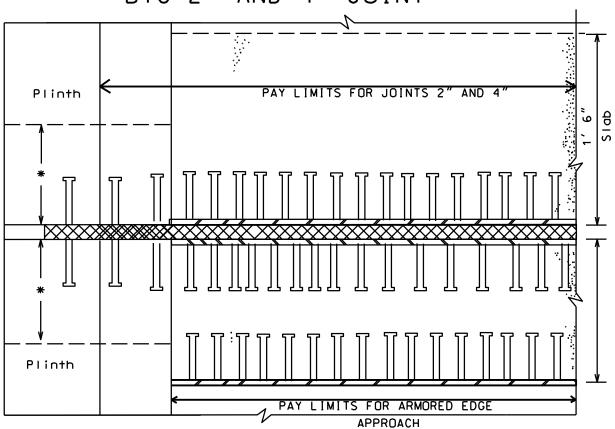
MATERIAL SUMMARY CONTRACT ID: 122650

FE02 051 0351 B00123N  $${\rm PES}$$  NO: MB05103511202 US 41 TO US 60 (KY 351) (MP 0.763) BRIDGE OVER 4TH STREET, HEILMAN AVENUE, AND CANOE CREEK ON 2ND STREET

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02562	SIGNS	300.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
		В 123		
0030	02775	ARROW PANEL	2.00	EACH
0040	24105EC	ASPHALT PLUG JOINT	605.00	LF
0050	02569	DEMOBILIZATION	1.00	LS

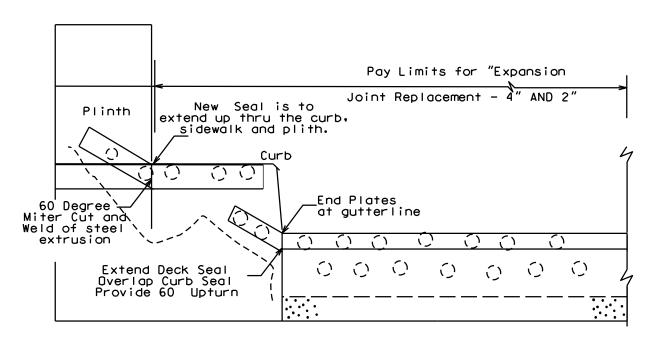


## CURB SECTION B10 2" AND 4" JOINT

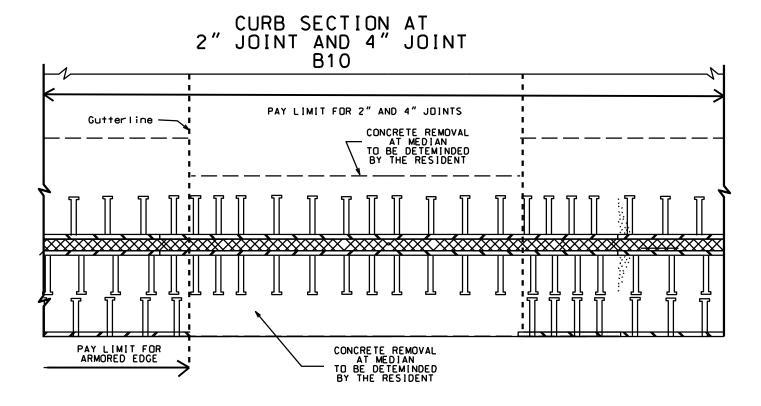


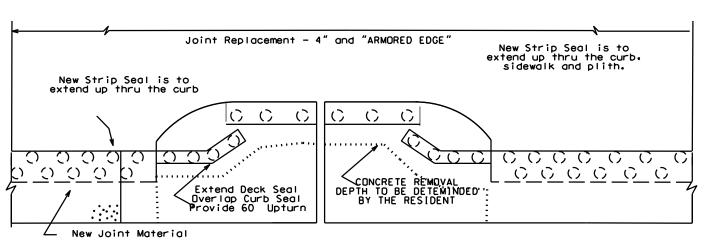
\* Remove and replace curb/plinth as directed by the Engineer to match proposed Expansion Joints.

## PLAN VIEW @ CURB



PROPOSED SECTION @ CURB





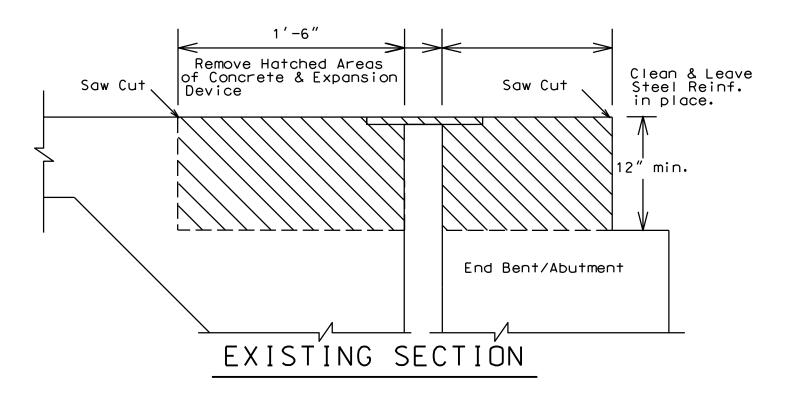
PROPOSED SECTION @ CURB

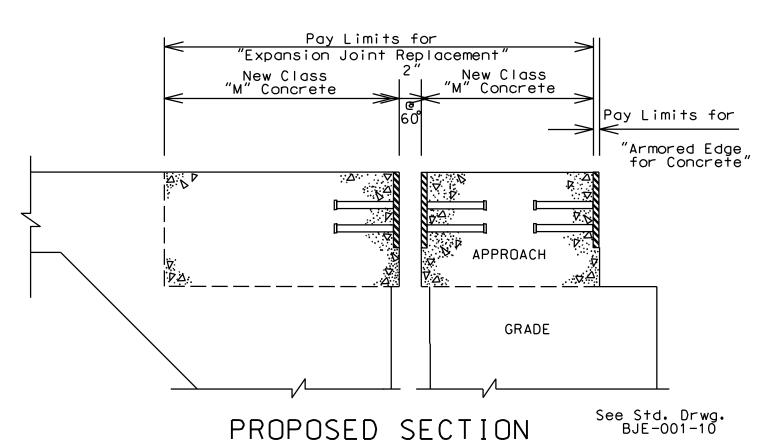
Not to Scale

Median Proposed Section

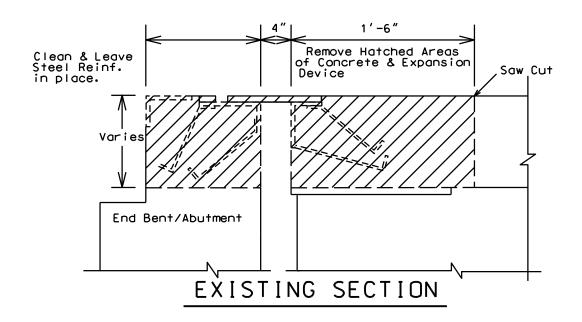
## 2" JOINT B10

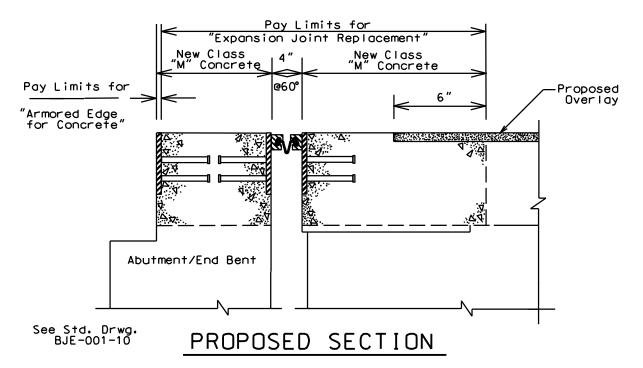
## EXPANSION DAM DETAIL





## 4" JOINT B10 EXPANSION DAM DETAIL





# Section For Median and Curb Cross

min.

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## General Notes

SPECIFICATIONS! All references to the Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. All references to the AASHTO Specifications are to the current edition of the AASHTO Standard Specifications for Highway Bridges.

INSTALLATION PROCEDURE: Seal the ends of the joint seal to prevent the entrance of water and foreign material.

WELDING SPECIFICATIONS: Ensure techniques and welding procedure comply with current joint specification ANSI/AASHIO/AWS DI.5 Bridge Welding Code.

؈ؖ

**PATTERN** 

STUD

MATERIAL SPECIFICATIONS: Ensure steel material is new, commercial grade steel suitable for welding. Acceptance will be based on visual inspection by the Engineer. Joint sealing material, only, is in accordance with Section 807 of the Specifications. Ensure stud shear connectors conform to ASTM Alo8, Grade 1015.

LOCATION: Locate armored edges and/or expansion dams in accordance with detail plans.

Slab

%"× 4" Plate (Typ.) 3/4"0 × 6" Stud

₹ 7 7

PAINI: Clean and paint all structural steel in accordance with the Specifications, except that no field coating will be required.

Contrary to the Specifications, no shop plans are required. SHOP DRAWINGS:

BASIS OF PAYMENT: The accepted quantities of expansion dam will be paid for at the contract unit price per linear foot for each size, measured along centerline of joint between the vertical faces of the barriers. Include the joint seal, extrusion, armored edges, anchor studs, welding and welding materials and installation hardware in the unit bid.

JOINT SETTING: Take measurements and temperature readings before 8 a.m. when determing the installation opening.

Т	NEOPRENE EXPANSION DAMS CURBS	MS CURBS
	MODEL	SUPPLIER
ı	WABO STRJP SEAL Type A Extrusion With SE-400 Seal	Watson Bowman Associates Inc.
	STEEL FLEX Type SSA2 With A2R 400 Seal	D. S. Brown Co.
$\top$		•Joint Openi

Int Opening At 60

7-1/4"

œ 5 "∠

⋖

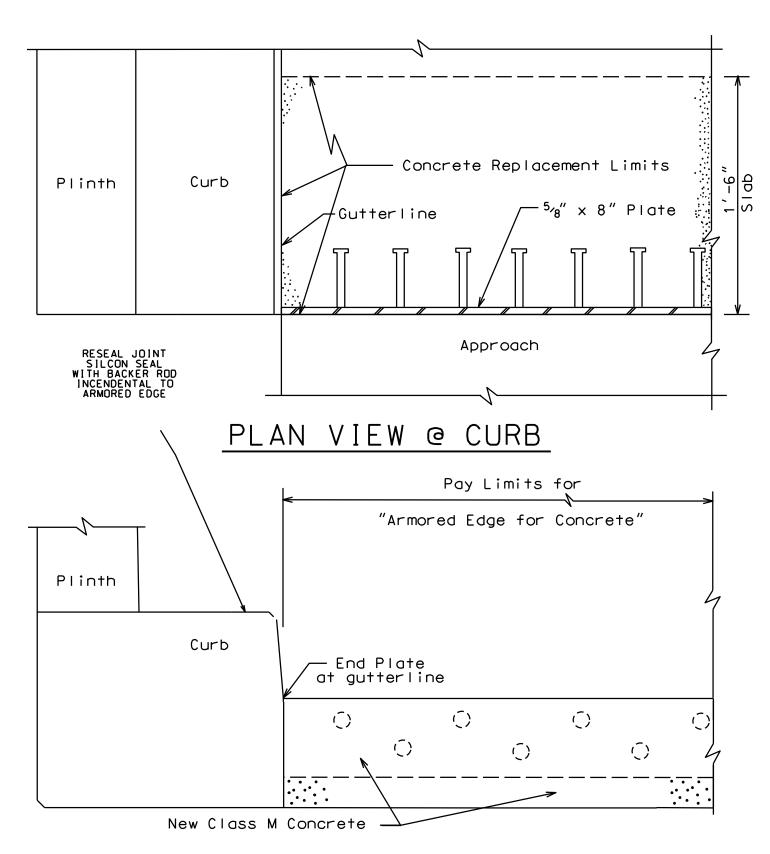
RBS

## THRU SECTION

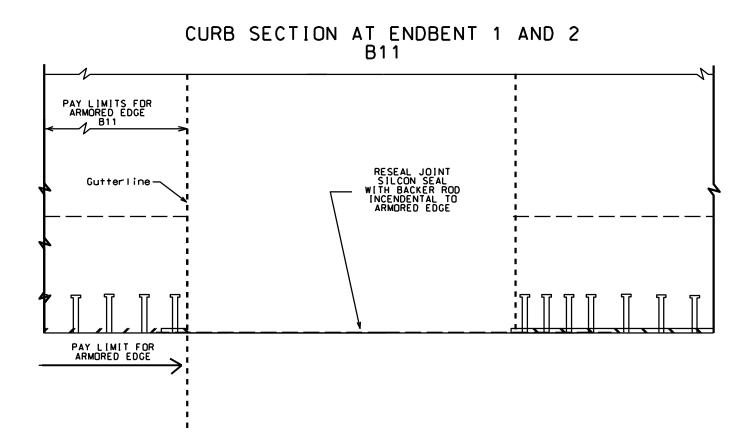
Ter	nperatu	Temperature Change	
lnc	rement	Increment per 10°F	
Concrete	ete	Stee	
Span	Incre-	updS	Incre-
Length	ment	Length	ment
(£†)	(in	( <del>†</del> †)	(ĵn)
320 - 420	3//6	180 - 240	91/6
421 - 560	1/4	241 - 320	١/4
561 - 700	5/16	321 - 365	2//6

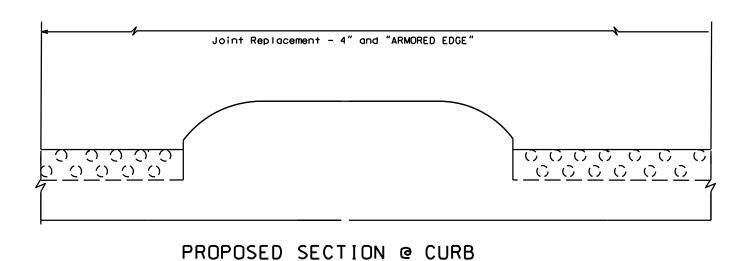
## CURB SECTION

End Bent No.1 & End Bent No.2 B11



PROPOSED SECTION @ CURB





Not to Scale

Median Proposed Section

Not to Scale

## ARMORED EDGE DETAIL

Clean & Leave Existing Steel Reinforcement in place. (Not Shown)

11" e t 10" e curb

End Bent 1 & End Bent2

Remove Hatched Area of Concrete

Clean & Leave Existing Steel Remove Hatched Area of Concrete

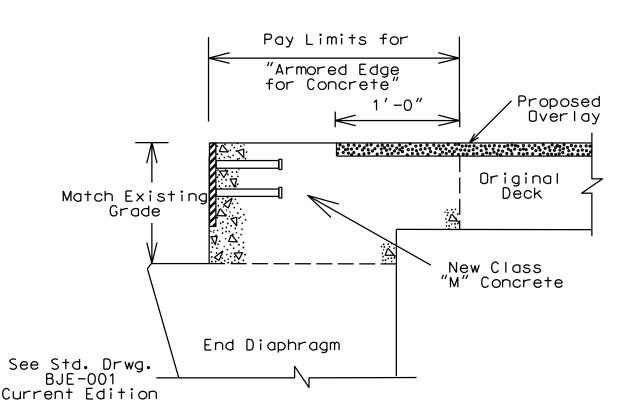
Saw Cut

Existing Overlay

Original Deck

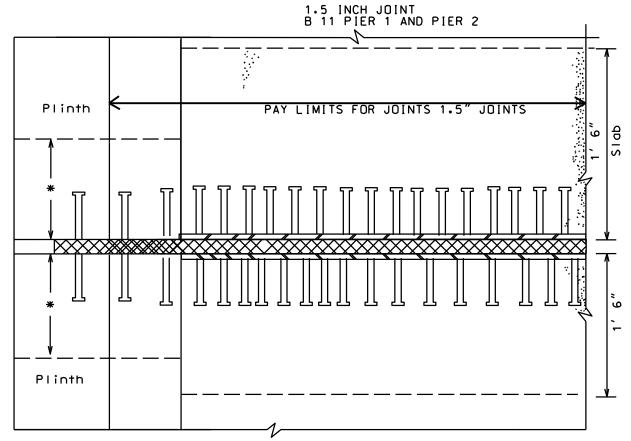
End Diaphragm

EXISTING SECTION



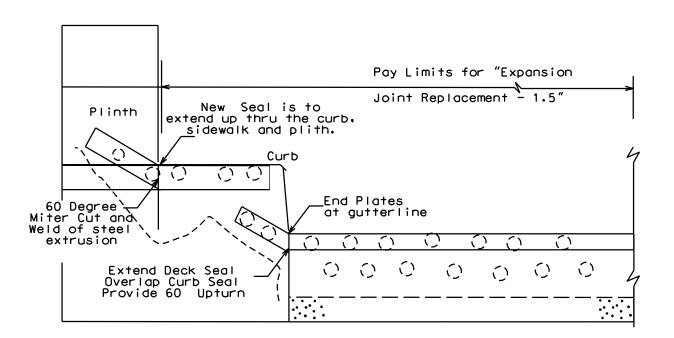
## PPOPOCED CECTION

## CURB SECTION



\* Remove and replace curb/plinth as directed by the Engineer to match proposed Expansion Joints (Incidental to "Expansion Joint Replacement").

## PLAN VIEW @ CURB

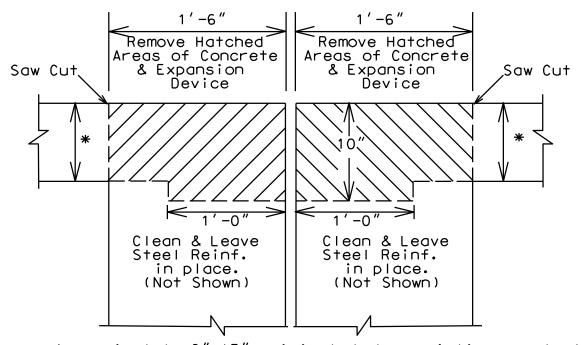


PROPOSED SECTION @ CURB

Not to Scale

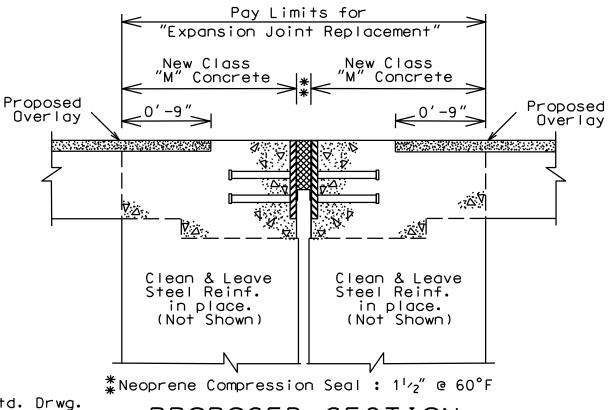
## EXPANSION DAM DETAIL

Pier No. 1. Pier No. 2



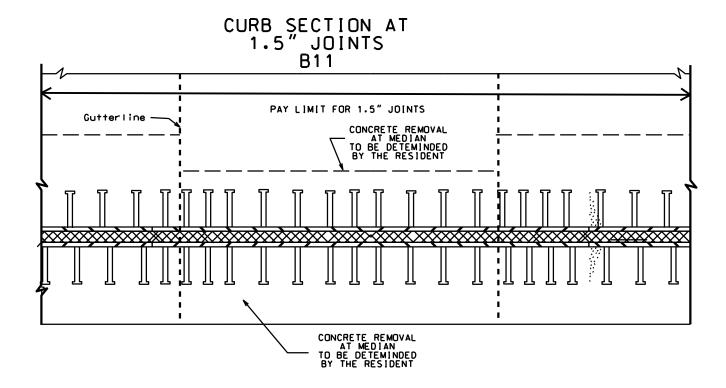
\* Approximately 8" (7" original deck + existing overlay)

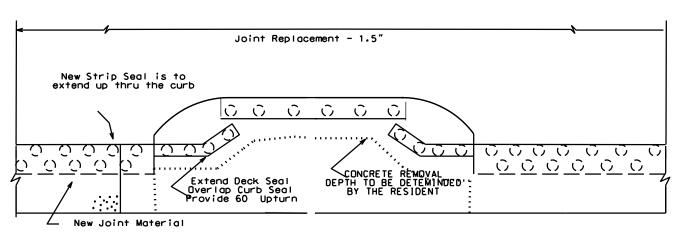
## EXISTING SECTION



See Std. Drwg. BJE-001-10

PROPOSED SECTION



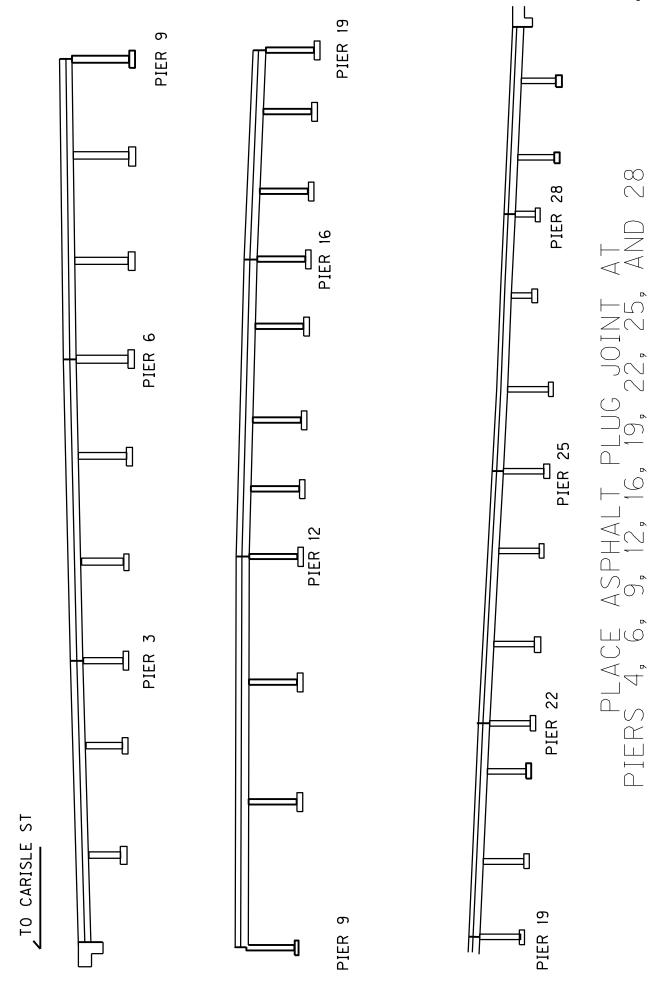


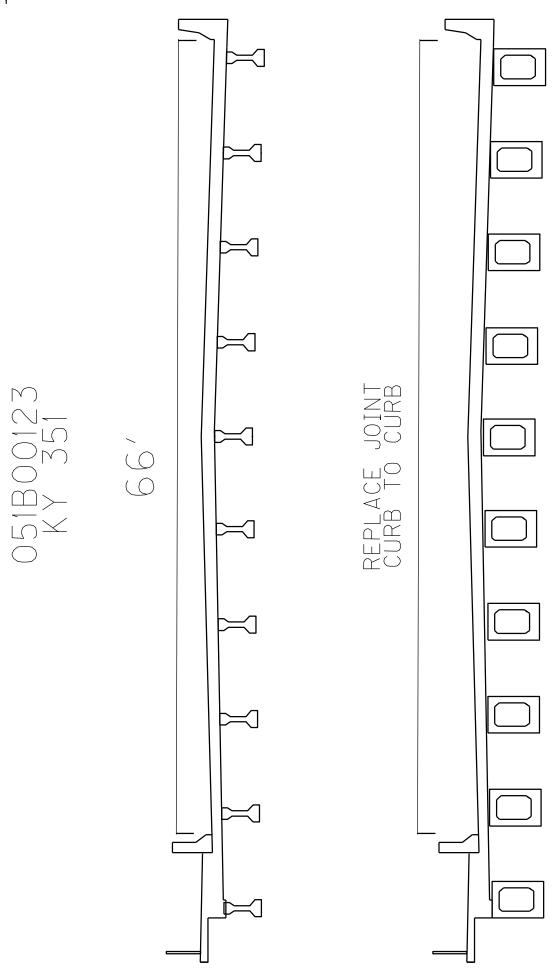
PROPOSED SECTION @ CURB

Not to Scale

Median Proposed Section

051B00123 KY 351





## **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.* 

## Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition (Effective with the July15, 2011 Letting)

CLIDGECTION	101.02 All models
SUBSECTION: REVISION:	101.02 Abbreviations.  Insert the following abbreviation and text into the section:
REVISION.	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.
GTIP GT GTT GT	
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 constant and a second
	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.  Replace the first sentence with the following:
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.

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GEIDGE CETAL	100 07 00 G
SUBSECTION: REVISION:	102.07.02 Computer Bidding. 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 ( <a href="http://transportation.ky.gov/contract/">http://transportation.ky.gov/contract/</a> ). 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:
	<ol> <li>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</li> <li>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</li> <li>any failure to comply with the provisions of Subsection 102.07; or</li> <li>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.</li> </ol>
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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CLIDCE CETON	100 10 D 11' O ' (D'1D 1
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 Planning. 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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## 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.

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	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 ( <a href="http://www.transportation.ky.gov/construction/ResCenter/ResCenter.htm">http://www.transportation.ky.gov/construction/ResCenter/ResCenter.htm</a> ).
	Replace Part A) Written Narrative 1. And 2. with the following:
	<ol> <li>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.</li> <li>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.</li> </ol>
SUBSECTION: REVISION:	109.07.01 Liquid Asphalt. Add the following to the Adjustable Contract Items:  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 <sup>th</sup> 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.

CLIDGECTION	11002016 17 67 6 4 1
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:	112.03.11 Temporary Pavement Markings.
PART:	B) Placement and Removal of Temporary Striping.
REVISION:	Replace the 2 <sup>nd</sup> 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:	112.03.15 Non-Compliance of Maintain and Control of Traffic.
REVISION:	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.

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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) <b>Water Injection System.</b> Provided each system has prior approval as specified in Subsection 402.01.01, the Department will allow the use of water injection systems for purposes of foaming the asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA).
	Ensure the equipment for water injection meets the following requirements:  1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted);  2) Injection equipment has provided a controls that introduce water ratios based on production.
	Injection equipment has variable controls that introduce water ratios based on production rates of mixtures;
	<ul> <li>3) Injects water into the flow of asphalt binder prior to contacting the aggregate;</li> <li>4) Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate.</li> </ul>
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.
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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)	d 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. Replace Title and Text with the following:				
	C) HMA, WMA and RAP Mixtures Placed on Shoulders or Placed as Asphalt Pavement Wedge.				
	1) Placed monolithically with the Mainline – Width of 4 feet or less. The Department will				
	pay as mainline mixture.  2) 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.				
	3) Placed Separately. The Department will use 1.00 for the Lane and Joint Density Pay Value.				
SUBSECTION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.				
PART:	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.				
	D) Aspirant wrixtures for Temporary Pavement.				
SUBSECTION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.				
PART: TABLES:	Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures VMA				
REVISION:	Replace the VMA table with the following:				
	VMA				
	Pay Value Deviation				
	From Minimum  1.00 > min. VMA				
	$ \begin{array}{c c} 1.00 & \geq \min. \text{ VMA} \\ \hline 0.95 & 0.1\text{-}0.5 \text{ below min.} \\ \hline \end{array} $				
	0.90 0.6-1 0 below min.				
	> 1.0 below min.				
SUBSECTION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.				
PART: TABLES:	Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures VMA				
REVISION:	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.				
	> 1.0 below mini.				

SUBSECTION: PART: TABLE: REVISION:	Lot Pay Adjustment Schedule, Compaction Option B Mixtures VMA							
	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:	<ul> <li>403.03.03 Preparation of Mixture.</li> <li>C) Mix Design Criteria.</li> <li>1) Preliminary Mix Design.</li> <li>Replace the last two sentences of the paragraph and table with the following:</li> <li>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:</li> </ul>							
						er of Gyr		]
		Class	ESAL's (millio	ons)	N <sub>initial</sub>	N <sub>design</sub>	N <sub>max</sub>	
		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:	403.03.09 Leveling and Wedging, and Scratch Course.							
PART: REVISION:	B) Scratch Cou Replace the sec		of the first paragraph	n with the	e followir	ng:		
	Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.							
SUBSECTION:	407.01 DESCRIPTION.  Parless the first contains of the personal with the following.							
REVISION:	Replace the first sentence of the paragraph with the following:  Construct a pavement wedge composed of a hot-mixed or warm-mixed asphalt mixture.							
SUBSECTION:		409.01 DESCRIPTION.						
REVISION:	Replace the firs	Replace the first sentence of the paragraph with the following:						
	Use reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) provided mixture requirements are satisfied.							
SUBSECTION:	410.01 DESCRIPTION.  Delete the second sentence of the paragraph.							
REVISION:	Delete the seco	nu sentence of	me paragraph.					

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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. Add the following sentence to the end of the first paragraph:				
REVISION.					
	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.				

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

(Effective with the July15, 2011 Letting)

	`	Elicetive with	n the July15, 2011 Le	atting)		
SUBSECTION: TABLE: REVISION:	413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.  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		
		1.00	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		
		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:	501.05.02 Ride					
REVISION:	Add the following	ng sentence to the	end of the first paragraph	:		
	The sum of the r	oav value adiustm	ents for the ride quality sh	all not exceed \$0 for the	e project as a	
	whole.	The sum of the pay value adjustments for the ride quality shall not exceed \$0 for the project as a whole.				
	505.02.04.5					
SUBSECTION: REVISION:	505.03.04 Detection	ctable Warnings. sentence with the	following:			
REVISION.	replace the first	sentence with the	o tonowing.			
	Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the					
	Standard Drawings.					
SUBSECTION: REVISION:	505.04.04 Detectable Warnings. Replace the paragraph with the following:					
REVISION.	Replace the paragraph with the following:					
	The Department will measure the quantity in square feet. All retrofit applications for maintenance					
	projects will require the removal of existing sidewalks to meet the requirements of the standard drawings applicable to the project. The cost associated with the removal of the existing sidewalk will be					
	incidental to the detectable warnings bid item or incidental to the bid item for the construction of the					
	concrete sidewalk unless otherwise noted.					
SUBSECTION:	505.05 PAYMENT.					
REVISION:	Add the following to the bid item table:					
		8				
	Code	Pay Item	Pay Unit			
	23158ES505	Detectable W	arnings Square Foot	ι		
SUBSECTION:	509.01 DESCRI					
REVISION:	Replace the seco	Replace the second paragraph with the following:				
	Research Progra the Standard Dra length, material,	m (NCHRP) 350 awings. Obtain the drain slot dimense to r less from the	e of similar units that conf Test Level 3 (TL-3) require Engineers approval prio- tions and locations typical e 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	

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

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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.

GLIDGEGEION	(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 John Scaning 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:
	<b>701.03.08 Inspection of Pipe.</b> 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:
	<b>701.04.07 Pipeline Video Inspection.</b> The Department will measure the quantity in linear feet
	along the pipe invert of the structure inspected. When inspection above the specified 50 percent is
	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 location of		<u>Pay Unit</u> Linear Foot			
SUBSECTION: TABLE: REVISION:	701.05 PAYMENT PIPE DEFLECTION DETERMIN Replace this table with the following		ING			
		PIPE DEFLECTI	ON			
	Amount of Deflection (9	%) Pa	yment			
	0.0 to 5.0	10	00% of the Unit Bid Price			
	5.1 to 9.9	50	0% of the Unit Bid Price (1)			
	10 or greater	Re	emove and Replace			
SUBSECTION:	(1) Provide Structural Analysis allowed to remain in place at the resolution 701.05 PAYMENT		ed on the structural analysis, pipe may be			
TABLE: REVISION:	PIPE DEFLECTION DETERMIN Delete this table.	ED BY MANDREL TES	TING			
SUBSECTION: REVISION:	713.02.01 Paint.					
KEVISION:	Replace with the following:					
	Conform to Section 842 and Section 846.					
SUBSECTION: REVISION:	713.03 CONSTRUCTION. Replace the first sentence of the second paragraph with the following:					
	On interstates and parkways, and other routes approved by the State Highway Engineer, install pavement striping that is 6 inches in width.					
SUBSECTION: REVISION:	713.03.03 Paint Application. Replace the second paragraph with	the following table:				
	Material	Paint Application Rate	e Glass Beads Application Rate			
	4 inch waterborne paint	Min. of 16.5 gallons/m	ile Min. of 6 pounds/gallon			
	6 inch waterborne paint	Min. of 24.8 gallons/mi				
CLIDCE CTION.	6 inch durable waterborne paint	Min. of 36 gallons/mile	Min. of 6 pounds/gallon			
SUBSECTION: REVISION:	713.03.04 Marking Removal.  Replace the last sentence of the paragraph with the following:					
	Vacuum all marking material and removal debris concurrently with the marking removal operation.					
SUBSECTION:	713.05 PAYMENT.					
REVISION:	Insert the following codes and pay items below the Pavement Striping – Permanent Paint:					
	Code Pay Item		Pay Unit			
		Linear Foot				
		rne Marking – 6 IN W	Linear Foot			
	24189ER Durable Waterbo 24190ER Durable Waterbo	rne Marking – 6 IN Y	Linear Foot			
	24189ER Durable Waterbo 24190ER Durable Waterbo					

SUBSECTION: REVISION:	714.03 CONSTRUCTION.  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:	716.02.01 Roadway Lighting Materials.
REVISION:	Replace the last two sentences of the paragraph with the following:
	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:	717 – THERMOPLASTIC INTERSECTION MARKINGS.
REVISION:	Replace the section name with the following:
	INTERSECTION MARKINGS.
SUBSECTION:	717.01 DESCRIPTION:
REVISION:	Replace the paragraph with the following:
	Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion process or by applying preformed thermoplastic intersection marking material.
SUBSECTION:	717.02 MATERIALS AND EQUIPMENT.
REVISION:	Insert the following subsection:
	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	on:		
	of failure due to blistering, exce pavement materials, drippings, of retroreflectivity, vehicular dama warranted by the manufacturer that adequately bonded to the surface Subsection 714.03.06 A) 1), retr	oving period, ensure that the pavement marking materistic scale cracking, bleeding, staining, discoloration, oil conchipping, spalling, poor adhesion to the pavement, lost use, and normal wear. Type I Tape is manufactured of the omeet certain retroreflective requirements. As long are and shows no signs of failure due to the other items coreflectivity readings will not be required. In the absorbased on a nighttime visual observation.	ontent of the s of ff site and as the material is listed in	
SUBSECTION:	717.03.06 Marking Removal.			
REVISION:	Replace the third sentence of the	e paragraph with the following:		
	Vacuum all marking material ar	nd removal debris concurrently with the marking remo	oval operation.	
SUBSECTION:	717.05 PAYMENT.			
REVISION:	Insert the following bid item coo	des:		
	Codo	Pay Unit	Pay Item	
	Code 06563	Pave Marking – R/R X Bucks 16 IN	Linear Foot	
	20782NS714	Pave Marking Thermo – Bike	Each	
	23251ES717, 23264ES717	Pave Mark TY I Tape X-Walk, Size	Linear Foot	
	23252ES717, 23265ES717	Pave Mark TY I Tape Stop Bar, Size	Linear Foot	
	23253ES717 Pave Mark TY I Tape Cross Hatch Square Foot			
	23254ES717	Pave Mark TY I Tape Dotted Lane Extension	Linear Foot	
	23255ES717	Pave Mark TY I Tape Arrow, Type	Each	
	23268ES717-23270ES717	1 / 1		
	23256ES717	Pave Mark TY I Tape- ONLY	Each	
	23257ES717	Pave Mark TY I Tape- SCHOOL	Each	
	23266ES717	Pave Mark TY 1 Tape R/R X Bucks-16 IN	Linear Foot	
	23267ES717	Pave Mark TY 1 Tape-Bike	Each	
SUBSECTION:	725.02.02 Type VI Class C & C	T		
REVISION:	Replace bullet 2) with the follow			
	,			
	miscellaneous metal w For the SCI100GM fer	m as developed by SCI Products, Inc. of St. Charles, I york conform to ASTM A 36 and galvanize according nder panels conform to AASHTO 180. Galvanize the I beam connectors after fabrication according to AST	to ASTM A 123. SCI100GM fender	
SUBSECTION:	725.02.04 Type VII Class C.			
<b>REVISION:</b>	Replace bullet 2) with the follow			
	2) The SCI100GM System as developed by SCI Products, Inc. of St. Charles, Illinois. For all miscellaneous metal work conform to ASTM A 36 and galvanize according to ASTM A 123. For the SCI100GM fender panels conform to AASHTO 180. Galvanize the SCI100GM fender			
		I-beam connectors after fabrication according to AST		
SUBSECTION:	801.01 REQUIREMENTS.			
REVISION:		e first paragraph and add the following to the second p	oaragraph.	
		SO <sub>3</sub> content above the value in table I of ASTM C 150 ay expansion test data for the supplied SO <sub>3</sub> content on		

SUBSECTION:	805.01 GENERAL.
REVISION:	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:	805.04 CONCRETE.  Replace the "AASHTO T 160" reference in first sentence of the third paragraph with "KM 64-629"
SUBSECTION: TABLE: PART: REVISION:	805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE. AGGREGATE SIZE USE Cement Concrete Structures and Incidental Construction Replace "9-M for Waterproofing Overlays" with "8 or 9-M for Waterproofing Overlays"

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

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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	IZES (	SIZES OF COARSE AGGREGATES	RSE AC	GGREG	ATES							
	Sieve		Al	NOUNTS	AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT	AN EACH	I LABORAT	ORY SII	EVE (SQU,	ARE OPEN	INGS) PEF	CENTAG	E BY WEI	GHT			
Aggregate Size	Nominal <sup>(3)</sup> Maximum Aggregate Size	4 inch	3 1/2 inch	3 inch	2 1/2 inch	2 inch	1 1/2 inch	1 inch	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
1	3 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 ½ inch					100	90-100	20-55	0-15		0-5						
467	1 ½ inch					100	95-100		35-70		10-30	0-5					
5	1 inch						100	90-100	20-55	0-10	0-5						
57	1 inch						100	95-100		25-60		0-10	0-5				
610	1 inch						100	85-100		40-75		15-40					
67	3/4 inch							100	90-100		20-55	0-10	0-5				
68	3/4 inch							100	90-100		30-65	5-25	0-10	0-5			
710	3/4 inch							100	80-100		30-75	0-30					
78	1/2 inch								100	90-100	40-75	5-25	0-10	0-5			
8	3/8 inch									100	85-100	10-30	0-10	0-5			
9-M	3/8 inch									100	75-100	0-25	0-5				
$10^{(2)}$	No. 4										100	85-100				10-30	
11(2)	No. 4										100	40-90	10-40			0-5	
DENSE GRADED AGGREGATE (1)	3/4 inch							100	70-100		50-80	30-65			10-40		4-13
CRUSHED STONE BASE (I)	1 ½ inch				100		90-100		60-95		30-70	15-55			5-20		0-8
(I)	C I : C III : C CO MINISTER TIMES					111	1										

© 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.

SUBSECTION: REVISION:	805.16 SAMPLING AND TESTING. Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion Test.
	Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.
SUBSECTION: REVISION:	810.04.01 Coating Requirements. Replace the "Subsection 806.07" references with "Subsection 806.06"
SUBSECTION: PART: REVISION:	810.06.01 Polyvinyl Chloride (PVC) Pipe. B) Culvert and Entrance Pipe. Replace the title with the following: B) Culvert Pipe, Storm Sewer, and Entrance Pipe.
SUBSECTION: REVISION:	823.02 LIQUID MEMBRANE FORMING COMPOUNDS. Add the 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 Evaluation Program (NTPEP) for Concrete Curing Compounds.
SUBSECTION: REVISION:	837.03 APPROVAL. Replace the last sentence with the following:  The Department will sample and evaluate for approval each lot of thermoplastic material delivered 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 Department a minimum of 10 working days to evaluate and approve thermoplastic material.
SUBSECTION: REVISION:	837.03.01 Composition.  COMPOSITION Table: Replace Lead Chromate with Heavy Metals Content  Comply with 40 CFR 261
SUBSECTION: TABLE: REVISION:	842.02 APPROVAL. PAINT COMPOSITION Revise the following in the table:  Replace the 2.0ΔE* values in the table with 4.0ΔE* for both Yellow and White Paint on both the Daytime and Nighttime Color Spectrophotometer.
SECTION: REVISION:	DIVISION 800 MATERIAL DETAILS Add the following section in Division 800  SECTION 846 – DURABLE WATERBORNE PAINT
	<b>846.01 DESCRIPTION.</b> This section covers quick-drying durable waterborne pavement striping paint for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete, bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.
	<b>846.02 Approval.</b> Select materials that conform to the composition requirements below. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping

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

(Effective with the July15, 2011 Letting)

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*	4.0∆E*
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*	4.0∆E*
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 <sub>2</sub>	VOC	Heavy Metals Content
Reduction Rate	60%	10%	10%	10%	60%	60%

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

(Effective with the July15, 2011 Letting)

TABLUATION OF CONSTRUCTION TOLERANCES. **APPENDIX A:** PART: 601.03.03 **REVISION:** Replace with the following: Concrete accuracy of individual ingredient material for each batch.  $\pm$  2.0% for aggregates  $\pm$  1.0% for water  $\pm$  1.0% for cement in batches of 4 cubic yards or greater  $\pm$  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  $\pm$  3.0% for admixtures **APPENDIX A:** TABLUATION OF CONSTRUCTION TOLERANCES. PART: 601.03.03 C) 2) **REVISION:** Delete

### **PART III**

## EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

HENDERSON COUNTY 051GR12M03-FE02

# 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

HENDERSON COUNTY 051GR12M03-FE02

#### **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: <a href="https://www.eProcurement.ky.gov">https://www.eProcurement.ky.gov</a>.

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: KY120127 02/10/2012 KY127

Superseded General Decision Number: KY20100214

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster 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 Nu	ımber Publication	Date
0	01/06/2012	
1	01/13/2012	
2	02/10/2012	

BRIN0004-002 06/01/2011

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

F	Rates	Fringes
BRICKLAYER		
Ballard, Caldwell,		
Carlisle, Crittenden,		
Fulton, Graves, Hickman,		
Livingston, Lyon,		
Marshall, and McCracken		
Counties\$	24.11	10.30
Butler, Edmonson, Hopkins,		
Muhlenberg, and Ohio		
Counties\$	24.61	10.22
Daviess, Hancock,		
Henderson, McLean, Union,		
and Webster Counties\$	28.47	12.78

BRTN0004-005 05/01/2009

ALLEN, CALLOWAY, CHRISTIAN, LOGAN, SIMPSON, TODD, TRIGG, and WARREN COUNTIES

Rates Fringes

BRICKLAYER	\$ 24.52	1.83
CARP0357-002 07/01/2011		
	Rates	Fringes
CARPENTER		13.22
Diver PILEDRIVERMAN		13.22 13.22
ELEC0369-006 06/01/2011		
BUTLER, EDMONSON, LOGAN, TODD	& WARREN COUNT	IES:
	Rates	Fringes
ELECTRICIAN	\$ 29.27	13.33
ELEC0429-001 02/01/2010		
ALLEN & SIMPSON COUNTIES:		
	Rates	Fringes
ELECTRICIAN	\$ 21.85	10.35
ELECO016 002 06/01/2011		
ELEC0816-002 06/01/2011 BALLARD, CALDWELL, CALLOWAY, C.	ARLISLE, CHRIS	TIAN, CRITTENDEN,
	of City Hall	in Fulton), GRAVES,
BALLARD, CALDWELL, CALLOWAY, C. FULTON (Except a 5 mile radius	of City Hall	in Fulton), GRAVES,
BALLARD, CALDWELL, CALLOWAY, C. FULTON (Except a 5 mile radius	of City Hall SHALL, MCCRACK Rates	in Fulton), GRAVES, EN & TRIGG COUNTIES Fringes
BALLARD, CALDWELL, CALLOWAY, C FULTON (Except a 5 mile radius HICKMAN, LIVINGSTON, LYON, MAR	of City Hall SHALL, MCCRACK Rates\$ 29.47	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes  25.5%+5.35
BALLARD, CALDWELL, CALLOWAY, C. FULTON (Except a 5 mile radius HICKMAN, LIVINGSTON, LYON, MAR	of City Hall SHALL, MCCRACK Rates\$ 29.47	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes  25.5%+5.35
BALLARD, CALDWELL, CALLOWAY, C. FULTON (Except a 5 mile radius HICKMAN, LIVINGSTON, LYON, MAR ELECTRICIAN	of City Hall SHALL, MCCRACK Rates\$ 29.47 hour addition	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes  25.5%+5.35  al.
BALLARD, CALDWELL, CALLOWAY, CALLOWAY, CALDWELL, CALLOWAY, CALLOWA	of City Hall SHALL, MCCRACK Rates\$ 29.47 hour addition	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes  25.5%+5.35  al.
BALLARD, CALDWELL, CALLOWAY, CALLOWAY, CALDWELL, CALLOWAY, CALLOWA	of City Hall SHALL, MCCRACK Rates\$ 29.47 hour addition OPKINS, MCLEAN Rates	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes 25.5%+5.35  al. , MUHLENBERG, OHIO,
BALLARD, CALDWELL, CALLOWAY, C. FULTON (Except a 5 mile radius HICKMAN, LIVINGSTON, LYON, MAR  ELECTRICIAN	of City Hall SHALL, MCCRACK  Rates\$ 29.47  hour addition OPKINS, MCLEAN  Rates\$ 29.02	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes 25.5%+5.35  al
BALLARD, CALDWELL, CALLOWAY, CALLOWA	of City Hall SHALL, MCCRACK  Rates\$ 29.47  hour addition OPKINS, MCLEAN  Rates\$ 29.02	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes 25.5%+5.35  al
BALLARD, CALDWELL, CALLOWAY, CALLOWA	of City Hall SHALL, MCCRACK Rates\$ 29.47 hour addition OPKINS, MCLEAN Rates\$ 29.02 hour addition	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes 25.5%+5.35  al.  , MUHLENBERG, OHIO,  Fringes 13.44  al.
BALLARD, CALDWELL, CALLOWAY, CALLOWA	of City Hall SHALL, MCCRACK Rates\$ 29.47 hour addition OPKINS, MCLEAN Rates\$ 29.02 hour addition	in Fulton), GRAVES, EN & TRIGG COUNTIES  Fringes 25.5%+5.35  al.  , MUHLENBERG, OHIO,  Fringes 13.44  al.

#### ENGI0181-017 07/01/2011

	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 equals or exceeds 150 ft. - \$1.00 above Group 1

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT

\_\_\_\_\_

IRON0070-005 06/01/2011

BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford); EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden)

> Rates Fringes

Ironworkers:

Structural; Ornamental; Reinforcing; Precast

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Concrete Erectors.....\$ 25.77 18.28

IRON0103-004 04/01/2011

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES

BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns); CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune); MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise,

> Rates Fringes

Ironworkers:.....\$ 28.25

IRON0492-003 05/01/2009

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury); CHRISTIAN COUNTY (Eastern two-thirds, including the Townships

Powderly, South Carrollton, Tarina & Weir)

of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);
EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);
MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood)

	Rates	Fringes
Ironworkers:	\$ 22.50	9.60
TDONO702 006 05 /01 /2011		

IRON0782-006 05/01/2011

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told)

	Rates	Fringes
Ironworkers:		
Projects with a total		
contract cost of		
\$20,000,000.00 or above	\$ 26.00	17.42
All Other Work	\$ 24.66	16.29

LABO0189-005 07/01/2011

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES

	F	Rates	Fringes
Laborers:			
GROUP	1\$	20.38	11.28
GROUP	2\$	20.63	11.28
GROUP	3\$	20.68	11.28
GROUP	4\$	21.28	11.28

#### LABORER 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; Blaster; 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

LABO0189-006 07/01/2011

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	21.51	10.15
GROUP	2\$	21.76	10.15
GROUP	3\$	21.81	10.15
GROUP	4\$	22.41	10.15

#### LABORER 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; Blaster; 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

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	F	Rates	Fringes
Laborers:			
GROUP	1\$	20.61	11.05
GROUP	2\$	20.86	11.05
GROUP	3\$	20.91	11.05
GROUP	4\$	21.51	11.05

#### LABORER CLASSIFICATIONS

LABO0561-001 07/01/2011

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; Blaster; 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

DATE 0000 000 05 /01 /0010

PAIN0032-002 05/01/2010

#### BALLARD COUNTY

	Rates	Fringes
Painters: Bridges	\$ 30.56	13.95
All Other Work	•	13.95
Spray, Blast, Steam, High & Ha Abatement) and All Epoxy - \$1		ng Lead
PAIN0118-003 05/01/2010		

#### EDMONSON COUNTY:

	Rates	Fringes	
Painters: Brush & Roller	\$ 18.50	10.30	
Spray, Sandblast, Power Tools, Waterblast & Steam	·	20.00	
Cleaning	\$ 19.50 	10.30	

PAIN0156-006 04/01/2010

DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES

	-	Rates	Fringes
Painters:			
BRIDGES	5		
GROUP	1\$	25.60	10.05
GROUP	2\$	25.85	10.05
GROUP	3\$	26.60	10.05
GROUP	4\$	27.60	10.05
ALL OT	HER WORK:		
GROUP	1\$	25.60	11.30
GROUP	2\$	25.85	11.30

GROUP	3\$	26.60	11.30
GROUP	4\$	27.60	11.30

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast; Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

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PAIN0456-003 07/01/2011

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN COUNTIES:

I	Rates	Fringes
Painters:		
BRIDGES		
Brush & Roller\$	22.55	9.65
Spray; Sandblast; Power		
Tools; Waterblast & Steam		
Cleaning\$	23.55	9.65
ALL OTHER WORK		
Brush & Roller\$	17.55	9.65
Spray; Sandblast; Power		
Tools; Waterblast & Steam		
Cleaning\$	18.55	9.65

ALL OTHER WORK - HIGH TIME PAY
Over 35 feet (up to 100 feet) - \$1.00 above base wage
100 feet and over - \$2.00 above base wage

DURING SPRAY PAINTING AND SANDBLASTING OPERATIONS, POT TENDERS SHALL RECEIVE THE SAME WAGE RATES AS THE SPRAY PAINTER OR NOZZLE OPERATOR

PAIN0500-002 07/01/2011

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

F	Rates	Fringes
Painters: Bridges\$	25.25	11.55
All Other Work\$	19.00	11.55

Waterblasting units with 3500 PSI and above - \$.50 premium Spraypainting and all abrasive blasting - \$1.00 premium Work 40 ft. and above ground level - \$1.00 premium

DITM0104 000 07/01/0011

PLUM0184-002 07/01/2011

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN and TRIGG COUNTIES

	Rates	Fringes
Plumber; Steamfitter	.\$ 31.45	13.99
PLUM0502-004 08/01/2011		

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes
Plumber; Steamfitter	\$ 31.00	16.13
PLUM0633-002 07/01/2011		

DAVIESS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:

	Rates	Fringes
PLUMBER/PIPEFITTER	\$ 29.22	12.65

<sup>\*</sup> TEAM0089-003 03/27/2011

Zone 1: ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON, & WARREN COUNTIES

Zone 2: BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD, & TRIGG COUNTIES
Zone 3: DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN,

Zone 3: DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN MUHLENBERG, OHIO, & WEBSTER COUNTIES

	Rates	Fringes				
Truck drivers:	Truck drivers:					
ALLEN, BUTLER, EDMONSON,						
LOGAN, SIMPSON & WARREN						
COUNTIES:						
Group 1	\$ 19.04	12.02				
Group 2	\$ 19.37	12.02				
Group 3	\$ 19.44	12.02				
Group 4	\$ 19.45	12.02				
Group 5	\$ 19.50	12.02				
Zone 1:						
Group 1	\$ 19.38	7.30+A				
Group 2		7.30+A				
Group 3	\$ 19.64	7.30+A				
Group 4	\$ 19.66	7.30+A				
Zone 2:						
Group 1	\$ 26.09	A				
Group 2	\$ 27.32	A				

Group 3\$	26.89	A
Group 4\$	27.40	A
Group 5\$	27.39	A
Zone 3:		
Group 1\$	20.93	7.30+A
Group 2\$	21.16	7.30+A
Group 3\$	21.23	7.30+A
Group 4\$	21.24	7.30+A

#### A - \$246.70 per week

#### TRUCK DRIVER CLASSIFICATIONS FOR ZONE 1:

#### GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

#### GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

#### TRUCK DRIVER CLASSIFICATIONS FOR ZONE 2:

GROUP 1 - Greaser; Tire Changer

#### GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump; Flat Bed; all Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 4 - Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier

GROUP 5 - Mixer All Types

#### TRUCK DRIVER CLASSIFICATIONS FOR ZONE 3:

GROUP 1 - Greaser, Tire Changer

#### GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump; Flat Bed; all Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4 - Euclid and Other Heavy Earth moving Equipment; Lowboy; Articulator Cat; 5 Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on 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 (29CFR 5.5 (a) (1) (ii)).

\_\_\_\_\_\_

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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#### 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
- \* 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 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.

Contract ID: 122650 Page 14 of  $14^{\text{page }112}$  of 118

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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-I-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**

#### Contract ID: 122650 Page 115 of 118

#### **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: 122650 Page 117 of 118

#### KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 122650

COUNTY: HENDERSON

PROPOSAL: 051GR12M03-FE02

PAGE: 1 LETTING: 03/23/12 CALL NO: 424

LINE	   ITEM 	DESCRIPTION	APPROXIMATE UNIT	UNIT   PRICE	AMOUNT
	SECTION 0001	BRIDGE	<u>'</u>	<u></u>	
0010	  02014 	BARRICADE-TYPE III	14.000 EACH	 	
0020	02562 	SIGNS	1,165.000 SQFT		
0030	02650 	MAINTAIN & CONTROL TRAFFIC B 10	( 1.00) LS		
0040	02650 	MAINTAIN & CONTROL TRAFFIC B 11	( 1.00) LS 		
0050	02650	MAINTAIN & CONTROL TRAFFIC B 123	( 1.00) LS		
0060	02671   	PORTABLE CHANGEABLE MESSAGE SIGN	7.000 EACH		
0070	02775   	ARROW PANEL	4.000 EACH		
0800	03294   	EXPAN JOINT REPLACE 1 1/2 IN	69.000 LF		
0090	03295	EXPAN JOINT REPLACE 2 IN	63.500 LF		
0100	03298	EXPAN JOINT REPLACE 4 IN	63.500 LF		
0110	03299	ARMORED EDGE FOR CONCRETE	170.000 LF		
0120	03304	BRIDGE OVERLAY APPROACH PAVEMENT	1,867.000 SQYD		
0130	06514	PAVE STRIPING-PERM PAINT-4 IN	2,515.000 LF		
0140	08150	STEEL REINFORCEMENT	1,068.800 LB		
0150	08504	EPOXY SAND SLURRY	670.000 SQYD		
0160	08526 	CONC CLASS M FULL DEPTH PATCH	13.000 CUYD	   	
0170	08534 	CONCRETE OVERLAY-LATEX	124.000 CUYD		
0180	08549 	BLAST CLEANING	2,580.000 SQYD		
0190	08550	HYDRODEMOLITION	1,910.000 SQYD		
0200	24094EC 	PARTIAL DEPTH PATCHING	48.000 CUYD		

#### Contract ID: 122650 Page 118 of 118

# KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

CONTRACT ID: 122650 PAGE: 2
COUNTY: HENDERSON LETTING: 03/23/12

PROPOSAL: 051GR12M03-FE02 CALL NO: 424

LINE NO	ITEM 	DESCRIPTION		APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	24105EC 	ASPHALT PLUG JOINT		605.000 LF		
	SECTION 0002	DEMOBILIZATION				
0220	02569 	DEMOBILIZATION	(AT LEAST 1.5%)	LUMP	   	
		TOTAL BID		   		