



CALL NO. 407

CONTRACT ID. 123131

METCALFE COUNTY

FED/STATE PROJECT NUMBER 085GR12R090-CB06

DESCRIPTION VARIOUS ROUTES IN METCALFE COUNTY

WORK TYPE ASPHALT RESURFACING

PRIMARY COMPLETION DATE 6/30/2013

LETTING DATE: August 17, 2012

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 17, 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 - 123131 ADMINISTRATIVE DISTRICT - 03

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - METCALFE
085GR12R090-CB06 VARIOUS ROUTES IN METCALFE COUNTY

COUNTY - METCALFE PES - 0308505431201
CB06 085 0543 000-004
TOBY HILL ROAD (KY 543) FROM KY 1243 (MP 0.000) EXTENDING EAST TO US 68 (MP 3.606), A
DISTANCE OF 3.61 MILES. ASPHALT RESURFACING.
GEOGRAPHIC COORDINATES LATITUDE 37^02'53" LONGITUDE 85^37'54"
AVERAGE DAILY TRAFFIC - 241 AVERAGE MAINLINE WIDTH - 17.0 FEET

COUNTY - METCALFE PES - 0308532341202
CB06 085 3234 000-002
OLD GLASGOW ROAD (KY 3234) FROM KY 640 (MP 0.000) EXTENDING EAST TO DRY FORK ROAD (MP 1.
640), A DISTANCE OF 1.64 MILES. ASPHALT RESURFACING.
GEOGRAPHIC COORDINATES LATITUDE 36^59'40" LONGITUDE 85^40'51"
AVERAGE DAILY TRAFFIC - 499 AVERAGE MAINLINE WIDTH - 21.7 FEET

COMPLETION DATE(S):
COMPLETION DATE - June 30, 2013
APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

SPECIAL NOTE FOR PIPE INSPECTION

Contrary to Section 701.03.08 of the 2012 Standard Specifications for Road and Bridge Construction and Kentucky Method 64-114, certification by the Kentucky Transportation Center for prequalified Contractors to perform laser/video inspection is not required on this contract. It will continue to be a requirement for the Contractor performing any laser/video pipe inspection to be prequalified for this specialized item with the Kentucky Transportation Cabinet-Division of Construction Procurement.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN 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 <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

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

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.

03/01/2011

ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

SPECIAL PROVISION FOR WASTE AND BORROW SITES (KY 543)

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites
01/02/2012



Royston Division
Chase Corporation
128 First St. (Blawnox)
Pittsburgh, PA 15238
Phone 412-828-1500
Fax 412-828-4826

Bridge Membrane Installation Guide

The following is the proper procedure to use when installing Royston bridge deck membranes. This guide will cover the recommended tools to use, deck preparation and membrane installation.

Recommended Tools for Installation:

1. Lambs wool roller, squeegee or airless spray equipment
2. Utility knife, screw driver, hammer, one inch trowel
3. Chalk line, tape measure
4. 6-foot broom handle or equivalent
5. Propane torch with rosebud tip
6. Jiffy Mixer Blade
7. ½ inch (12.7mm) Drill
8. Gloves, rags and clean-up solvents

The above may not be all the tools that an individual installer may need, but is recommended for proper installation.

ROYSTON MATERIALS NEEDED

1. Royston Bridge Deck Membrane
2. Royston Primer/Adhesive
3. Royston Flex-Flo Adhesive Sealant (FFAS) or 104CM (Caulkable Mastic)

PACKAGING AND STORAGE

Royston membranes are packaged in a reflective, high optical density material that provides protection from ultra-violet light during outdoor storage. However, it is recommended that the product be stored in a cool, dry place away from direct sunlight. Exposure to direct sunlight for extended periods will make the membrane compound very tacky and difficult to work with, however when the ambient temperature falls below 55°F (12.8°C), keep the membrane in the sun to enhance the tackiness of the compound.

Royston Primer/Adhesives should be stored in a cool dry place until used.

Royston Flex-Flo Adhesive Sealant (FFAS) or 104CM must be stored in a warm place **55°F (12.8°C) or above** at all times before use.

DECK PREPARATION

Royston membranes can be placed over many types of surfaces including concrete, asphalt, wood, or steel.

DECK TYPES

1. New concrete decks must be properly cured for a minimum of seven (7) days, unless the agency specification differs, then the agency specification takes precedence.
 - A. The Concrete surface must be smooth or a broom finish.
2. Existing concrete decks must be structurally sound.
 - A. All concrete repairs shall be done in accordance with agency specification materials and procedure.
 - B. Concrete surface must not have any irregularities deeper than ¼ inch (6.35mm) depth.
 - C. All old membrane must be removed.

- D. Grooves in the deck as a result of milling operation shall not exceed ¼ inch (6.35mm) depth.
3. Asphalt bridge decks must be structurally sound.
- A. All asphalt repairs shall be done in accordance with agency specification materials and procedure.
- B. When milling existing asphalt irregularities shall not exceed ¼" (6.35 mm) depth.
3. Wooden bridge decks do, on occasion, require membrane waterproofing.
- A. A leveling scratch course will be placed on the wood deck to provide a smooth surface.
4. Steel bridge decks require waterproofing.
- A. Guidelines for steel deck installations shall be in accordance with agency specifications.
5. Box Culverts (new construction)
- A. Application of membrane installation shall be the same as a concrete deck.
- B. The vertical face of the culvert shall have a 6 inch (152.4mm) turn-down of the membrane.
- C. The 6 inch (152.4mm) termination edge must be sealed with either FFAS or 104CM.

DECK PREPARATION PROCEDURES

The deck must be clean, dry, and free of all loose debris and moisture.

New Asphalt surfaces and/or leveling scratch courses do not need Royston Primer/Adhesives.

DECK MOISTURE CONTENT

Concrete decks that have received a high level of rain require that the moisture in the deck be checked to prevent membrane blistering. Use the plastics sheet method to determine moisture content. Maximum moisture content will be not greater than 4%.

ROYSTON PRIMER/ADHESIVE INSTALLATION

1. Royston offers several Primer/Adhesives.
- A. **713A** is the general purpose.
- B. **713B** is it is a low VOC primer where required under current agency specifications.
- C. **740** is the high tack Adhesive for ambient temperatures below 45°F.(7.2°C)
- D. **750** is the spray-able Adhesive.
2. Refer to all Technical Data and MSDS sheets shipped with each order.
3. Thoroughly mix the Primer/Adhesives using a ½ inch (12.7mm) drill with a jiffy mixer.
4. Application rate per gallon is as follows for the different Adhesive:
- | | |
|----------------------|-----------------------------------------|
| 713A&713B | 200 to 300 sq. ft. (18.58m2 to 27.87m2) |
| 740 | 150 to 200 sq. ft. (13.94m2 to 18.58m2) |
| 750 | 250 to 300 sq. ft. (22.23m2 to 27.87m2) |
5. The primer must dry to the touch, which takes approximately 30 minutes on a 70°F (21.1°C) degree day.
- A. Only apply the Adhesive/Primer to the deck area which is to be covered within 24 hours.

713A, 713B, and 740 are applied using a roller, brush, or squeegee. **750** is sprayed using equipment such as a Graco 30-1 sprayer or equal with a 6 degree x .035 tip.

ELIMINATE ALL PUDDLEING.

ADHESIVE SEALANT APPLICATION

Apply **Royston Flex-Flo Adhesive Sealant (FFAS) or 104CM** to all perimeter areas where the membrane will terminate such as curbs, parapet walls, abutments, joints and drains. Refer to Deck preparation procedure listed above. Note: 104CM is used for terminations only and not to be used underneath membrane.

1. Apply a four inch bed of material 60 mils thick, where the vertical face of the curb meets the deck.
2. For scuppers and drains apply a four inch bed of material 60 mils thick around and into the scupper or drain a minimum of 1".

MEMBRANE APPLICATION

1. Application of the membrane can start once the FFAS/104CM and Royston Primer/Adhesive is dry. On crowned deck surfaces, place membrane sheets in a "shingle" fashion working from the curbside to the center crown. On flat deck surfaces, start at one curb and proceed across to the other. Measure the width of the deck in at least three places and divide the widest number by 44 ½ inches (1130.3mm) for the number of sheets it will take to cover the deck width.

Note: 104CM is used for terminations only and not to be used underneath membrane.

2. Start the roll with the **Zip Strip** away from the curb.
3. Roll out the membrane with the release liner side down. Remove the release liner from the bottom by pulling the liner at 45° angle. This helps to keep tension on the membrane as it lays down minimizing the wrinkles and eliminating air pockets. Once the roll is down push the membrane into good contact with the deck using a push broom or a hand roller. Make sure the edge at the curb is embedded in the FFAS/104CM.
 - A. All additional rolls are to be overlapped in a shingle fashion utilizing 3 ½ inch (88.9mm) zip strip as a guide.
 - B. With the installation of each roll of membrane push the membrane into good contact with the deck using a push broom or hand roller to minimize wrinkles and air pockets.
 - C. As each roll is placed, the final step is to pull the zip strip release liner from the roll. When reaching the crown of the bridge ensure there is clean and dry membrane to terminate with a 3 ½" (88.9mm) overlap.
 - D. When terminating the membrane at the crown, ensure that there is an overlap of the adjoining membrane with a minimum of 3 ½" (88.9mm)
 - E. All longitudinal sections of membrane terminations shall be staggered and heat sealed with a 6 inch (152.4mm) overlap.
 - F. Should heat sealing not be an option, then the use of either FFAS or 104CM shall be used as noted in item E.

Heat Sealing is the process of taking a propane torch and waving it over the area you want to seal, looking for the point when the top of the membrane shows signs of melting. Getting the technique down should not take a long time, but make sure you are not applying too much heat and melting through the membrane. The domestic type propane torches are too small and no effective in heat sealing. A unit that uses a 20 lb. (9.07kg) propane bottle does a good job and quickly.

A. All edges that are overlapped without a Zip Strip must be heat sealed or sealed with FFAS/104CM.

4. **Patches:** Trapped stones under the membrane must be removed so not to puncture the membrane when the asphalt is placed. Remove the stone, by making a C shaped cut around the stone. Peel back the membrane, remove the stone then push the membrane back into place. Cut a 6 inch (152.4mm) by 6 inch (152.4mm) patch from a piece of membrane to cover the cut. Place it over the cut and then heat seal the patch. Similarly, cuts, nicks, gouges, rips, tears, etc., are to be repaired using the same procedure.
5. **Curb Strips:** If required by specification, are positioned so the curb strip edge is ½ inch below the top of the proposed wearing surface. Royston Primer/Adhesives are to be applied on the vertical curb surface, to the termination of the curb strip. Establish a reference by striking a chalk line. (For Example: If 6 inch (152.4mm) wide curb strips and the wearing surface 2-1/2 inches (63.5mm) deep are specified, strike a chalk line on the deck 4 inches (101.6mm) from the curb. Align the edge of the 6 inch (101.6mm) wide strip with the chalk line, smooth and press the strip toward the curb, and tightly into the corner, then up the vertical curb for 2 inches (50mm) to the pre-established height of ½ inch (12.7mm) below the final pavement). Curb Strips can be installed before or after the deck membrane is installed, but it does not change the curb detail involving the Flex Flo Adhesive sealant. Heat

sealing the curb strip to the deck membrane and to the curb is required. Use a small trowel to press the vertical edge against the curb as you are heating it. Again, make sure you are not over heating the membrane.

6. The Asphalt Overlay needs to be applied as soon as possible after the membrane installation to avoid damage to the membrane. The minimum asphalt temperature is 290°F (143.3°C).



TECHNICAL INFORMATION

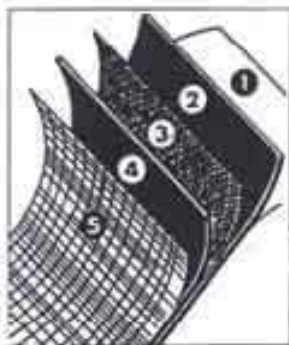
ROYSTON BRIDGE MEMBRANE - 10AN EASY PAVE**CSI Section 071326
No. 514**

ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE is a prefabricated reinforced laminate consisting of an impregnated fiberglass, non-woven, high strength inner mat sandwiched between layers of a polymer modified bitumen. An "open" spun-bonded polyester top film (mat).

PRODUCT DESCRIPTION:

ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE is a prefabricated reinforced laminate consisting of an impregnated fiberglass, non-woven, high strength inner mat sandwiched between layers of a polymer modified bitumen. An "open" spun-bonded polyester top mat provides ease of installation, mechanical protection against foot and vehicular traffic and instant adhesion to the compacted pavement interface. A unique 3-inch leading edge guarantees a positive compound-to-compound seal at the overlap. Transverse seals are easily made using a simple propane torch.

1. Embossed Release Film
2. Rubberized Asphalt Compound
3. Non-woven Fiberglass Reinforcement
4. Rubberized Asphalt Compound
5. Spun Bonded Polyester Mat

**WHAT IT DOES:**

ROYSTON 10AN EASY PAVE forms an impenetrable water barrier between the concrete decks and subsequently applied traffic bearing toppings or surfacing material. It effectively prevents moisture, salts and deicing chemicals from infiltrating concrete surfaces, eliminates damage to steel reinforcing and eliminates concrete damage as a result of freeze-thaw cycles.

This waterproof, impermeable membrane furnishes a tough, flexible, bituminous compound, which assures the highest degree of resistance to moisture dissolved salts and corrosive chemicals. The reinforced high strength non-woven fiberglass mat adds strength and aid in eliminating ruptures of the membrane during application.

The thin spun bonded polyester mat imparts sufficient strength to the membrane to permit driving rubber tired trucks, pavers and other vehicles on the membrane covered bridge deck. Although the spun polyester facing mat has a high melting point, the hot asphalt forms a strong bond to the bituminous compound during compaction.

WHERE TO USE IT:

ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE should be used to cover concrete decking of new highway bridges prior to the application of the surfacing material. It may also be used during resurfacing of old bridges provided corrosive elements have not already penetrated the decking layer. Also excellent for use on parking decks, balconies, plazas and other locations where waterproofing is required.

SURFACE PREPARATION:

Concrete surfaces should be clean, dry and free from dust, dirt, mud, oil, grease and other contaminants. Laitance and loose concrete

PHYSICAL PROPERTIES

Properties	Test Method	Typical Value
Color		Black with spun bonded polyester to surface
To Surface		Spun bonded polyester
Thickness		0.15 cm \pm 0.0127 cm 60 \pm 5 mils)
Weight		0.35 \pm 0.05
Elongation of Compound Only	ASTM D 1000 Mod. (see note #1)	1000% min.
Tensile Strength	ASTM D 1000 Mod. (see note #1)	4.46 kg/cm (15 lb/inch width)
Water Vapor Permeability	ASTM E 96 Method B	.05 US Perms max.
Compound Softening Point	ASTM D 36	97.8°C (208°F) min..
Compound Penetration	ASTM D 5	40-60 @ 77°F 5 sec 100 needle
Puncture Resistance	ASTM E 154	11 k (25lbs)
Low Temperature Pliability	ASTM D 146 1" Mandrel -31°C (-25°F)	No cracks or splits at 180° bend
Cycling Shear Strength	RTM 30 (see note #2) 5.08 cm (2")/min @ 0°C (32°F) w/0" opening & .3175 cm (.125") displacement	1.76 kg/cm ² (25 lb/sq.in.) min.
Cycling Shear Strength Recovery	RTM 30 (see note #2) .635 cm (.25") Recovery 0°C (32°F)	Constant load @ 1000 cycles, no damage
Resistance to Hydrostatic Head	RTM 29 (see note #3)	45.75 m (150 ft) min.
Water Absorption	ASTM D 1228 - 72 hrs	.25% max
Peel Adhesion	180° peel after 1 hour primed steel	1.784 kg/cm (10 lb/in.) min.
Reinforcement		48 g/m ²

NOTES:

1. ASTM D 1000 Method using CRE Tester with a 4" jaw separation at a speed of 10"/min. PSI calculated from #/in. width at specified thickness.
2. RTM 30 uses membrane properly applied to two primed steel panels with a 1" gap between panels. At specified test temperature the gap is cycled to the specified opening for the specified No. of cycles. For Shear Strength, the force/unit of the first cycle is recorded. For Shear Stress recovery any damage after the No. of cycles to constant load and the No. of cycles required to reach constant load is noted.
3. Hydrostatic Head tests are performed on membrane properly applied to primed concrete. The surface is sealed with a pressure chamber and water is introduced under pressure equal to specified head.

WARRANTY

Manufacturer WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. Manufacturer makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling. For further Technical or Application Information, contact Chase Construction Products

TECHNICAL INFORMATION

ROYSTON BRIDGE MEMBRANE - 10AN EASY PAVE

CSI Section XXXXX

should be removed by sand blasting or mechanical abrasion. Holes and voids in the concrete should be patched with a suitable material.

USE OF ADHESIVE:

Royston Roybond 713A should be stirred before using and applied at a rate of approximately 200 sq. ft. per gallon, without dilution, by brush squeegee, roller or other acceptable methods. The adhesive should be allowed to dry to the touch before application of the membrane. This will require 20 to 30 minutes depending on temperature and humidity. If the adhesive tends to puddle in low spots, it should be brushed out thoroughly to complete drying. Wet adhesive should be removed from holes in the concrete to avoid solvent bubbling when the traffic surface is applied.

Add 713B, 740, 750

APPLICATION:

For best results, the membrane should be applied at ambient temperatures of 35°F or higher. The membrane should be applied by hand rolling onto the application. The release film should be removed as the application proceeds. The membrane should be applied to the decking surface and should be brought up the curb to a point 1/2 inch below the top of the overlay, or as otherwise provided by the engineer. Care should be taken to avoid rupture of the membrane when molding it to irregular contours. Narrow strips (curb strips) are available for easy application to curb areas.

Each roll should be applied to overlap the previous roll by a minimum of 3-6 inches. The overlap at the edge is self-sealing due to the placement of the spun bonded polyester mat providing compound-to-compound contact. The transverse lap at the end of each roll should be sealed by heating with a propane torch to melt the spun bonded polyester mat and fuse the surfaces together. Patching may also be done by the heat sealing method or with the use of Royston 104CM or Flex-Flo Adhesive Sealant (FFAS). Follow the appropriate data sheets for proper use of these products.

APPLICATION OF HOT ASPHALT OVERLAY:

The asphalt should be between 290°F and 340°F at the time of application. Rubber tired pavers and trucks may be driven on the membrane provided care is taken to prevent sudden starts, stops or turns. As the hot asphalt is compacted, it bonds firmly to the surface of the membrane. A minimum of 1 1/2 inches of compacted asphalt is desirable.

AVAILABILITY:

Call your local Royston representative or distributor or call Royston's direct at 800-245-3209 for prices, delivery, additional information or technical service.

TECHNICAL SERVICES:

Chase Specialty coatings

800-245-3209

128 First Street, Pittsburgh, PA 15238

WARRANTY

Manufacturer WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. Manufacturer makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling. For further Technical or Application Information, contact Chase Construction Products

**SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER
SEPARATE OPERATION
(KY 3234)**

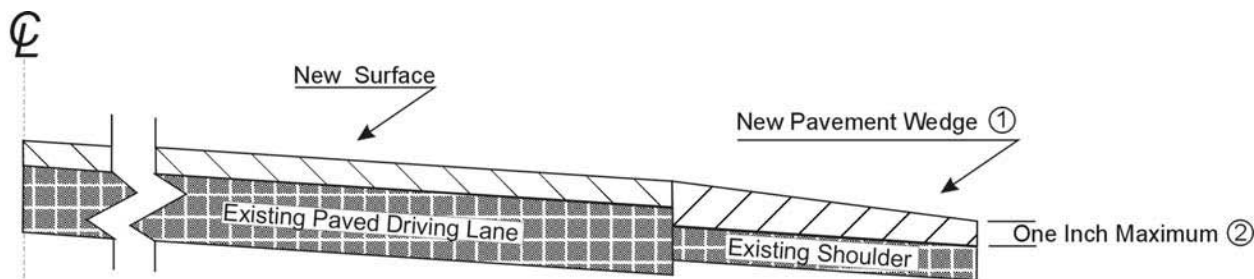
1.0 MATERIALS. Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03 and 403.03 as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the driving lanes. Where existing site conditions permit, limit the outside edge thickness of the new paving limits to one inch above the existing shoulder wedge elevation. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



- ① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.
- ② Where existing site conditions permit.

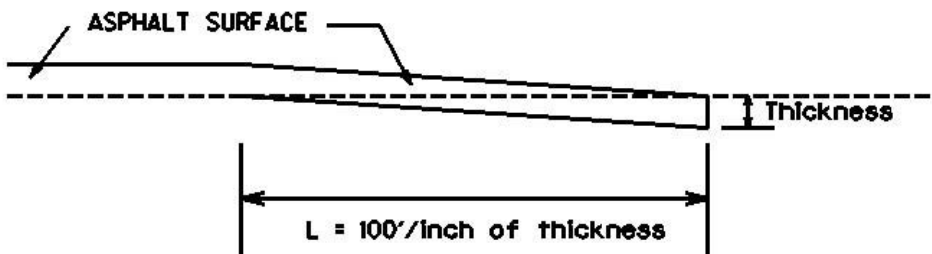
3.0 MEASUREMENT. The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Sections 403 and 407 as applicable.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures placed as pavement wedge according to Section 403. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1 Inch

L = 100 LF

L= Length of Edge Key

Metcalfe County
KY-543 MP 1.060
Calculations for Guardrail @ Bridge

Remove Rail

SW Corner	75 LF
SE Corner	87.5 LF
NW Corner	87.5 LF
NE Corner	75 LF
	325

Remove End Treatments

SW Corner	1 - Ty 7 EA
SE Corner	1 - Ty 7 EA
NW Corner	1 - Ty 7 EA
NE Corner	1 - Ty 7 EA
	4 - Ty 7

Install Guardrail- Steel W-Beam S Face

SW Corner	178.75 LF	(13 str)	(1 rad)
SE Corner	191.25 LF	(14 str)	(1 rad)
NW Corner	403.75 LF	(31 str)	(1 rad)
NE Corner	75 LF	(6 str)	
	848.75		

End Treatments

SW Corner	1 - term section #1
SE Corner	1 - term section #1
NW Corner	1 - term section #1
NE Corner	1 - Ty 1 End Treatment

DGA for shoulder preparation
75 tons

Totals for MP 1.060 Bridge	
Remove Rail	325 LF
Remove End Treatment	4 EA
Guardrail - Steel W Beam Single Face	848.75 LF
Terminal Section #1	3 EA
End Treatment Type 1	1 EA
DGA	75 TONS

Metcalfe County
KY-543 MP 2.665
Calculations for Guardrail @ Bridge

Install Guardrail - Steel W-Beam S Face

SW Corner	50 LF	(4 str)	
SE Corner	87.5 LF	(7 str)	
NW Corner	75 LF	(6 str)	
NE Corner	78.75 LF	(5 str)	(1 rad)
	291.25 LF		

Install Guardrail - Steel W Beam S Face A

SW Corner	25 LF
SE Corner	25 LF
NW Corner	25 LF
NE Corner	25 LF
	100 LF

Guardrail on Bridge, Case 1-A

Left	56 LF
Right	56 LF
	112 LF

End Treatments

SW Corner	1 - Ty 1 End Treatment
SE Corner	1 - Ty 1 End Treatment
NW Corner	1 - Ty 1 End Treatment
NE Corner	1 - term section #1

DGA for shoulder preparation
50 tons

Totals for MP 2.665 Bridge	
Guardrail - Steel W Beam Single Face	291.25 LF
Guardrail - Steel W Beam Single Face A	100 LF
Guardrail on Bridge, Case 1-A	112 LF
Terminal Section #1	1 EA
End Treatment Type 1	3 EA
DGA	50 TONS

SPECIAL NOTES FOR GUARDRAIL (KY 543)

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (3) Delineators for guardrail; (4) Maintain and control traffic; and (5) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Guardrail. Furnish guardrail system components according to section 814 and the Standard Drawings; except use steel posts only, no alternates.

C. Delineators for Guardrail. Furnish white and/or yellow Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

D. Erosion Control. See Special Notes for Erosion Control.

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail; temporary pollution and erosion control; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the engineer.

Guardrail

Page 2 of 3

C. Guardrail. Except as specified herein, construct guardrail system according to Section 719 and the Standard Drawings. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on current Standard Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When installing guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

D. Delineators for Guardrail. Construct Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

E. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

G. Right of Way Limits. The Department has not established exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

H. Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See Special; Note for Waste and Borrow.

Guardrail
Page 3 of 3

I. Final Dressing, Clean Up, and Seeding and Protection. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas according to the Special Notes for Erosion Control.

J. Erosion Control. See Special Notes for Erosion Control.

IV. METHOD OF MEASUREMENT

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site preparation. Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections as applicable.

C. Guardrail. See Section 719.04.

D. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

E. Erosion Control. See Special Notes for Erosion Control.

V. BASIS OF PAYMENT

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Guardrail. See Section 719.05.

C. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

D. Erosion Control. See Special Notes for Erosion Control.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within **48 hours** of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver this material to the State Maintenance facility in Metcalfe County. The Contractor, at his option, may elect to keep this material at an agreed cost of \$7.50 per ton. If the Contractor elects this option, the Department will deduct the cost for this material from money due on the Contract.

NOTICE TO CONTRACTOR: The Department considers transfer of millings to the state maintenance facility to be a part of the construction project, therefore truck operators are subject to receiving prevailing wages.

1-3526 48hours contractor option \$7.50
01/2/2012

SPECIAL NOTES FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to milling and/or resurfacing, saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate to an approximate depth of 12 inches below the existing pavement surface level. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Remove and dispose of all materials off the Right-of-way at sites obtained by the Contractor at no additional cost to the Department.

On the same day trench is excavated, backfill the excavated area with 6 inches of Crushed Limestone Size No. 23 wrapped on the bottom and sides in Table III Geotextile Fabric. Backfill the remaining area with Class 2 Asphalt Base 1.0D PG64-22 in 3 inch maximum courses up to the existing pavement surface. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 7 calendar days have elapsed after placement of the final course of asphalt base. After a minimum of 7 calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

Accept payment at the Contract unit prices per square yard for Base Failure Repair and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; furnishing and placing crushed limestone stone wrapped in geotextile fabric; furnishing and placing asphalt base up to the pavement boundary; leveling and wedging until the repair areas stabilize; and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3616 basefailurerepairgeo23stonepaybysy
01/02/2012

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. 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, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The Engineer may specify days and hours when lane closures will not be allowed.

Maintain alternating one way traffic during construction. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

Do not leave lane closures in place during non-working hours.

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.

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

Traffic Control Plan
Page 2 of 3

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

Traffic Control Plan
Page 3 of 3

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4' - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

SPECIAL NOTE FOR EROSION CONTROL (KY 543)

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC

Erosion Control

Page 2 of 4

Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right-of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

Erosion Control
Page 3 of 4

IV. MEASUREMENT

Erosion Control Blanket. If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

Sodding. If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

Channel Lining. If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

Erosion Control. Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining if applicable, the Department shall not measure Erosion Control for payment and all Erosion Control measures shall be incidental to the project. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to Erosion Control.

V. Basis of Payment

Erosion Control Blanket. If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

Sodding. If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

Channel Lining. If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

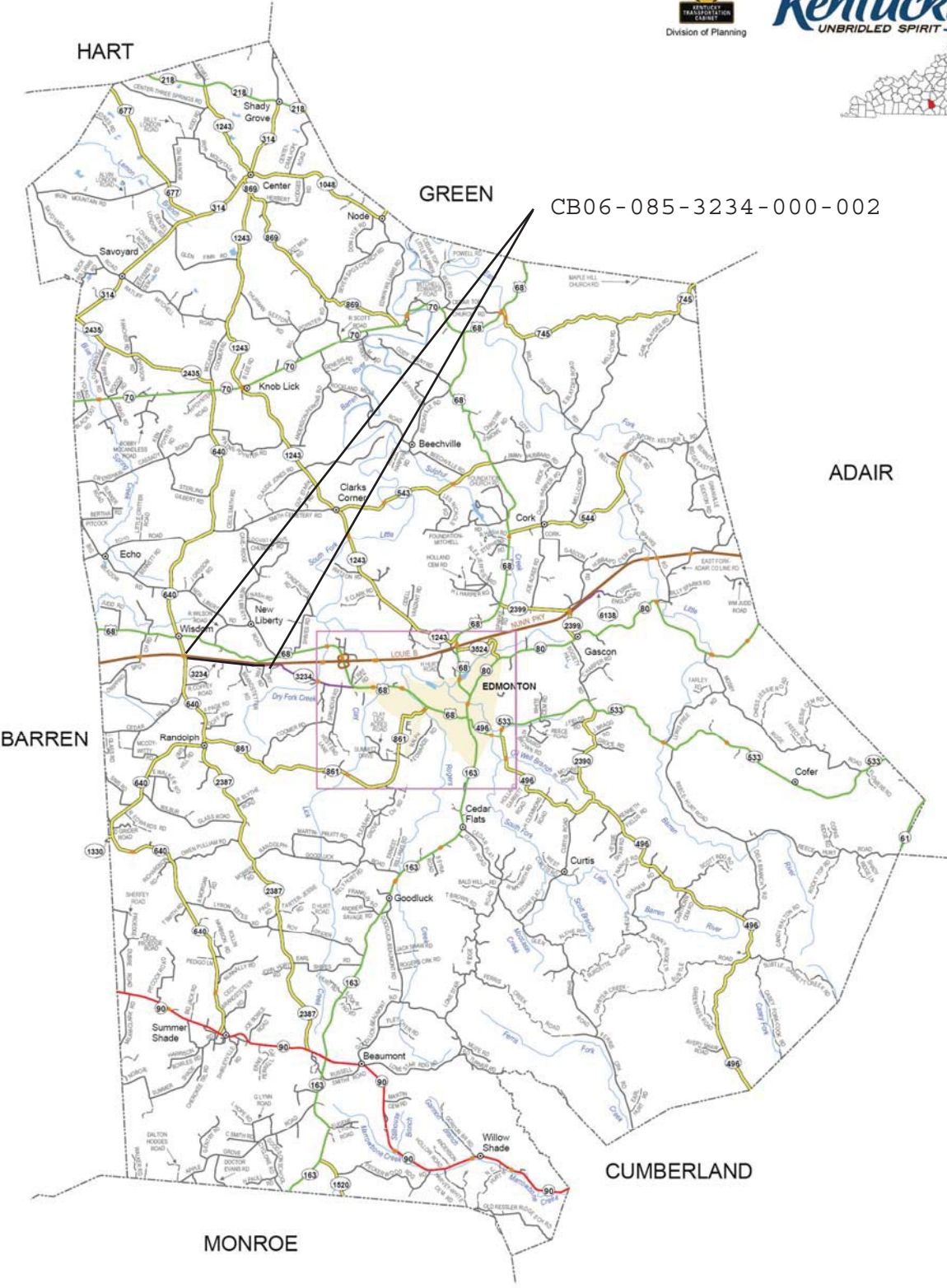
Erosion Control
Page 4 of 4

Erosion Control. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining if applicable, all Erosion Control measures and activities will be incidental to the project and shall not be measured for payment, for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric and all other erosion and water pollution control items required by the BMP or the Engineer.

1-561 erosion Control Note for Maintenance Projects
06/08/2012

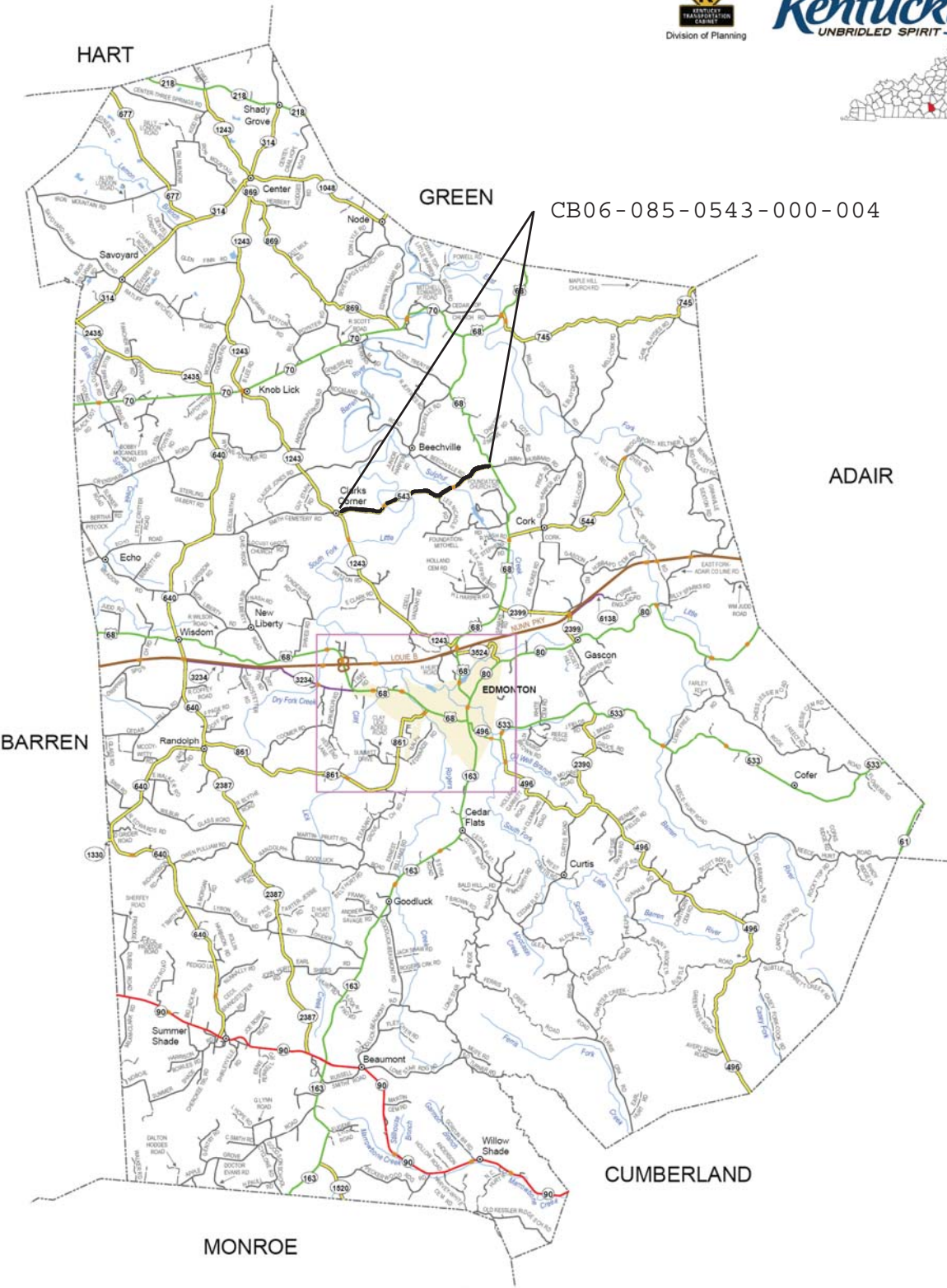


State Primary Road System
METCALFE COUNTY





State Primary Road System
METCALFE COUNTY



MATERIAL SUMMARY

CONTRACT ID: 123131

CB06 085 0543 000-004 PES NO: 0308505431201
TOBY HILL ROAD (KY 543) FROM KY 1243 (MP 0.000) EXTENDING EAST TO US 68 (MP 3.606),
A DISTANCE OF 3.610000 MILES.

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	00001	DGA BASE	685.00	TON
0020	00190	LEVELING & WEDGING PG64-22	299.00	TON
0030	00301	CL2 ASPH SURF 0.38D PG64-22	2,160.00	TON
0040	01987	DELINEATOR FOR GUARDRAIL B/W	50.00	EACH
0050	02351	GUARDRAIL-STEEL W BEAM-S FACE	1,140.00	LF
0060	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0070	02360	GUARDRAIL TERMINAL SECTION NO 1	4.00	EACH
0080	02367	GUARDRAIL END TREATMENT TYPE 1	4.00	EACH
0090	02381	REMOVE GUARDRAIL	425.00	LF
0100	02562	SIGNS	190.00	SQFT
0110	02650	MAINTAIN & CONTROL TRAFFIC KY 543	1.00	LS
0200	02676	MOBILIZATION FOR MILL & TEXT KY 543	1.00	LS
0120	02677	ASPHALT PAVE MILLING & TEXTURING	128.00	TON
0130	03240	BASE FAILURE REPAIR	79.00	SQYD
0140	03250	ONE STEP MEMBRANE	408.00	SQYD
0150	08806	GUARDRAIL-BRIDGE CASE I-A	112.00	LF
0170	10020NS	FUEL ADJUSTMENT	3,361.00	DOLL
0180	10030NS	ASPHALT ADJUSTMENT	5,923.00	DOLL
0190	02569	DEMOBILIZATION	1.00	LS

CB06 085 3234 000-002 PES NO: 0308532341202
OLD GLASGOW ROAD (KY 3234) FROM KY 640 (MP 0.000) EXTENDING EAST TO DRY FORK ROAD
(MP 1.640), A DISTANCE OF 1.640000 MILES.

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	00001	DGA BASE	200.00	TON
0020	00190	LEVELING & WEDGING PG64-22	316.00	TON
0030	00263	ASPHALT MIX FOR PAVEMENT WEDGE	160.00	TON
0040	00301	CL2 ASPH SURF 0.38D PG64-22	1,155.00	TON
0050	02562	SIGNS	170.00	SQFT
0060	02650	MAINTAIN & CONTROL TRAFFIC KY 3234	1.00	LS
0140	02676	MOBILIZATION FOR MILL & TEXT KY 3234	1.00	LS
0070	02677	ASPHALT PAVE MILLING & TEXTURING	14.00	TON
0080	03240	BASE FAILURE REPAIR	78.00	SQYD
0090	06510	PAVE STRIPING-TEMP PAINT-4 IN	17,318.00	LF
0100	06514	PAVE STRIPING-PERM PAINT-4 IN	17,318.00	LF
0110	10020NS	FUEL ADJUSTMENT	2,230.00	DOLL
0120	10030NS	ASPHALT ADJUSTMENT	3,930.00	DOLL
0130	02569	DEMOBILIZATION	1.00	LS

KY 3234

Base Failures

		Total		78.06
MP	Length	Width	SY	
0.102	35	4.5	17.50	
0.460	10	5	5.56	
0.556	30	4	13.33	
0.588	20	4	8.89	
0.598	10	4	4.44	
0.716	10	5	5.56	
0.834	5	3	1.67	
0.953	10	4	4.44	
1.365	10	5	5.56	
1.608	10	4	4.44	
1.640	15	4	6.67	

KY 3234

Milling Sheet

MP	Length	Width	Depth (in)	Tons
0.000	100	22.5	1	6.9
1.640	100	22.5	1	6.9
Total				13.8

KY 543

Base Failure Sheet

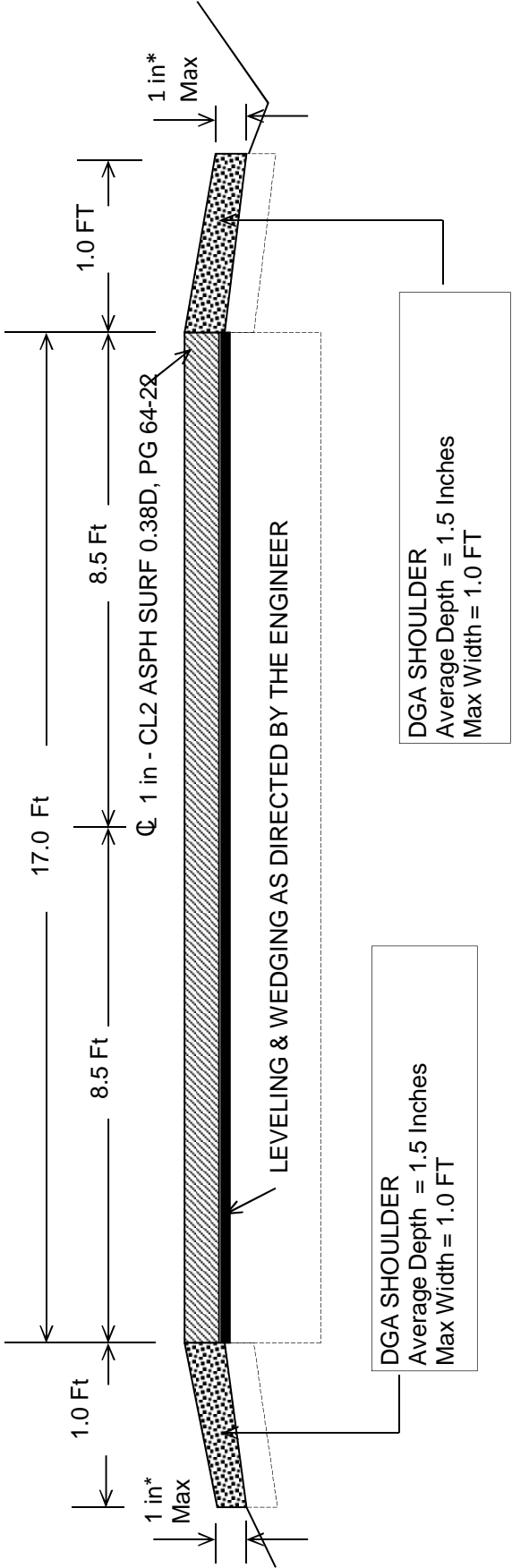
MP	Length	Width	Depth	Square Yards
	0.380	10	5	1 5.6
	0.800	20	10	1 22.2
	1.248	15	20	1 33.3
	1.945	20	8	1 17.8
			Total	78.9

KY 543

Milling Detail Sheet

MP	Length	Width	Avg. Depth	Tons
0.000	100	17	0.5	5.2
1.086				
Approaches	400	23	1	56.2
Deck	150	23	2	42.2
2.679				
Approaches	200	20	0.5	12.2
Deck	57	20	1	7.0
3.606	100	17	0.5	5.2
Total				128.0

TYPICAL SECTION
METCALFE COUNTY
CB06-085-0543-000-004



*** Where Existing Site Conditions Permit**

GUARDRAIL DELIVERY VERIFICATION SHEET

CONTRACT ID _____

DESCRIPTION	UNIT	QUANTITIES	
		FIELD VERIFIED	DELIVERED
GUARDRAIL STEEL W BEAM	LF		
GUARDRAIL STEEL THRIE BEAM	LF		
GUARDRAIL THRIE BEAM-W BEAM CONNECTOR	EA		
GUARDRAIL TERMINAL SECTION No. 1	EA		
GUARDRAIL TERMINAL SECTION No. 2	EA		
GUARDRAIL TERMINAL SECTION No. 3	EA		
GUARDRAIL THRIE BEAM TERMINAL SECTION	EA		
CRASH CUSHION TYPE VI	EA		
CRASH CUSHION TYPE VII	EA		
CRASH CUSHION TYPE IX/IX-A	EA		
GUARDRAIL END TREATMENT TYPE 1	EA		
GUARDRAIL END TREATMENT TYPE 2A	EA		
GUARDRAIL END TREATMENT TYPE 3	EA		
GUARDRAIL END TREATMENT TYPE 4A	EA		
GUARDRAIL END TREATMENT TYPE 7	EA		
GUARDRAIL CONNECTOR TO BRIDGE END TYPE A/A-1	EA		
GUARDRAIL CONNECTOR TO BRIDGE END TYPE E/E-1	EA		
GUARDRAIL CONNECTOR TO BRIDGE END TYPE C	EA		
GUARDRAIL CONNECTOR TO BRIDGE END TYPE D	EA		
GUARDRAIL CONNECTOR TO CONC MED PIER	EA		
GUARDRAIL CONNECTOR TO CONC SHLDR PIER	EA		
GUARDRAIL POSTS-STEEL	EA		
GUARDRAIL OFFSET BLOCK TYPE 4	EA		
GUARDRAIL OFFSET BLOCK STEEL	EA		
GUARDRAIL OFFSET BLOCK THRIE BEAM	EA		
GUARDRAIL BACK-UP PLATE W BEAM	EA		
GUARDRAIL BACK-UP PLATE THRIE BEAM	EA		
GUARDRAIL NUTS, BOLTS, & WASHERS	BAG		

NOTES:

1. Dispose of concrete foundations and timber posts off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

2. Salvage and deliver removed guardrail system components, other than concrete foundations and timber posts, according to Section 719.03.07.

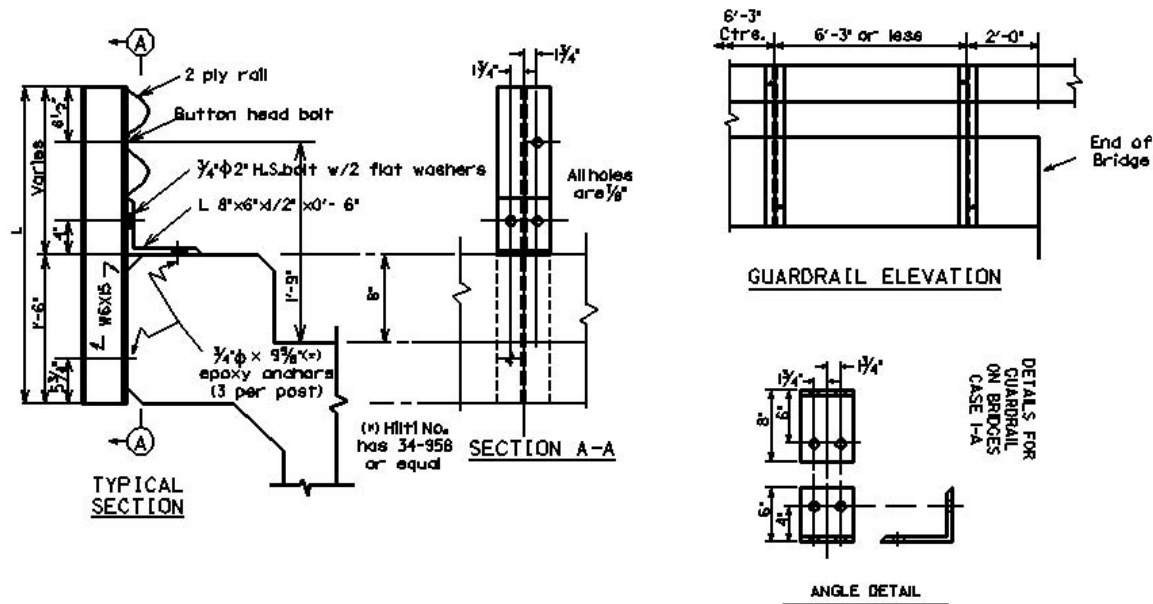
3. Prior to removing the materials from the project site, obtain the Contractor's and Engineer's representative's signatures.

4. Upon delivery, obtain the Bailey Bridge Lot's representative's signature and submit this completed form to the Engineer.

5. The Department will not measure removed guardrail components for payment without completed delivery verification sheet(s).

	PRINTED NAME	SIGNATURE	DATE
RESIDENT ENGINEER'S REPRESENTATIVE	_____	_____	_____
CONTRACTOR'S REPRESENTATIVE	_____	_____	_____
BAILEY BRIDGE LOT'S REPRESENTATIVE	_____	_____	_____

GUARDRAIL ON BRIDGE, CASE I-A
CURB HEIGHT GREATER THAN 2 INCHES



				On the Bridge
Bridge MP	L=	D=	No. Posts	LF of 2 PLY Rail
2.679	57	9 to 15 in	20	112

L = Length of Guardrail Post D = Curb Height W = Width of Bridge Curb

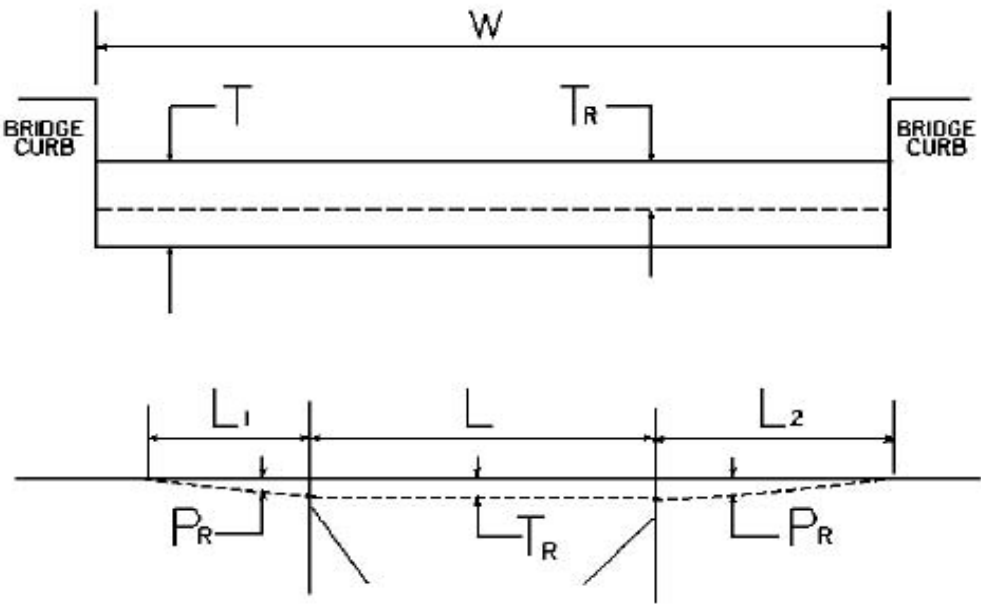
WARRANTS - Use Case I-A guardrail when the dimension from the top of the existing riding surface to the top of the curb is greater than 2 Inches. Use Case I-A where the clear distance between the faces of the guardrail is less than 20 Ft and the curb width is less than 18 Inches.

NOTES - When using Case I-A Guardrail, do not pave the bridge surface. The surface shall NOT be paved flush to the top of the curb.

When Case I-A Guardrail is used, a Precast Bridge Block shall be used at the ends of the bridge which face opposing traffic. **See attachment for Detail for Precast Bridge Block.**

If concrete bridge rail needs to be removed from the bridge, include a bid item for Bridge rail removal.

BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb
T = thickness of existing asphalt overlay
L = length of bridge
L₁ & L₂ = length of approach pavement to be removed
T_R = thickness to be removed and replaced on bridge
P_R = thickness to be removed and replaced on pavement
Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft/in of thickness

Route	Bridge No.	MP	W (ft)	T (in)	L ₁ (ft)	L ₂ (ft)	T _R (in)	L (ft)	P _R (in)
KY543	B00051N	1.086	24.50	2.00	200.00	200.00	2.00**	150.00	2.00**
KY543	B00027N	2.679	22.50	1.00	100.00	100.00	1.00	57.00	1.00

*Milling as directed by the Project Engineer. Thickness of existing asphalt overlay **T** on the bridge is estimated. The intent of this contract is to remove and replace equal thickness of asphalt on the bridge, not to exceed the indicated dimension **TR** on the bridge detail sheet. The Department’s Engineer will direct actual removal and replacement of asphalt during milling and paving operation.

** B00051N – 2 inches to be Milled and 1 inch replaced over One Step Membrane and approaches.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2012* and *Standard Drawings, Edition of 2012 with the 2012 Revision*.

**Supplemental Specifications to the Standard Specifications for Road and
Bridge Construction, 2012 Edition**

(Effective with the August 17, 2012 Letting)

Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.
Part:	D) Testing Responsibilities.
Number:	4) Density.
Revision:	Replace the second sentence of the Option A paragraph with the following: Perform coring by the end of the following work day.
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge decks prepared by hydrodemolition.
Subsection:	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following: 609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast concrete release the temporary erection supports under the bridge and swing the span free on its supports. 609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam is placed in the final location and prior to placing steel reinforcement. At locations where lift loops are cut, paint the top of the beam with galvanized or epoxy paint.

STANDARD DRAWINGS THAT APPLY

ROADWAY
~GENERAL~

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS PART 1.....RGX-001-05

~PAVEMENT~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT.....RPM-110-06

TRAFFIC
~TEMPORARY~

TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAYTTC-100-02

LANE CLOSURE TWO-LANE HIGHWAY CASE II.....TTC-105-02

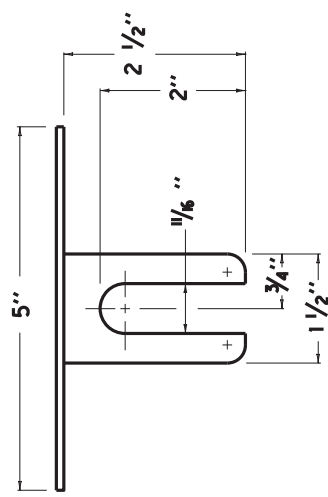
DEVICES

POST SPLICING DETAIL.....TTD-110-01

COUNTY OF	ITEM NO.	SHEET

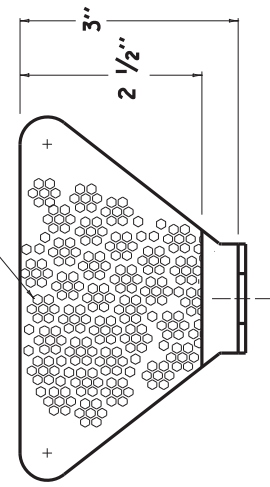
NOTES

- THE DELINEATOR'S SHAPE AND DIMENSIONS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. TYPES OF DELINEATORS PERMITTED SHALL BE FROM THE LIST OF APPROVED MATERIALS.
- DELINEATOR SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE EACH AND SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR ONE COMPLETE INSTALLATION.
- | CODE | PAY ITEM | PAY UNIT |
|------|----------------------------------------------------|----------|
| 1982 | DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL WHITE | EACH |
| 1983 | DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL YELLOW | EACH |
| 1987 | DELINEATOR FOR GUARDRAIL - BI-DIRECTIONAL WHITE | EACH |
- GUARDRAIL DELINEATORS SHALL BE REQUIRED ON ALL GUARDRAIL.
- DELINEATORS SHALL BE MANUFACTURED FROM 12 GA. GALVANIZED STEEL.
- DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
- WHEN CONCRETE BARRIERS EXTEND ACROSS BRIDGE STRUCTURES IN LIEU OF STEEL BEAM GUARDRAIL, DELINEATORS SHALL BE INSTALLED AT SAME VERTICAL ALIGNMENT AS ON THE GUARDRAIL, AND DELINEATORS SHALL COMPLY WITH CURRENT SEPIA DRAWING 004.
- DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

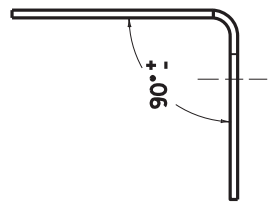


PLAN VIEW

TYPE XI SHEETING,
YELLOW OR WHITE

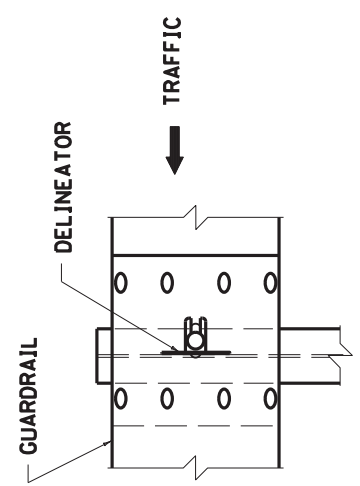


FRONT VIEW

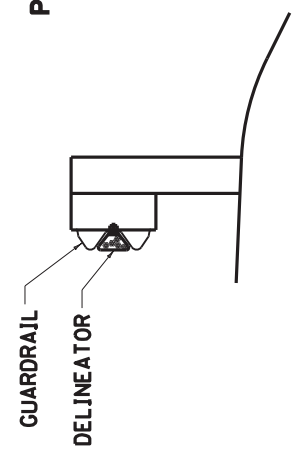


SIDE VIEW

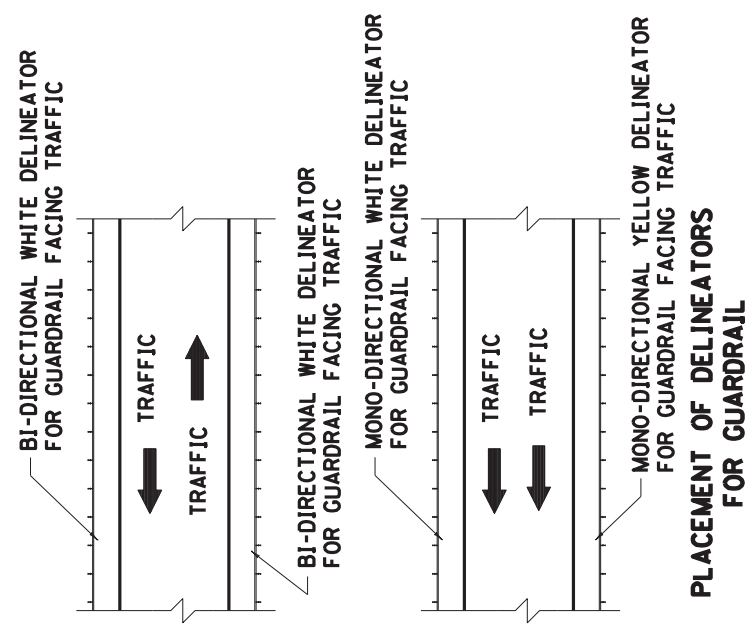
NOTE: DIMENSIONS SHOWN ARE FOR ONE VERSION OF A WEB-MOUNTED GUARDRAIL DELINEATOR. DELINEATORS WITH ALTERNATE DIMENSIONS MAY BE CONSIDERED FOR INCLUSION ON THE APPROVED PRODUCTS LIST.



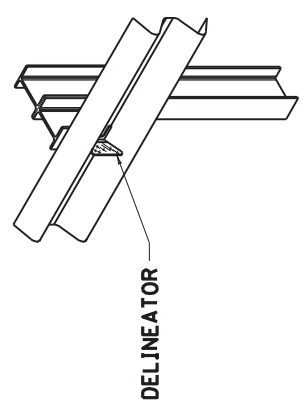
FRONT VIEW



SIDE VIEW



PLACEMENT OF DELINEATORS
FOR GUARDRAIL



ISOMETRIC VIEW

APPROXIMATE DELINEATOR SPACING	
TANGENT	100'
CURVE	50'

SPACING SHOULD BE ADJUSTED IN CURVES SO THAT SEVERAL DELINEATORS ARE ALWAYS SIMULTANEOUSLY VISIBLE TO THE ROAD USER.

KENTUCKY
DEPARTMENT OF HIGHWAYS

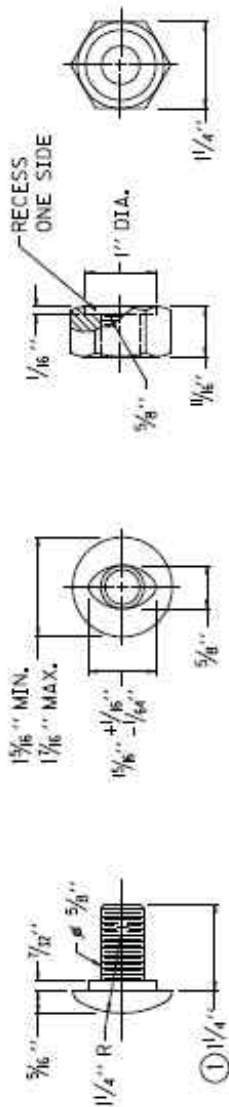
DELINEATORS
FOR GUARDRAIL

SUBMITTED: 6-15-2012
DATE: 6-15-2012
DIRECTOR DIVISION OF DESIGN

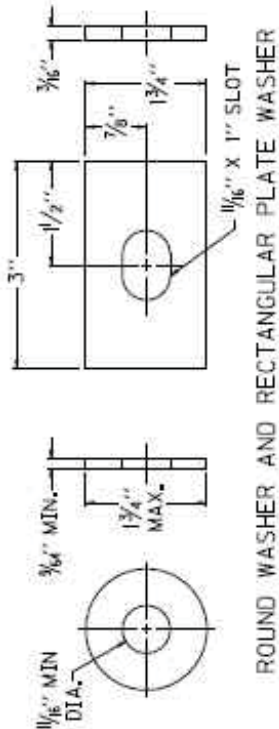
COUNTY OF	JTB#	SHEET NO.

NOTES

- ① RAIL BOLT SIMILAR EXCEPT LENGTH.
- ② THE THRIE BEAM TO "W" BEAM CONNECTOR SHALL COMPLY WITH AASHTO M-180 CLASS A, TYPE 2 EXCEPT WHERE IN CONFLICT WITH THIS DETAIL.

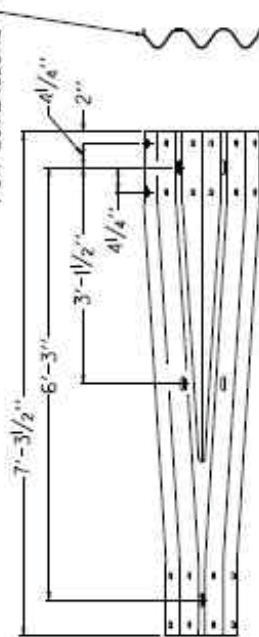


5/8" BUTTON HEAD BOLT AND RECESSED NUT



ROUND WASHER AND RECTANGULAR PLATE WASHER

SEE CUR. STD.
DWG. RBR-001
FOR DIMENSIONS



THRIE BEAM TO "W" BEAM CONNECTOR ②

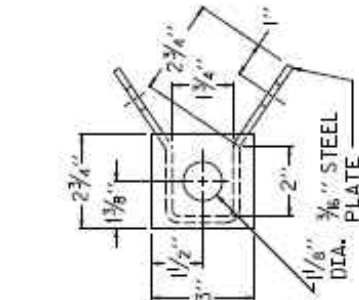
3/4" DIA. - 8 HOLES, FOR

5/8" X 1 1/2" HEX HEAD BOLTS

WITH WASHERS ON FRONT FACE

1/2" STEEL
PLATE

1/4" STEEL
PLATE



ALTERNATE NO. 1

RAIL ANCHOR ASSEMBLY

KENTUCKY DEPARTMENT OF HIGHWAYS
GUARDRAIL COMPONENTS
SUBMITTED: <i>[Signature]</i> 6-15-2012 DATE
008

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

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 administering 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 work-week 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

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (6) provides:

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

KRS 11A.040 (8) states:

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

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

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

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

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

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

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

KENTUCKY LABOR CABINET
PREVAILING WAGE DETERMINATION
CURRENT REVISION
HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-11-II-HWY

Project No.
Highway

Date of Determination: August 4, 2011

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-11-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the Kentucky Transportation Cabinet. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations adopted by the Commissioner of the Department of Workplace Standards. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.


Michael Donta, Deputy Commissioner
Department of Workplace Standards

CLASSIFICATIONSRATE AND FRINGE BENEFITS**BOILERMAKERS:**

BASE RATE	\$24.65
FRINGE BENEFIT	12.94

BRICKLAYERS:

Bricklayers:

BASE RATE	\$22.90
FRINGE BENEFITS	8.50

Stone Mason:

BASE RATE	\$21.50
FRINGE BENEFITS	8.50

CARPENTERS:

Carpenters:

BASE RATE	\$22.40
FRINGE BENEFITS	8.75

Piledrivers:

BASE RATE	\$22.05
FRINGE BENEFITS	8.75

CEMENT MASONS:

BASE RATE	\$21.25
FRINGE BENEFITS	8.50

ELECTRICIANS:

*BASE RATE	\$29.36
FRINGE BENEFITS	10.55

*When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to a direct fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

LINEMAN:

*BASE RATE	\$30.09
FRINGE BENEFITS	10.94

EQUIPMENT OPERATOR:

*BASE RATE	\$26.90
FRINGE BENEFITS	10.31

GROUNDSMAN:

*BASE RATE	\$17.79
FRINGE BENEFITS	8.51

IRONWORKERS:

BASE RATE	\$ 25.77
FRINGE BENEFITS	18.54

CLASSIFICATIONSRATE AND FRINGE BENEFITS**LABORERS:**

General laborer, flagman, steam jenny:	BASE RATE	\$20.84
	FRINGE BENEFITS	8.75
Batch truck dumper, deck hand or scow man, hand blade operator:	BASE RATE	\$20.84
	FRINGE BENEFITS	8.75
Power driven tool operator of the following: wagon drill, chain saw, sand blaster, concrete chipper, pavement breaker, vibrator, power wheelbarrow, power buggy, sewer pipe layer, bottom men, dry cement handler, concrete rubber, mason tender:	BASE RATE	\$21.09
	FRINGE BENEFITS	8.75
Asphalt lute and rakerman, side rail setter:	BASE RATE	\$21.14
	FRINGE BENEFITS	8.75
Gunnite nozzle man, gunnite operator:	BASE RATE	\$21.14
	FRINGE BENEFITS	8.75
Tunnel laborer (free air):	BASE RATE	\$21.14
	FRINGE BENEFITS	8.75
Tunnel mucker (free air):	BASE RATE	\$21.74
	FRINGE BENEFITS	8.75
Tunnel miner, blaster and driller (free air):	BASE RATE	\$21.74
	FRINGE BENEFITS	8.75
Caisson worker:	BASE RATE	\$21.74
	FRINGE BENEFITS	8.75
Powderman:	BASE RATE	\$21.44
	FRINGE BENEFITS	8.75
Drill operator of percussion type drills which are both powered and propelled by an independent air supply:	BASE RATE	\$22.64
	FRINGE BENEFITS	8.75

CLASSIFICATIONS**RATE AND FRINGE BENEFITS****OPERATING ENGINEERS:****Group A:**

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earth), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheepfoot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller guries, self-propelled compactor, self-contained hydraulic percussion drill:

BASE RATE	\$23.80
FRINGE BENEFITS	8.75

Group B:

All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirly oiler, tractair and road widening trencher, articulating trucks:

BASE RATE	\$21.55
FRINGE BENEFITS	8.75

Group B2:

Greaser on grease facilities servicing heavy equipment:

BASE RATE	\$21.90
FRINGE BENEFITS	8.75

Group C:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver:

BASE RATE	\$21.31
FRINGE BENEFITS	8.75

PAINTERS:

All Excluding Bridges:

BASE RATE	\$19.92
FRINGE BENEFITS	9.57

Bridges:

BASE RATE	\$23.92
FRINGE BENEFITS	10.07

<u>CLASSIFICATIONS</u>	<u>RATE AND FRINGE BENEFITS</u>	
PLUMBERS:	BASE RATE	\$22.52
	FRINGE BENEFITS	7.80
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SHEET METAL:	BASE RATE	\$20.40
	FRINGE BENEFITS	7.80
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TRUCK DRIVERS:		
Truck helper and warehouseman:	BASE RATE	\$21.10
	FRINGE BENEFITS	8.75
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE	\$21.46
	FRINGE BENEFITS	8.75
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE	\$21.45
	FRINGE BENEFITS	8.75
Driver on mixer trucks (all types):	BASE RATE	\$21.45
	FRINGE BENEFITS	8.75
Truck mechanic:	BASE RATE	\$21.38
	FRINGE BENEFITS	8.75
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE	\$21.15
	FRINGE BENEFITS	8.75
Driver on pavement breakers:	BASE RATE	\$21.46
	FRINGE BENEFITS	8.75
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE	\$21.45
	FRINGE BENEFITS	8.75
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE	\$21.46
	FRINGE BENEFITS	8.75
Greaser on greasing facilities:	BASE RATE	\$21.15
	FRINGE BENEFITS	8.75

ERRATUM

Refer to the Locality Number and Determination Number listed below published by the Kentucky Labor Cabinet, Division of Employment Standards, Apprenticeship and Mediation dated August 4, 2011.

Locality: Highway Construction Locality No. II, including the following counties: Adair, Barren, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, McCreary, Magoffin, Martin, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe.

Determination Number: CR-II-II-HWY

DELETE:

Ironworkers	BASE RATE	\$25.77
	FRINGE BENEFIT	18.54

INSERT:

Ironworker (Structural)	BASE RATE	\$22.50
	FRINGE BENEFIT	8.75

Ironworker (Reinforcing)	BASE RATE	\$22.30
	FRINGE BENEFIT	8.75



Michael L. Dixon, Commissioner
Department of Workplace Standards
Kentucky Labor Cabinet
Frankfort, KY 40601

This 8th day of November, 2011.

ERRATUM

Refer to the Locality Number and Determination Number listed below published by the Kentucky Labor Cabinet, Division of Employment Standards, Apprenticeship and Mediation dated August 4, 2011.

Locality: Highway Construction Locality No. II, including the following counties: Adair, Barren, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, McCreary, Magoffin, Martin, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe.

Determination Number: CR-II-II-HWY

DELETE:

Ironworker (Structural)	BASE RATE	\$22.50
	FRINGE BENEFIT	8.75
Ironworker (Reinforcing)	BASE RATE	\$22.30
	FRINGE BENEFIT	8.75

INSERT:

Ironworkers	BASE RATE	\$25.77
	FRINGE BENEFIT	18.54


Michael L. Dixon, Commissioner
Department of Workplace Standards
Kentucky Labor Cabinet
Frankfort, KY 40601

This 4TH day of May, 2012.

Kentucky Determination No. CR-11-II-HWY dated August 04, 2011

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

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-11-II HWY dated August 04, 2011, erratum dated November 8, 2011, and erratum dated May 4, 2012. 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.

Kentucky Determination No. CR-11-II-HWY dated August 04, 2011

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 to the undersigned.

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

PART IV

INSURANCE

INSURANCE

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

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

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

PART V

BID ITEMS

CONTRACT ID: 123131
COUNTY: METCALFE
PROPOSAL: 085GR12R090-CB06

PAGE: 1
LETTING: 08/17/12
CALL NO: 407

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
SECTION 0001 ROADWAY					
0010	00001	DGA BASE	885.000 TON		
0020	00190	LEVELING & WEDGING PG64-22	615.000 TON		
0030	00263	ASPHALT MIX FOR PAVEMENT WEDGE	160.000 TON		
0040	00301	CL2 ASPH SURF 0.38D PG64-22	3,315.000 TON		
0050	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL	HITE 50.000 EACH		
0060	02351	GUARDRAIL-STEEL W BEAM-S FACE	1,140.000 LF		
0070	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.000 LF		
0080	02360	GUARDRAIL TERMINAL SECTION NO 1	4.000 EACH		
0090	02367	GUARDRAIL END TREATMENT TYPE 1	4.000 EACH		
0100	02381	REMOVE GUARDRAIL	425.000 LF		
0110	02562	SIGNS	360.000 SQFT		
0120	02650	MAINTAIN & CONTROL TRAFFIC KY 3234	(1.00) LS		
0130	02650	MAINTAIN & CONTROL TRAFFIC KY 543	(1.00) LS		
0140	02676	MOBILIZATION FOR MILL & TEXT KY 3234	(1.00) LS		
0150	02676	MOBILIZATION FOR MILL & TEXT KY 543	(1.00) LS		
0160	02677	ASPHALT PAVE MILLING & TEXTURING	142.000 TON		
0170	03240	BASE FAILURE REPAIR	157.000 SQYD		
0180	03250	ONE STEP MEMBRANE	408.000 SQYD		
0190	06510	PAVE STRIPING-TEMP PAINT-4 IN	17,318.000 LF		
0200	06514	PAVE STRIPING-PERM PAINT-4 IN	17,318.000 LF		

METCALFE COUNTY
085GR12R090-CB06

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 123131
COUNTY: METCALFE
PROPOSAL: 085GR12R090-CB06

PAGE: 2
LETTING: 08/17/12
CALL NO: 407

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	08806	GUARDRAIL-BRIDGE CASE I-A	112.000 LF		
0220	10020NS	FUEL ADJUSTMENT	5,591.000 DOLL	1.00	5,591.00
0230	10030NS	ASPHALT ADJUSTMENT	9,853.000 DOLL	1.00	9,853.00
SECTION 0002 DEMOBILIZATION					
0240	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			