

CALL NO. 200
CONTRACT ID. 144207
MERCER COUNTY
FED/STATE PROJECT NUMBER 084GR14T012-HSIP & FD04
DESCRIPTION SAFETY IMPROVEMENTS ON US 68 IN MERCER COUNTY
WORK TYPE GRADE & DRAIN WITH ASPHALT SURFACE
PRIMARY COMPLETION DATE 11/1/2015

# **LETTING DATE:** November 21,2014

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME November 21,2014. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

**DBE CERTIFICATION REQUIRED - 11%** 

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

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# PART I

# **SCOPE OF WORK**

## **ADMINISTRATIVE DISTRICT - 07**

CONTRACT ID - 144207 084GR14T012-HSIP & FD04 COUNTY - MERCER

PCN - 0708400681401 HSIP 2681 (030)

LEXINGTON RD (US 68) (MP 12.503) FROM CHATHAM RD EXTENDING EAST TO THE MERCER/JESSAMINE COUNTY LINE (MP 20.058), A DISTANCE OF 07.56 MILES.GRADE & DRAIN WITH ASPHALT SURFACE SYP NO. 07-9000.

GEOGRAPHIC COORDINATES LATITUDE 37:50:18.79 LONGITUDE 84:43:53.95

PCN - 0708400681402 FD04 084 0068 018-020

LEXINGTON RD (US 68) (MP 18.57) FROM 1.028 MI EAST OF COGHILL LN EXTENDING EAST TO THE MERCER/JESSAMINE COUNTY LINE (MP 20.00), A DISTANCE OF 01.43 MILES.GRADE & DRAIN WITH ASPHALT SURFACE SYP NO. 07-00420.00.

GEOGRAPHIC COORDINATES LATITUDE 37:51:17.89 LONGITUDE 84:41:28.75

#### **COMPLETION DATE(S):**

COMPLETED BY 11/01/2015 APPLIES TO ENTIRE CONTRACT

APPLIES TO EACH DAILY ROAD

6 HOURS CLOSURES

APPLIES TO ONE 14 DAY ROAD

14 CALENDAR DAYS CLOSURE

## **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/construction-procurement)

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.

## SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

# 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 <a href="mailto:kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

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

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). The answers provided shall be considered part of

this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

## HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

# **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

## **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)

10/29/12



Steven L. Beshear Governor Lori H. Flanery Secretary

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

OFFICE OF THE SECRETARY

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

#### FINANCE AND ADMINISTRATION CABINET

#### **Vendor Document Disclosure**

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

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

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

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

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



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

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## FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.08 Irregular Proposals 102.14 Disqualification of Bidders

102.09 Proposal Guaranty

## **CIVIL RIGHTS ACT OF 1964**

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

## NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

## SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

## DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

## **DBE GOAL**

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

## **OBLIGATION OF CONTRACTORS**

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

# **CERTIFICATION OF CONTRACT GOAL**

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of \_\_\_\_\_ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

## **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 63-35 DBE, within 10 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
  - The entire expenditure paid to a DBE manufacturer;
  - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

## UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

## CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

# FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

# SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

# **PROMPT PAYMENT**

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

## **CONTRACTOR REPORTING**

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These reports must be submitted within 14 days of payment made to the DBE contractor.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

## **DEFAULT OR DECERTIFICATION OF THE DBE**

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

06/20/2014

MERCER COUNTY 084GR14T012-HSIP & FD04

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## PROJECT TRAFFIC COORDINATOR (PTC)

Be advised this project is a significant project pursuant to section 112.03.12.

## SURFACING AREAS

The Department estimates the mainline surfacing width to be 20 feet.

The Department estimates the total mainline area to be surfaced to be 35,587 square yards.

The Department estimates the shoulder width to be 1 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 3,559 square yards.

#### 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.

#### 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 NOTES APPLICABLE TO PROJECT (GENERAL NOTES)

The Bid Items for this Highway Safety Improvement Project are located as indicated on the Plan and Profile sheets, Curve Section Sheets, Pipe Sheets, and as summarized in the Project Item Description Summary Sheets.

#### Caution

The information in this proposal and shown on the plans, summary sheets, and the type of work listed herein are approximate only and are not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

# **On-Site Inspection**

Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

## **Right-of-Way Limits**

All work is located within the existing right of way. Limit work activities to the Right-of-Way and work and staging areas secured by the Contractor at no additional cost to the Department. Be responsible for all encroachments onto private lands.

## **Property Damage**

Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

#### Control

Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion

of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

## **Rock Outcrop**

Rock Outcrop Removal is to occur at areas indicated on the plan sheets and summary sheets. See cross sections and pipe sections for details. Begin and End limits at each area are to be field verified with approval from the Engineer. Removal is to occur through the means of using a hoe ram with no blasting being anticipated. Disposal of all excess and unsuitable excavation is to be at approved sites off the right of way obtained by the Contractor at no additional cost to the Department with all cost being incidental to the bid item "Rock Removal". Standing segments of dry stacked rock wall fence shall not be damaged or disturbed in any manner. Any fallen rock wall fence that is removed from right of way shall be stacked on pallets and offered to the property owner. The Department will measure the Rock Outcrop Removal as "Rock Removal" and will pay the quantity as Cubic Yards.

## **Drop Box Inlets**

Modified Drop Box Inlets, unless otherwise specified, are to be field designed, as directed and approved by the Engineer, based on the field conditions encountered at each location. This may include modifying the width and/or height of the chamber from what is shown on the Standard Drawings.

## **Super Elevation Improvement**

Place asphalt Level & Wedging, Base, and Surface mixtures as indicated in the Pavement Detail when correcting super elevation in curves. Milling and Level and Wedging shall be determined by the Engineer. Asphalt quantities per location shall be determined by the Engineer.

# **High Friction Surface**

As specified in the Special Note for High Friction Surface Treatment, for applications of High Friction Surface on new asphalt, ensure the new asphalt surface has cured a minimum of thirty (30) days prior to performing surface preparation and installation of the high friction surface treatment. See the Special Note for High Friction Surface Treatment for all other requirements and construction methods of the High Friction Surface.

## **Rock Wall Fence**

Standing segments of dry stacked rock wall fence shall not be damaged or disturbed in any manner. Any fallen rock wall fence that is removed from right of way shall be stacked on pallets and offered to the property owner. If any property owners do not want the rock, the stacked rock on pallets is to be delivered to the *Department of Highways Mercer County Maintenance Facility*.

## **Wetland Protected Areas**

One known area of a defined wetland is located adjacent to the inlet at station 863+34, and shall not be disturbed or impacted by construction.

#### SPECIAL NOTES APPLICABLE TO PROJECT

## I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's 2012 Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Site Preparation; (3) Shouldering; (4) Paved Ditch Type 2; (5) Constructing pipe extensions; (6) Replacing Culvert Pipes; (7) Asphalt installation; and (8) Any other work as specified by this contract.

## II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Shouldering.** Shouldering shall be completed using compacted earth and DGA aggregate, as detailed on the Typical Sections. NOTE: Only compacted earth shall be used for shouldering in the Shakertown area, as specified and detailed on the Plan Sheets and Typical Sections.
- **C. Paved Ditch Type 2.** All work shall be completed according to Section 709 and Standard Drawing RDD-002-06 using Class A Concrete.
- **D.** Culvert Pipe. Furnish pipe meeting the requirements of Section 701 and Section 810. Select pipe for Ph range Medium and minimum fill cover height according to Standard Drawing RDI-001-09, RDI-002-04, and RDI-035-01. Use flowable fill for pipe backfill according to Section 601.03.03(B).
- **E. Erosion Control.** See Special Note 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 saw cutting and removing pavement; clearing and grubbing, and incidental excavation and backfilling; removal of existing pipe, headwalls and any obstructions or items; restoration of pavements, slopes, and all disturbed areas; final dressing and

cleanup; and disposal of materials. Perform all site preparation only as approved or directed by the Engineer.

Immediately prior to completion, clean all existing and new culvert pipe and clean ditches. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction.

C. Shouldering. All work will be completed according to Section 209, or as specified in the Proposal notes, Plan Sheets, Typical Sections, or as directed by the Engineer. Shouldering will consist of any necessary grading and/or shaping of the existing shoulder, or providing suitable earth material and grading, shaping, and compacting the earth material, in order to achieve the proposed shoulder dimensions as detailed in the Typical Sections. After any necessary shouldering is completed, a 4" layer of DGA shall be placed along the shoulders and under guardrail, as detailed on the Typical Sections and Plan Sheets. Two applications of Chip Seal are to be applied on the DGA along the shoulder and on the DGA under the guardrail, as shown on the Typical Sections.

NOTE: The shoulders along the roadway near Shakertown are to be earth only. Perform shouldering as described above to achieve the proposed shoulder dimensions as detailed in the Typical Sections. DGA with Chip Seal will only be placed in the two (2) foot area under, and in front of, the guardrail, and the two (2) feet area behind the guardrail (a total DGA width of four (4) feet), as noted on the Plan Sheets and Typical Sections.

Erosion Control Blanket is to be installed in the areas of earth shoulders as approved by the Engineer.

- **D. Paved Ditch.** All work will be completed according to Section 709 and Standard Drawing RDD-002-06 for Paved Type 2 Ditches.
- **E. Removing Pipe.** Remove existing culvert pipe at the approximate locations noted in the proposal. The Engineer will determine the actual locations at the time of construction. Saw cut the existing asphalt pavement, and base to a neat edge prior to excavation and removal of the existing pipe. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities. Waste excavated materials and removed pipe at approved sites off the right of way obtained by the Contractor at no additional cost to the Department.
- **F.** Culvert Pipe. Construct culvert pipe at the locations in the proposal or designated by the Engineer. The contractor will establish with the approval of the Engineer the final centerline, flow lines and skew to obtain the best fit of the existing ditches and channels. Construct pipe bedding according to Section 701 and the applicable standard or Sepia Drawings. Use approved connecting bands or concrete anchors as

required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.

The Contractor will install the pipe replacements initially as shown in the Pipe Replacement Detail, excluding the Asphalt Surface. The Contractor shall wait a minimum of 48 hours after pipe replacement and placing flowable fill pipe backfill and Asphalt Base before placing Level and Wedge and Asphalt Surface. The pavement material used to place Asphalt Base shall be paid as Level & Wedging. During the waiting period, the Contractor is responsible for maintaining the driving surface. Materials used for maintenance shall be incidental to Maintain and Control Traffic. The total length of roadway at pipe replacement locations (not in curves receiving super elevation) to have Asphalt Surface pavement is 200 feet, with 100 feet beyond the pipe in each direction. Asphalt quantities per location shall be determined by the Engineer.

- **G. Pipe Backfill.** Contrary Section 701.03.06, all pipe will be backfilled with flowable fill. Backfill the pipe according to the Pipe Replacement Detail.
- **H. Embankments.** Backfill pipe extensions and construct shoulder embankments as shown on the drawings or as directed by the Engineer. Provide positive drainage of slopes at all times during and upon completion of construction.
- **I.** Asphalt Pavement Installation. All work shall be completed according to Section 401, 402, & 403. Super Elevation Improvements are to be completed by placing asphalt base, leveling and wedging, and asphalt surface mixtures as indicated on the Typical Sections, Pavement Detail, and/or Plan Sheets.
- **J.** Milling and Level and Wedging. Milling and Level and Wedging, shall be determined by the Engineer. Asphalt quantities per location shall be determined by the Engineer according to Section 403.
- **K.** Disposal of Waste. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites, off the right of way, obtained by the Contractor at no additional cost to the Department.
- L. Final Dressing, Clean Up, Seeding and Protection, and Restoration. After all work is completed, remove all waste and debris from the job site. Grade all disturbed areas to blend with the adjacent roadway features and to provide a suitable seed bed. Perform Class A Final dressing on all disturbed areas, Seed and protect all disturbed earthen areas according to the Special Note for Erosion Control.
- M. Erosion Control. See Special Note for Erosion Control.

#### IV. METHOD OF MEASUREMENT

- **A. Maintain and Control Traffic.** Maintain and Control Traffic will be measured as Lump Sum.
- **B. Site Preparation.** Other than the bid items listed, Site Preparation will NOT be measured for payment, but shall be incidental to the project bid items.
- **C. Ditching and Shouldering.** See the note "DGA Base for Shoulders". DGA will be measured in tons and weighed according to Section 109. For the bid items "Ditching" and "Shouldering", the Department will measure the quantities according to Section 209.
- **D. Paved Ditch.** The Department will measure the quantity according to Section 709.
- **E. Removing Pipe**. Removal of existing culvert pipe will be measured according to Section 701.01.14. Any excavation necessary to remove existing pipe will NOT be measure for payment, but shall be incidental to the bid item "Remove Pipe".
- **F.** Culvert Pipe. The Department will measure the quantity according to Section 701. Any excavation necessary to install culvert or entrance pipe will be incidental to the corresponding pipe bid items.
- **G. Backfill the pipe.** Backfilling of pipe will NOT be measured for payment, but shall be incidental to the installation of the pipe.
- **H. Embankments.** The Department will measure the quantity according to Section 206.
- **I. Asphalt Pavement Installation**. The Department will measure the quantity according to Sections 109, 402, & 403.
- **J. Milling and Level and Wedging**. The Department will measure the quantity according to Section 403.
- **K. Erosion Control.** See Special Note for Erosion Control.

# V. BASIS OF PAYMENT

- **A. Maintain and Control Traffic.** The Department will pay the quantity as Lump Sum.
- **B. Ditching and Shouldering.** See the note "DGA Base for Shoulders". For DGA, the Department will make payment according to Section 109. For the bid items "Ditching" and "Shouldering", the Department will make payment according to Section 209.
- **C. Paved Ditch.** The Department will make payment according to Section 709.

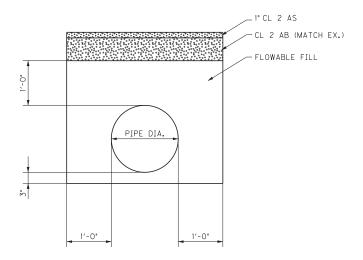
- **D. Removing Pipe**. The Department will make payment for the removal of existing culvert pipe by the linear foot of completed and accepted quantities. The Department will NOT make payment for any excavation necessary to remove existing pipe and will consider this incidental to the bid item "Remove Pipe". Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.
- **E.** Culvert Pipe. The Department will make payment for culvert pipe by the linear foot of completed and accepted quantities. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for furnishing, installing, and backfilling new culvert pipe.
- **F. Pipe Backfill.** The Department will NOT make payment for backfilling pipe, but shall be incidental to the installation of the pipe.
- **G. Embankments.** The Department will make payment for the completed and accepted quantities in Cubic Yards according to Section 206.
- **H. Asphalt Pavement Installation.** The Department will make payment for the completed and accepted quantities in Tons according to Section 403.
- **I. Milling and Level and Wedging**. The Department will make payment for the completed and accepted quantities in Tons according to Section 403.
- **J.** Erosion Control. See Special Note for Erosion Control.

DATE DATE DATE

PREPARED BY CHECKED BY APPROVED BY

COUNTY OF	ITEM NO.	SHEET NO.
MERCER	7-9000	

# PIPE REPLACEMENT DETAIL



REMOVE AND REPLACE CULVERT PIPE

## SPECIAL NOTE FOR ASPHALT MIXTURE FOR PAVEMENT WEDGE

**I. MATERIALS.** Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications, current edition.

**II. CONSTRUCTION.** Place the Asphalt Mixture for Pavement Wedge as a separate operation from the driving lane to the Paved Ditch Type 2 between Mile Points 17.96 to 19.78 (Left Stations 948+50.60 to 1042+68.83). Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03, as applicable. Compact the mixture with a roller weighing at least one ton.

Construct the wedge as detailed on the Typical Sections. The depth of the wedge may vary in thickness at the edge of the driving lanes and at the edge of the Pave Ditch Type 2. After compaction the wedge is to be flush with the edge of the driving lanes and a maximum of 1" above the edge of the Pave Ditch Type 2.

**III. MEASUREMENT.** The Department will measure Asphalt Mixture for Pavement Wedge according to Section 407.

**IV. PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

## SPECIAL NOTE FOR STAKING

Perform Contractor Staking according to Section 201; except, in addition to the requirements of Section 201, perform the following:

- 1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer; and
- 2. Prepare a Pavement Drainage Development Plan to ensure positive drainage; and
- 3. Verify the dimensions and quantities on the Culvert Pipe/Culvert Extension cross sections and revise as necessary to accommodate the existing site conditions, to provide proper alignment of the culvert pipe with stream channels, ditches, and the roadway lines and grades, and to ensure positive drainage upon completion of the work; and
- 4. Establish typical section cross slopes for superelevation correction, transitions and tapers, shoulder widening, and details to align the culvert extensions and roadway widening to match the existing roadway alignment and curvature and to accommodate guardrail, and to ensure positive drainage upon completion of the work; and
- 5. Verify entrance pipe lengths and determine flow line elevations and slopes necessary to provide positive drainage; and
- 6. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
- 7. Produce and furnish to the Engineer "As Built" plans; and
- 8. Perform any and all other staking operations required to control and construct the work.

## SPECIAL NOTE FOR TREE, STUMP, AND BRUSH REMOVAL

## I. DESCRIPTION

All work shall be performed in accordance with the Department's current Standard Specifications for Road and Bridge Construction and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist furnishing all equipment, labor, materials, and incidentals for the following: (1) Site Preparation; (2) Maintaining and controlling traffic; (3) Temporary erosion control and temporary pollution control; (4) Cutting, trimming, and/or removing trees, stumps, and/or brush as specified or directed by the Project Engineer; (5) Treating all cut stumps required by Project Engineer to prevent re-sprouting; (5) Clean up and disposal of waste; (6) Final dressing and seeding and protection; and (7) all other work specified in the Contract.

## II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- **A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- **B. Seeding and Protection.** Use applicable Seed Mixture as specified per Section 212.03.03.
- **C. Erosion Control.** See Special Note for Erosion Control.

## III. CONSTRUCTION METHODS

- **A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- **B.** Cutting, Trimming, and/or Removing Trees, Stumps, and/or Brush. The Contractor shall cut trees and/or bushes as close to the ground as possible; three inches (3") or less from ground line. The Tree Canopy between Mile Points 17.67 to 19.87 (Station 932+79.89 to 1049+01.29) shall be cleared as shown in the Tree Canopy Clearing Detail to a height of thirty-five (35) feet over the roadway and extend to a horizontal distance of five (5) feet left and right of the edge of pavement. Grinding of all tree stumps within the mowing zone shall be required as directed by the Project Engineer. All stumps that are designated to be treated by mechanical grinding shall be required to be removed to a minimum depth of two (2) inches below the surrounding grade line. Treat, within one hour of cutting, all stumps with the specified herbicide solution. Replace and level any and all soil disturbed during these operations. Leave the soil in a condition suitable for seeding that is level with surrounding soil grade, with no holes or indentions to catch water or present unsafe mowing conditions. This work will be incidental to the bid items

"Remove Trees or Stumps" and "Trim and Remove Trees and Brush." NOTE: Tree cutting restrictions apply. No trees shall be cut or trimmed between April 1<sup>ST</sup> and November 15<sup>TH</sup>. See Special Note for Completion Dates & Liquidated Damages concerning damages if trees and/or bushes are cut outside of the specified time frame.

C. Removal of Tree, Stump, and Brush Debris. The Contractor will remove all debris and biomass from the trimming and/or removal of trees, stumps, and/or brush from the work site and dispose of such off the right-of-way in accordance with local, state, and federal solid waste laws and regulations. Cleanup and remove all existing down trees and brush located within the designated areas. At the discretion of the Project Engineer, the contractor may be permitted to chip and blow biomass onto non-mowing zones. Chips shall not be blown onto areas that would potentially restrict the flow of water in drainage ditches. All un-chipped biomass must be removed from roadway rights-of-ways.

The Contractor shall keep the work zone free of accumulated waste material and debris at all times. Remove and dispose of all tree, stump, and brush chips off the rights-of-ways. Remove and dispose of all debris and waste material off the rights-of-ways as work is completed and at the end of each workday. Remove desirable wood pieces from the rights-of-ways at the end of each workday. Stockpile trees and brush off the rights-of-ways. At the discretion of the Project Engineer, the Contractor may be permitted to stockpile trees and brush at approved locations along the rights-of-ways.

The Contractor shall immediately correct any disturbance to all drainage features and structures caused by the Contractor's work.

**D. Stump Treatment.** Within one hour of cutting, the Contractor shall apply a stump treatment mix consisting of fifty percent (50%) Glyphosate (EPA Reg. No. 524-579) with water and add twelve (12) ounces of Imazapyr (EPA Reg. No. 241-431), as specified, per gallon of solution. The addition of a non-ionic surfactant 5% (v/v) shall be added to the solution to increase uptake of the herbicide solution into the root system. Generic formulations are not acceptable. Mix the herbicide solution in the presence of the Inspector. Include a color indicator in the herbicide solution to mark the treated stumps. Spray or paint the herbicide solution onto all cut stumps within one hour after cutting. Apply the herbicide solution in a manner to avoid drift onto surrounding vegetative ground cover. Stumps in the mowing zone, designated for mechanical grinding treatment, need not receive the herbicide treatment.

Provide herbicide material for the treatment of cut stumps meeting the following criteria:

## a. Glyphosate

Active ingredient: (**Glyphosate**)

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its	S
potassium salt	48.7%
Inert ingredients	51.3%
Total	100.0%

\* Contains 660 grams per liter or 5.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of the acid, glyphosate. EPA Reg. No. 524-579

# b. Imazapyr

Active ingredient: (Imazapyr)

*Isopropylamine salt of Imazapyr 2-[4,5-dihydro-4-methyl-4-(1meth	ylethyl)-
5oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)	26.7%
Inert ingredients	73.3%
Total	100%
* Equivalent to 21.9 percent 2.14.5 dibydro 4 methyl 4 (1 methylathy	1) 50vo

\* Equivalent to 21.8 percent 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazolyl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon. EPA Reg. No. 241-431

KRS 217B requires that any individual who applies pesticides to Kentucky Highway Right-of-Way areas must be certified as a Pesticide Applicator under Category 6 guidelines. Comply with all current laws and regulations established by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and by KRS 217B that regulate the handling, use, and application of pesticides.

- **E. Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his work.
- F. Coordination with Utility Companies. NOTICE: Utility locations shown in the plans are approximate and have not been specifically located by the Department. Locate all underground, above ground and overhead utilities prior to beginning construction. The Contractor shall have the responsibility 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 Utility Owner while they relocate their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations.
- **G. Right-of-Way Limits.** The exact limits of the Right-of-Way have not been established by the Department. Unless otherwise shown on the plans (such as in the vicinity of Shaker Village), Right of Way has been assumed to be twenty (20) feet each side of the centerline, or at the face of the wire, plank, or rock wall fence, whichever is closer to the centerline. The Contractor shall limit his activities to obvious Right-of-Way, permanent or temporary easements, and any work areas secured by consent and release of the adjacent property owners. The Contractor shall be responsible for all encroachments onto private lands.

- **H. Clean Up, Disposal of Waste.** Clean up and dispose of all removed debris by the end of each work day, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for clean up or disposal of waste and debris from the project.
- **I. Final Dressing, Seeding and Protection.** Apply final dressing, class A to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the appropriate Seed Mixture as specified in Section 212.03.03. The Department will NOT make direct payment for final dressing and seeding and protection.
- **J.** Erosion Control. See Special Note for Erosion Control.

## IV. METHOD OF MEASUREMENT

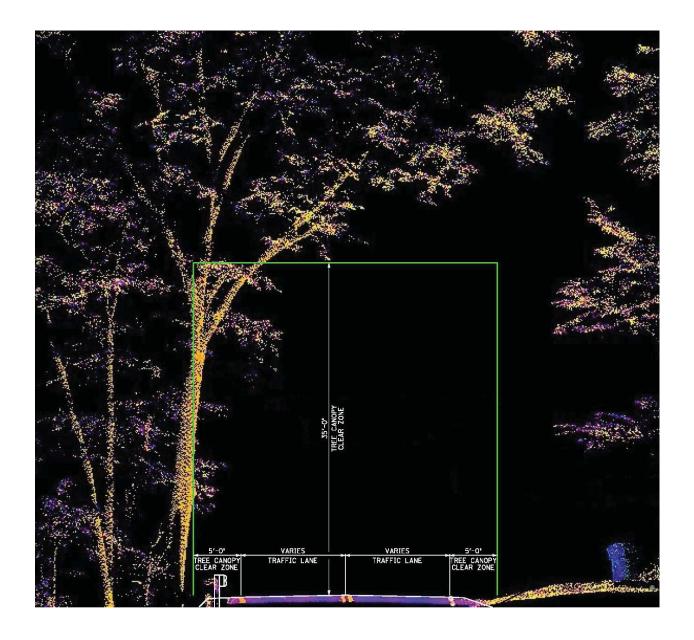
- **A. Maintain and Control Traffic.** Maintain and Control Traffic will be measured as Lump Sum.
- **B. Site preparation.** Site preparation necessary for trimming and/or removal of trees, stumps, and/or brush will NOT be measured for payment, but shall be incidental to the bid items "Remove Trees or Stumps" and "Trim & Remove Trees & Brush".
- **C. Remove Trees or Stumps.** The Department will measure the quantity as each tree or stump removed. Trees or stumps to be removed under this bid item are those listed on the Plans or in this Proposal, or as directed by the Engineer.
- **D. Trim & Remove Trees & Brush.** The Department will measure the quantity as per linear foot per side of highway. See the Tree Canopy Clearing Detail for horizontal and vertical trimming dimensions. The horizontal width is taken from the edge of the pavement measured perpendicular to the roadway but not to extend beyond the areas outlined in the above mentioned Right-of-Way Limits or as directed by the Engineer.
- **E. Stump Treatment.** The Department will NOT measure for payment the operation of Stump Treatment. This activity shall be incidental to the bid items "Remove Trees or Stumps" and "Trim & Remove Trees & Brush".
- **F.** Clean Up, Disposal of Waste. The Department will NOT measure for payment the operations of Clean Up and Disposal of Waste. These activities shall be incidental to project bid items.
- **G. Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operations of Final Dressing and Seeding and Protection. These activities shall be incidental to Erosion Control.
- **H. Erosion Control.** Erosion Control will be measured as Lump Sum.

## V. BASIS OF PAYMENT

- **A. Maintain and Control Traffic.** The Department will pay the quantity as Lump Sum.
- **B. Site Preparation.** The Department will NOT make payment for Site Preparation. Site preparation necessary for the trimming and/or removal of trees, stumps, and/or brush will be incidental to the bid items "Remove Trees or Stumps" and "Trim & Remove Trees & Brush".
- **C. Remove Trees or Stumps.** The Department will make payment for the completed and accepted quantities of each tree or stump removed. (NOTE: Any trees and/or bushes that are cut or trimmed between April 1<sup>ST</sup> and November 15<sup>TH</sup> will NOT receive payment at the contract unit price.) The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete this work to remove the trees and/or stumps.
- **D. Trim & Remove Trees & Brush.** The Department will make payment for the completed and accepted quantities per linear foot. (NOTE: Any trees and/or bushes that are cut or trimmed between April 1<sup>ST</sup> and November 15<sup>TH</sup> will NOT receive payment at the contract unit price.) The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete this work to trim and remove trees and/or brush.
- **E. Stump Treatment.** The Department will NOT make payment for the operation of Stump Treatment. This activity shall be incidental to the bid items "Remove Trees or Stumps" and "Trim & Remove Trees & Brush".
- **F. Clean Up, Disposal of Waste.** The Department will NOT make payment for the operations of Clean Up and Disposal of Waste. These activities shall be incidental to project bid items.
- **G. Final Dressing, Seeding and Protection.** The Department will NOT make payment for the operations of Final Dressing and Seeding and Protection. These activities shall be incidental to Erosion Control.
- **H. Erosion Control.** The Department will pay the quantity as Lump Sum.

# TREE CANOPY CLEARING DETAIL

Clearing offset 5 feet from edge of pavement, both sides, cutting with a vertical reach of 35 feet



## SPECIAL NOTE FOR EMBANKMENT SLIDE REPAIR

#### I. DESCRIPTION

This work shall be performed in accordance with the Department's Current Standard Specifications and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist of: (1) Do necessary excavation; (2) Furnish and install railroad rails; (3) **Install wall cribbing furnished by the Department of Highways;** (4) Excavate, place geotextile material, and backfill the area around the railroad rails and on the fill slope; (5) Reconstruct shoulder area; (6) Install guardrail, as stated in the Special Note for Guardrail; (7) Maintain and control traffic; and (8) any other work as specified by this contract.

Repairs using drilled railroad steel and guardrail cribbing, as shown in the Embankment Repair Detail, are to occur at locations indicated on the Plan Sheets and Summary Sheets. Begin and End limits at each area are to be field verified with approval from the Engineer.

## II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- **A. Railroad Rails.** Use recycled (used) railroad rails classified with a nominal weight of 130 lb/yd (pounds per yard) size or greater. Use only visibly straight recycled railroad rails with no splices. The Engineer will verify rail nominal weights (Manufacturer's Stamp with lb/yd, date, etc.). Provide Certification for nominal weight if the Manufacturer's Stamp is unidentifiable.
- **B.** Wall Cribbing. Use recycled (used) steel "W" beam guardrail. Cribbing material will furnished by the Department of Highways. Wall cribbing will be located at the <u>Department of Highways Mercer County Maintenance Facility</u>. The Contractor will be responsible for picking up the cribbing material and delivering it to the project site as an incidental item.
- **C. Backfill material for Drilled Sockets.** Use the following for backfill material for Drilled sockets: concrete, free flowing sand, pea gravel, crushed limestone, or crushed sandstone. Use backfill material with one hundred percent (100%) passing a one-half (1/2) inch sieve. Do not use auger tailings. Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.
- **D. Fill Material for CRIBBING.** Use one of the following backfill materials: Kentucky Aggregate Gradation No. 2's or larger. Backfill material shall meet

requirements of Section 805. The Engineer will use visual inspection and/or material testing, as applicable, to determine acceptability.

- **E. DGA.** Furnish Dense Graded Aggregate as per Section 805. Do not use Crushed Stone Base.
- **F. Final Dressing, Seed and Protection.** Use Seed Mixture No. 1.
- **I. Geotextile Fabric.** Furnish Geotextile Fabric Type IV as per Section 843.
- J. **Erosion Control.** See Special Note for Erosion Control.

## III. CONSTRUCTION METHODS

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B. Staking.** Establish proper slope elevations and ratios, shoulder widths, existing ditch profile and final ditch profile to insure positive drainage. Be responsible for field layout. Positive drainage is required upon completion of the project and is the responsibility of the Contractor.
- C. Site Preparation. Prepare repair sites. This includes clearing and grubbing, if necessary. Remove all obstructions. Sweep and remove debris, if necessary. The area to be cleared has not been measured by the Department and the bidder must draw his own conclusions. Construct silt checks, temporary silt fence, or other erosion control devices, as necessary to satisfy the BMP, at locations directed by the engineer. The Engineer shall approve all site preparation. The Department will not make direct payment for site preparation.
- **D.** Installation of Railroad Rails. See attached summary for site locations and estimated quantities of materials required. Contrary to the attached tables and drawings for drilled railroad rails, Install only 1 Row of RR Rails on 4 foot centers unless otherwise shown on the summary or mentioned in these notes. From a Geotechnical Overview, based on the field review and brief review of the geology, it is anticipated that rock will vary from four to eight feet. No geotechnical borings were advanced, and, as such, rock depths may differ from those estimated above. Therefore the contractor is responsible for determining actual depth to rock and providing to the department to be approved by the engineer. The embankment failures at these sites are caused by erosion from steep slopes and poor drainage.

NOTE TO ENGINEER AND CONTRACTOR: ABSOLUTELY NO CHANGE IN SCOPE OF WORK OR INCREASE IN QUANTITIES WILL BE ALLOWED ON THIS PROJECT WITHOUT PRIOR WRITTEN APPROVAL FROM THE TEBM (Transportation Engineering Branch Manager) FOR OPERATIONS OR HIS REPRESENTATIVE IN THE DISTRICT OFFICE.

# THE DEPARTMENT SHALL NOT BE LIABLE FOR PAYMENTS DUE TO ADDITIONAL WORK THAT HAS NOT BEEN AUTHORIZED BY THE AFOREMENTIONED PERSONS.

Install used railroad rail piling in drilled sockets in rock or stable material under the landslides (see figure 1) or the eroded areas (see figure 2) as project location dictates or as directed by the Engineer.

Drill the socket, furnish, and install the railroad rails into holes at slide locations. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as "Railroad Rail-Drilled". Drill sockets into solid rock, if possible. The Department will monitor each hole, which will serve as a sounding for the rail to be installed in it. Embed the railroad rail into solid rock no less than one-half the free end length of the rail. (See figure 1 and figure 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation. Allow adequate size of the drilled socket to allow free insertion of the railroad rail, but the maximum socket size is 1 foot in diameter.

After each hole is drilled, install railroad rail immediately with the flanges positioned perpendicular to the direction of the landslide or break (see figure 3). Determine the height of rail that is needed to reestablish pavement and shoulder typical section. Cut off excess rail flush with the proposed ground line that is not needed. Use cutoffs elsewhere in the project if possible; unusable cutoffs remain the property of the Contractor.

After railroad rail is installed, immediately backfill the drilled hole with the approved materials. Shovel the backfill material into the hole in small amounts. Avoid bridging between the rail and the sides of the hole. Do not use Auger tailings as backfill material.

When double or triple rows are required, stagger the rows to obtain the required spacing. Keep the spacing between the rows of rails as close as is practical; do not space between the rows of more than 2 feet, if possible. See figure 3 (Case II and Case III) for the diagrams showing two (2) or three (3) rows of rails. Select the spacing as per Table 1 for all 130 pound per yard rail or greater. The Department shall approve the selection prior to work being performed.

Crib any exposed portion of railroad rail before placing backfill.

**E.** Excavation and Backfill. Excavate each repair area to provide a platform for drilling the used railroad rails, if necessary. Excavate for roadway ditches as necessary for slope, shoulder and pavement drainage. Place geotextile fabric, then construct embankment behind railroad rails, cribbing, and on slope, as per Section 206. Construct embankment up to the approximate existing pavement elevation.

Reconstruct the shoulder area with DGA up to the approximate existing elevation and width of the surrounding typical section or to a minimum width of <u>2 Feet</u> at each slide location. Do not pond water on the shoulder area or at the shoulder edge. Reconstruct the shoulder before installing guardrail.

<u>DO NOT USE EXCAVATED MATERIAL FROM THE SITE AS FILL MATERIAL</u>. Excess excavation may be wasted at sites on the right-of-way, ONLY if approved by the Engineer. Material may NOT be wasted in flood prone areas or in streams.

If the Engineer deems no suitable sites are available within the right-of-way, the Contractor will be required to waste excess material off the right-of-way at sites obtained by the Contractor at no cost to the Department.

- **F. Installation of Wall Cribbing**. Install Cribbing as shown on Figure 1 or Figure 2 as slide location dictates or as directed by the Engineer. Extend wall cribbing 2 feet below the existing ground line. If bedded rock is encountered, install the cribbing to the bedded rock only. If necessary, the Engineer will direct changes to this procedure. Furnish all labor and equipment to deliver and install wall cribbing on the recycled (used) railroad rail piling. Wall cribbing shall be lapped, bolted, and attached solid to the drilled railroad rails.
- **G. Final Dressing, Seeding and Protection**. Apply Final Dressing, Class A to all disturbed areas, both on and off the right-of-way. Sow with Seed Mixture No. 1. The Department will NOT make direct payment for final dressing, or seeding and protection, but shall be incidental to Erosion Control.
- **H. On-Site Inspection.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize themselves with the existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made.
- **I. Right-of-Way Limits.** Right-of-Way and easement limits shown on the plans are approximate only. The Contractor shall make every effort to limit his activities to obvious right-of-way and permanent or temporary easements and shall be responsible for encroachments onto private lands.
- **J. Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his work.
- **K. Erosion Control.** See Special Note for Erosion Control.

#### IV. METHOD OF MEASUREMENT

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

- **B. Staking.** See Special Note for Staking.
- **C. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to the bid item Excavation and Backfill.
- **D. Railroad Rail-Drilled.** The Department will measure the finished in-place length of this item in Linear Feet. Laps, cutoffs, excess, and waste will NOT be measured for payment. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as Railroad Rail-Drilled.
- **E. Wall Cribbing.** The Department will NOT measure this item, but shall be incidental to the bid item Excavate and Backfill.
- **F. Excavation and Backfill.** The Department will measure this item in cubic yards. The Department will measure the quantity in the field as per Section 204 (Roadway Excavation) or other accepted methods of measurement as directed by the Engineer.
- **G. DGA.** The Department will NOT measure the DGA necessary for reconstructing the shoulder area, but shall be incidental to the bid item Excavate and Backfill.
- **H. Geotextile Fabric.** The Department will measure Geotextile Fabric Type IV according to Section 214.
- I. Clean Up, Disposal of Waste. The Department will NOT measure for payment the operations of Clean Up and Disposal of Waste. These activities shall be incidental to project bid items.
- **J. Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operations of Final Dressing and Seeding and Protection. These activities shall be incidental to Erosion Control.
- **K. Erosion Control.** See Special Note for Erosion Control.

#### V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Staking.** See Special Note for Staking.

- **C. Railroad Rail-Drilled.** The Department will pay for the completed and accepted quantities under the bid item of Railroad Rail-Drilled. The Department will consider payment full compensation for all work required in these notes and elsewhere in the Contract.
- **D. Excavation and Backfill.** The Department will pay for the completed and accepted quantities under the bid item: Excavation and Backfill. Payment will be based on quantity measured in the field. The Department will consider payment full compensation for all work and incidentals necessary to excavate and backfill the areas indicated on the plans or as directed by the Engineer.
- **E. DGA.** The Department will NOT make payment for the DGA necessary to reconstruct the shoulder areas within the Excavate and Backfill work areas shown on the plans or as directed by the Engineer, but shall be incidental to the bid item Excavate and Backfill.
- **F. Geotextile Fabric.** The Department will make payment of Geotextile Fabric Type IV according to Section 214.
- **G. Wall Cribbing.** The Department will provide the material for all Wall Cribbing. The Department will NOT make payment for the installation of the Wall Cribbing, but shall be incidental to the bid item Excavate and Backfill. The Department will NOT make separate payment for the hauling of the wall cribbing to the project site.
- **H.** Clean Up, Disposal of Waste. The Department will NOT make payment for the operations of Clean Up and Disposal of Waste. These activities shall be incidental to project bid items.
- **I. Final Dressing, Seeding and Protection.** The Department will NOT make payment for the operations of Final Dressing and Seeding and Protection. These activities shall be incidental to Erosion Control.
- **J. Erosion Control.** See Special Note for Erosion Control.

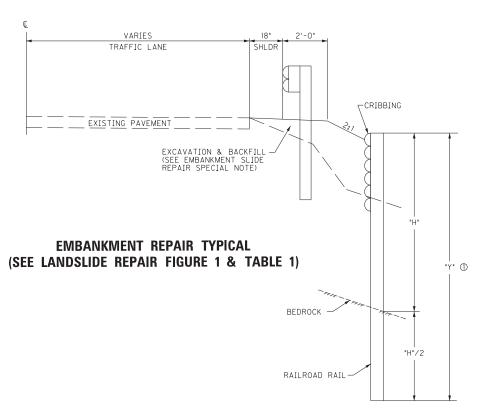
DATE DATE DATE

PREPARED BY CHECKED BY APPROVED BY

COUNTY OF	ITEM NO.	SHEET NO.
MERCER	7-9000	

## EMBANKMENT REPAIR DETAIL

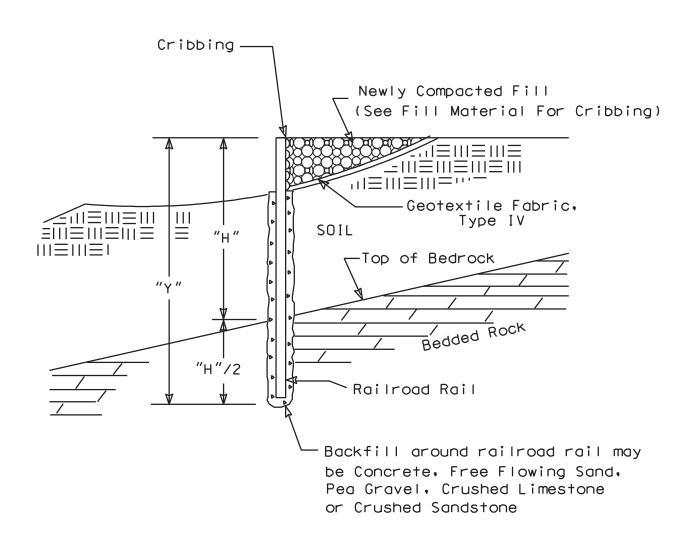
DRILLED RAILROAD STEEL



NOTES:

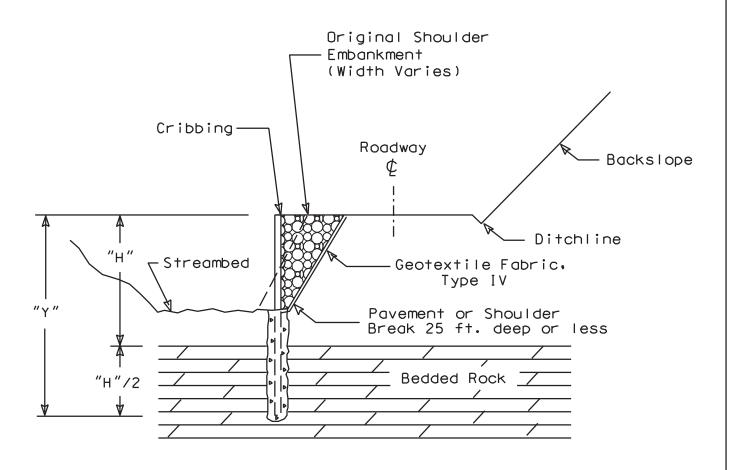
① AN ASSUMED 12 FEET RAILROAD STEEL IS ESTIMATED FROM A GEOTECHNICAL OVERVIEW, BASED ON THE FIELD REVIEW AND BRIEF REVIEW OF THE GEOLOGY, IT IS ANTICIPATED THAT ROCK WILL VARY FROM FOUR TO EIGHT FEET. NO GEOTECHNICAL BORINGS WERE ADVANCED, AND, AS SUCH, ROCK DEPTHS MAY DIFFER FROM THOSE ESTIMATED ABOVE. THEREFORE THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL DEPTH TO ROCK AND PROVIDING TO THE DEPARTMENT TO BE APPROVED BY THE ENGINEER.

# TYPICAL SECTION DEPICTING INSTALLATION OF RECYCLED RAILROAD RAIL PLACED IN DRILLED SOCKET FOR LANDSLIDE CORRECTION



# TYPICAL CROSS SECTION OF ROADWAY REPAIRS UTILIZING RECYCLED RAILROAD RAILS IN DRILLED SOCKETS FOR EMBANKMENT EROSION CORRECTION

NOTE: Spacing from edge to edge of drilled socket: 3 ft. max.



NOTE:

"H"/2 Depth of Rail into bedded rock = 1/3 total length where rock is present.

#### DETAIL SHEETS FOR SLIDE REPAIR

# ALTERNATE SCHEMES FOR INSTALLING RAILROAD RAILS IN DRILLED SOCKETS

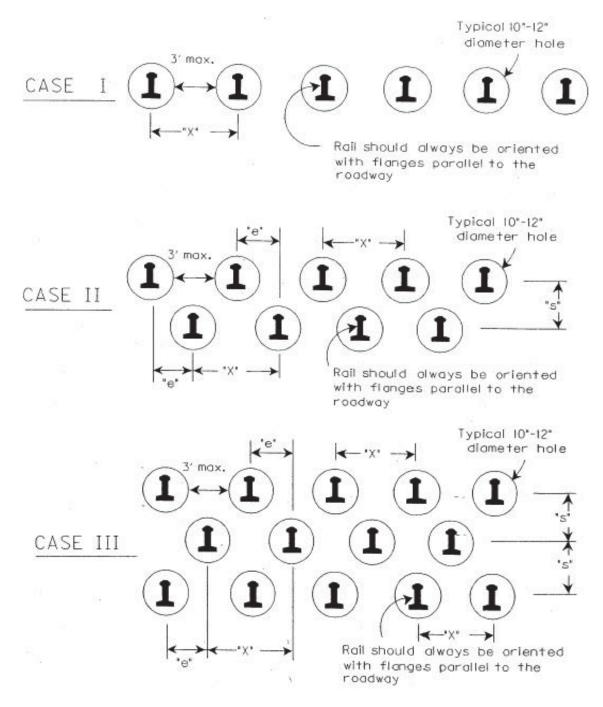


FIGURE 3

## DETAIL SHEETS FOR SLIDE REPAIR

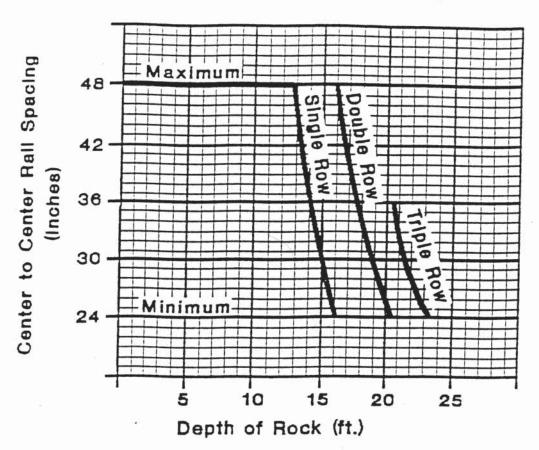
## TABLE 1 FACTOR OF SAFETY = 1.0 DESIGN CHART FOR 130LBS/YD TO 133 LBS/YD RECYCLED (USED) RAILROAD RAILS

## REFER TO FIGURES 1, 2, & 3 FOR DIMENSIONS SHOWN BELOW

Soil Depth to	Minimum	Total Length of	Required	Maximum	Effective
Bedded Rock	Embedment	Installed	Number of	Spacing	Spacing
"H"	into Bedded	Railroad Rail	Rows	Between Rails	Between Rows
(Feet)	Rock "H/2"	"Y"		"X"	of Rails "e"
	(Feet)	(Feet)		(Max. 48")	(Inches)
				(Inches)	
8	4	12	1	48	N/A
9	4.5	13.5	1	48	N/A
10	5	15	1	48	N/A
11	5.5	16.5	1	48	N/A
12	6	18	1	48	N/A
13	6.5	19.5	1	48	N/A
14	7	21	1	32	N/A
15	7.5	22.5	2	48	24
16	8	24	2	44	22
17	8.5	25.5	2	36	18
18	9	27	2	28	14
19	9.5	28.5	2	24	12
20	10	30	3	33	11
21	10.5	31.5	3	28.5	9.5
>21	N/A	N/A	N/A	N/A	N/A

**NOTE:** SOIL DEPTHS "H" GREATER THAN 2L FEET SHALL BE REFERRED TO THE ENGINEER.

## Design Chart for 136 to 140 lb./yd. Rails



#### SPECIAL NOTE FOR HIGH FRICTION SURFACE TREATMENT

#### I. DESCRIPTION

This work shall be performed in accordance with the Department's 2012 Standard Specifications, and applicable Standard Drawings except as hereafter specified. Article references are to the Standard Specifications.

The Contractor shall furnish all materials, labor, and equipment for the following work:

- (1) Maintaining and Controlling Traffic; (2) Cleaning and preparing the existing surface;
- (3) Installing a high friction surface treatment in accordance with the contract documents; and (4) All other work as specified as part of this contract.

#### II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Materials Field Sampling and Testing Manual. Make 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.** High Friction Surface Treatment. The high friction surface treatment shall consist of a polymer resin binder and aggregate system chosen from the approved lists in this special note. The Department will obtain one sample of each binder component and one sample of aggregate. The Department will obtain a one gallon (128 ounce) sample of each binder component for testing, and the Department will obtain one 40 to 50 pound sample of aggregate for testing.

List of Approved Materials for High Friction Surface Treatments for Asphalt Pavements

Polymer Resin Binder	Binder Manufacturer	Binder Type	Aggregate
Sher-Endure	Sherwin Williams	MMA	Calcined Bauxite
Sher-Friction	Sherwin Williams	Ероху	Calcined Bauxite
Tire Grip	Ennis-Flint	Ероху	Calcined Bauxite
TrafficGrip	Hitex Ltd	Ероху	Calcined Bauxite
E-Bond 526	Transpo	Ероху	Calcined Bauxite
PPC HFST	Kwik Bond Polymers	Polyester	Calcined Bauxite
Mark 154	Poly-Carb	Ероху	Calcined Bauxite

List of Approved Materials for High Friction Surface Treatments for Concrete Pavements

Polymer Resin Binder	Binder Manufacturer	Binder Type	Aggregate
Sher-Endure	Sherwin Williams	MMA	Calcined Bauxite
Sher-Friction	Sherwin Williams	Ероху	Calcined Bauxite
Mark-154	Poly-Carb	Ероху	Calcined Bauxite

List of Approved Materials for High Friction Surface Treatments for Concrete Bridge Decks

Polymer Resin Binder	Binder Manufacturer	Binder Type	Aggregate
ProPoxy III	Unitex	Ероху	Calcined Bauxite
Sikadur 22 Lo Mod	Sika	Ероху	Calcined Bauxite
Sher-Friction	Sherwin Williams	Ероху	Calcined Bauxite

**a) Binder.** The polymer resin binder shall hold the aggregate firmly in position and meet the following requirements:

TWO-PART MODIFIED BINDER REQUIREMENTS			
Property	Specification Limits	Test Method	
Ultimate Tensile Strength	17.0 – 25.0 MPa (19.65 MPa)	ASTM D638	
Compressive Strength	5mm min.; > 13 MPa	ASTM D695	
Gel Time	50 ml; 10 minutes min. (16 minutes)	ASTM D2471	
Elongation at break	30% minimum (54.0%)	ASTM D638	
Peak Exothermic Temperature	150°F min.	ASTM D2471	
Water Absorption	Less than 0.25%	ASTM D570	
Shore Hardness	70 min.	ASTM D2240, Shore D	
Cure Rate	3 hours max	ASTM D1640 @ 75°F	
Mixing Ratio	Per Manufacturer's Recommendation	n/a	

**b) Aggregate.** Ensure that the aggregate is clean, dry and free from foreign matter and meets the following requirements:

AGGREGATE REQUIREMENTS			
Property	Specification Limits	Test Method	
SFC – Side Force Coefficient	0.70 min.	ASTM E670	
SN – Skid Number	69 min SN40R	ASTM E274	
PSV – Polished Stone Value	75.0 mm max. (70 mm)	ASTM E660	
Texture Depth – Sand Patch Method	1 mm min. (1.2 mm)	ASTM E965	
AAV – Aggregate Abrasion Value	20 max	AASHTO T96	
Aggregate Gradation	95.0 – 100.0% Passing No. 6 0.00 – 5.0% Passing No. 16	AASHTO T27	

#### III. CONSTRUCTION METHODS

Prior to beginning work, provide the Engineer with a certification from the manufacturer of the binder stating that all material used in the work will meet the requirements of Section II A. a. in this Special Note. Also provide the Engineer with a certified certificate stating that all aggregates used in the work will meet the requirements of Section II A. b. of this Special Note.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Be responsible for all site preparation, including but not limited to the following:
- a) **Preparation and Restoration.** Ensure that a manufacturer's representative is on site to provide technical assistance during the start up operations and as necessary during the surface preparation, material placement and during any necessary remedial work.
- b) Protective Coverings. Utilities, drainage structures, curbs, bridge joints, and any other structure within or adjacent to the high friction surface treatment location shall be protected from surface preparation activities and application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the surface treatment location. Pavement markings that conflict with the surface application shall be removed prior to performing the required surface preparation.
- c) Surface Preparation. Prepare all surfaces in accordance with the following requirements. Ensure surfaces are dry and meet the requirements of the section immediately prior to installation of the high friction surface treatment. Surfaces contaminated with oils, greases, or other deleterious materials not removed by the required surface preparation shall be washed with a mild detergent solution, rinsed with clean potable water and dried using a hot compressed air lance.
- d) Asphalt Pavement. Clean asphalt pavement surfaces using mechanical sweepers and high pressure air wash. Mechanically sweep all surfaces to remove dirt, loose aggregate, debris and deleterious material. Air wash all surfaces using a minimum of 180 CFM clean and dry compressed air. Maintain the air lance perpendicular to the surface and the tip of air lance

within 12 inches of the surface. For applications on new asphalt pavement, ensure the surface has cured a minimum of 30 days prior to performing surface preparation and installation of the high friction surface treatment.

- e) Concrete Pavement. Clean concrete pavement surfaces by shot blasting and vacuum sweeping. Shot blast all surfaces to remove all curing compound, loosely bonded mortar, surface carbonation and deleterious material. The prepared surface shall comply with the International Concrete Repair Institute (ICRI) standard for surface roughness CSP 5. After shot blasting, vacuum sweep all surfaces to remove all dust, debris and deleterious material.
- f) Concrete Bridge Deck. Clean the entire area of the deck surface and vertical faces of curbs, barrier walls, and plinths up to a height of one inch above the top elevation of the overlay, and areas to receive epoxy-sand slurry by shot blasting and vacuum sweeping. Shot blast all surfaces to remove all curing compound, loosely bonded mortar, surface carbonation and deleterious material. Areas to receive epoxy-sand slurry shall be cleaned to a bright, clean appearance. The prepared bridge deck surface to receive high friction surface treatment shall comply with the International Concrete Repair Institute (ICRI) standard for surface roughness CSP 5. After shot blasting, vacuum sweep all surfaces to remove all dust, debris and deleterious material.
- **g) Pre-Treating.** Pre-treat joints and cracks greater than 1/4 inch in width and depth with properly proportioned and mixed polymer resin binder. Once the binder in the pre-treated areas has gelled, the installation of the high friction surface treatment may proceed.
- **C. Mechanized Application.** Do not apply surface treatment on a wet surface, when the ambient air or surface temperature is below 50°F or above 110°F, or when the anticipated weather conditions or surface temperature would prevent the proper application of the surface treatment as determined by the manufacturer.

Apply the polymer resin binder by a truck or trailer mounted application machine that must be capable of continually mixing and delivering the binder components on demand within the temperature range specified in varying widths of up to 12 feet wide at a uniform application thickness. Ensure that the mechanically applied distributing equipment includes accurate measuring devices and/or calibrated containers and thermometers for measuring the binder temperature prior to placement should heating be required. Operations will proceed in such a manner that will not allow the binder material to separate in the mixing lines, cure, dry, or otherwise impair retention bonding of the high friction surfacing aggregate. The application machine shall be equipped with flushing systems such that blockages of lines will not occur, and installation operations are not delayed, stopped, or otherwise compromised. Ensure that mechanical applications are capable of applying binder uniformly at a minimum rate of 10 gallons per minute. The mixed components are mechanically applied onto a prepared surface with a minimum coverage rate of 3.5 square yards per gallon at a minimum uniform thickness of 50 mils onto the-surface. In addition, ensure that the application machine complies with the requirements of the binder manufacturer.

The aggregate shall be applied within 120 seconds of the binder application onto the surface. Uniformly spread aggregate immediately without causing excessive overlap of aggregate outside of coverage area. Ensure that the mechanical aggregate spreader is capable of applying a continuous application of varying widths up to 12 feet wide, in a manner to not violently disturb the wet binder film, at a rate of approximately 13-15 lbs per square yard. Complete coverage of the "wet" binder with aggregate is necessary to achieve a uniform surface. No exposed wet spots of the binder shall be visible once the aggregate is installed. The operations should proceed in such a manner that will not allow the mixed binder material to separate, cure, dry, be exposed or otherwise harden in such a way as to impair retention and bonding of the high friction surfacing aggregate. Do not use vibratory or impact type compaction on the aggregate after placement.

**D. Hand Application.** At the Engineers discretion, corrective work and application to areas such as intersections or areas less than 300 square yards, or where truck mounted application machines are not applicable to the specified locations because of logistical restrictions, may be performed by hand application of the high friction surface treatment.

Do not apply surface treatment on a wet surface, when the ambient air or surface temperature is below 50°F or above 110°F, or when the anticipated weather conditions or surface temperature would prevent the proper application of the surface treatment as determined by the manufacturer.

The polymer resin binder components Part (A) and Part (B) shall be proportioned to the correct ratio (+/- 2% by volume ), mixed using a low speed high torque drill fitted with a helical stirrer.

The mixed components shall be hand applied onto a prepared surface at a minimum coverage rate of 3.5 square yards per gallon at a minimum uniform thickness of 50 mils onto the surface. Hand applied binder will be uniformly spread onto the prepared surface by the use of a continuous V notch serrated edged squeegee.

Immediately after placing the binder, apply the aggregate, in a manner to not violently disturb the wet binder film, at a rate of approximately 13-15 lbs per square yard. Do not use vibratory or impact type compaction on the aggregate after placement.

- **E.** Curing of Installed High Friction Surface Treatment. Allow the installed high friction surface treatment to cure in accordance with manufacturer recommendations (approximately 3 hours at an ambient air temperature of at least 50 degrees Fahrenheit). Protect treated surfaces from traffic and environmental effects until the area has cured.
- **F.** Removal of Excess Aggregate. Remove the excess aggregate from the treatment area and all adjacent surfaces by mechanical sweeping or vacuum sweeping the surfaces a minimum of 3 times before applying additional application and/or opening to traffic. In addition, re-sweep the treatment area and adjacent surfaces using mechanical sweeping or vacuum sweeping 48 hours after opening to traffic to remove all additional loose aggregate and aggregate shed by the action of traffic.
- **G. Disposal of Waste.** All debris, excess aggregate, materials containers, and other waste shall be disposed of off the Right-of-Way at approved sites obtained by the Contractor at no cost to the Department. No separate payment will be made for the disposal of waste and debris from the project, but shall be incidental to the other items of the work.
- **H. Restoration.** Any roadway features disturbed by the work or the Contractor's operations shall be restored in like kind materials and design as directed by the Engineer at no additional cost to the Department.
- I. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.
- **J. On-Site Inspection.** Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

- **K.** Right-of-Way Limits. All work is located within the existing right of way. Limit work activities to the Right-of-Way and work and staging areas secured by the Contractor at no additional cost to the Department. Be responsible for all encroachments onto private lands.
- L. Caution. The information in this proposal and shown on the plans and the type of work listed herein are approximate only and are not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.
- M. Control. Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

N. Acceptance of Non-Specification High Friction Surface Treatment Materials. The Department will consider each application of binder and aggregate combinations as individual High Friction Surface Treatment Systems. The binder portion of each combination will be considered as 50 percent of the system and the aggregate portion of each combination will be considered as 50 percent of the system. Deviations from the aggregate portion of the system will be addressed utilizing the table below.

High Friction Surface Treatment Gradation Requirements			
Sieve Size-Percent Passing			
Payment Reduction	No. 6	No. 16	
0%	95-100	0-5	
5%	94	6	
10%	93	7	
15%	92	8	
25%	91	9	
50% <sup>(1)</sup>	<u>&lt;</u> 90	<u>&gt;</u> 10	

<sup>(1)</sup> At 90% or less passing the No. 6 sieve or at 10% or more passing the No. 16 sieve, a maximum penalty of 50% of the aggregate portion of the system shall be applied to the bid item price for the quantity represented by the failing test if the material is allowed to remain in place.

#### IV. FIELD EVALUATION

At the option of the Engineer, skid testing shall be conducted by the Department on the existing surface within 30 days prior to installation of the high friction surface treatment.

High friction surface treatments shall be evaluated for skid resistance by lock wheel skid testing as per ASTM E274, between 60 and 90 days after installation. Acceptable installed high friction surface treatments shall produce, at a minimum, a skid number (SN) of 69. Surface treatment applications not meeting average minimum skid test results of 69 SN shall be removed and replaced at no cost to the Department.

#### V. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but shall be incidental to high friction surface treatment.
- **C. High Friction Surface Treatment.** The Department will measure the surface area coverage of High Friction Surface Treatment in Square Yards.

#### VI. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** High Friction Surface Treatment. Payment for the accepted quantity at the Contract unit price per Square Yard shall be full compensation for furnishing all labor, materials, equipment, and incidentals for furnishing and installing High Friction Surface Treatment. Payment shall not be made prior to the final and accepted sweeping, 48 hours after installation.

## SPECIAL NOTE FOR STRIPING ON HIGH FRICTION SURFACE TREATMENTS

- **1.0 DESCRIPTION.** Installation of pavement striping, temporary and permanent, on High Friction Surface (HFS) Treatments.
- **2.0 CONSTRUCTION.** Conduct striping under lane closures meeting the conditions of the MUTCD and Kentucky Standard Drawings and Specifications. Upon initial completion of the HFS installation, install temporary striping as the Engineer directs. Upon completion of the 48 hour vacuum sweeping, install permanent striping as the Engineer directs.
- **3.0 MEASUREMENT.** The Department will measure the quantity in linear feet.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
	Pavement Striping - Temporary	Linear Foot
	Pavement Striping - Permanent	Linear Foot

The Department will consider payment as full compensation for all work required under this note.

# SPECIAL NOTE FOR GUARDRAIL END TREATMENT TYPE 1

Contrary to KYTC Standard Drawing RBR-020-05 the guardrail end treatment ET-Plus manufactured by Trinity Industries will not be permitted as an option for bid item "Guardrail End Treatment Type 1".

#### SPECIAL NOTES FOR COMPLETION DATES & LIQUIDATED DAMAGES

Trees and/or bushes shall not be cut or trimmed between April 1<sup>ST</sup> and November 15<sup>TH</sup>. Any trees and/or bushes that are cut or trimmed between April 1<sup>ST</sup> and November 15<sup>TH</sup> will <u>not</u> receive payment at the contract unit price. Furthermore, failure to adhere to these restrictions shall result in Liquidated Damages in the amount of <u>\$283.50</u> per affected tree as mitigation to the Indiana Bat Conservation Fund for the loss of habitat. Activities that are a part of this contract that do not involve the initial trimming and/or cutting of trees and/or bushes will be permitted under the ultimate fixed completion date.

Ultimate fixed completion date for this project will be November 01, 2015. Liquidated Damages for failure to complete project on time will be assessed following Section 108.09.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages for any and all road closures that exceed the approved time limits. Liquidated Damages in the amount of **\$1,000** per hour will be assessed for each hour or fraction of an hour that US 68 remains closed after 3 p.m. on an approved daily road closure day. Liquidated Damages in the amount of **\$2,400** per day will be assessed for each day or fraction of a day that US 68 remains closed after the 14<sup>TH</sup> day of the approved two week road closure.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of <u>\$2400</u> per day, per occurrence, for failure to perform cleanup and removal of debris and wood waste within the required time. Work will be suspended until the debris has been removed from the right-of-way.

Contrary to Section 108.09, Liquidated Damages will be assessed for the months of December through March.

Contrary to Section 108.09, Liquidated Damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

#### SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

### COORDINATION OF WORK WITH OTHER CONTRACTS

Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts 01/02/2012

#### SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

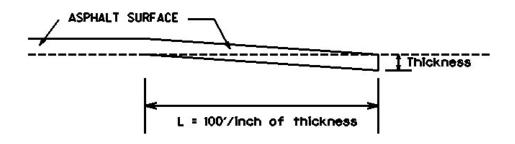
The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to "Asphalt Material for Asphalt Seal Coat".

1-3215 Double Asphalt Seal Coat 01/02/2012

#### 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 = 1.0 Inches

L = 100 LF

L= Length of Edge Key

1-3309 Edge key by Ton 01/02//2012

#### SPECIAL NOTE FOR GUARDRAIL

#### 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) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and control traffic; and (6) 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.** Remove existing guardrail system including the guardrail end treatments, Bridge End connectors, and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. 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; filling voids left as the result of removing

existing guardrail and guard posts with dry sand; 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.

NOTE: Within the Guardrail limits of Begin Station 823+97 and End Station 830+51, approximately Three Hundred (300) feet of guardrail post are attached to an existing Shot Crete coated Soil Nail wall requiring the posts to be cut out during the removal of the existing guardrail system and before installing new post by drilling.

**C. Guardrail.** Except as specified herein, construct guardrail system according to Section 719 and the Standard Drawings. Locations listed on the Plan Sheets 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 removing existing guardrail and installing new 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.
- **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 Note 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 the bid items Remove Guardrail, 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.

MERCER COUNTY 084GR14T012-HSIP & FD04

# SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within <u>48 hours</u> 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.

Take possession of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

1-3520 48 hours Contractor keeps millings 01/2/2012

MERCER COUNTY 084GR14T012-HSIP & FD04

#### 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, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications and the Standard Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

At the discretion of the Engineer, days and hours may be specified when lane closures will not be allowed. No lane closures will be allowed on the following dates:

Christmas Holiday, December 24-28, 2014 New Year's Holiday, January 1-4, 2015 Memorial Day Weekend, May 22-25, 2015 Independence Day Weekend, July 3-5, 2015 Labor Day Weekend, September 4-7, 2015

Labor Day Weekend, September 4-7, 2013

US 68 may be closed to through traffic between 9 a.m. and 3 p.m. for culvert replacement(s). The contractor shall submit proposed days of road closures to the Engineer at least 7 calendar days in advance for approval. Liquidated Damages in the amount of \$1,000 per hour will be assessed for each hour or fraction of an hour that US 68 remains closed after 3 p.m. on an approved daily road closure day.

With the prior approval of the Engineer, and after placing signs and/or message boards to notify the public 14 days in advance of the extended road closure, US 68 may be closed for no more than <u>one</u> extended time period of two weeks (14 Calendar days) from Coghill Lane (Mile Point 17.5) to Brooklyn Bridge (Mile Point 20.0) for the purpose of performing and completing the construction of all embankment repair retaining walls, drilled railroad steel & Cribbing, the removal of rock outcrop, ditching, pipe and drop box improvements, and shoulder work within these limits. The extended road closure shall not occur before the last school day for Mercer County and must not occur after August 1, 2015. Liquidated Damages in the amount of \$2,400 per day will be assessed for each day or fraction of a day that US 68 remains closed after the 14<sup>TH</sup> day of the approved two week road closure.

All other work must be completed at all times, maintaining alternating one way traffic during construction operations. The clear lane width shall be 10 feet. With approval of the Engineer, short stoppages of no more than 20 minutes for construction operations can be experienced, however, the contractor shall make all provisions for the passage of all emergency vehicles and

school buses on an official run as quickly as possible in less than the 20 minute allowed stoppage time.

The Department will provide public notification regarding approved road closures. Notify the Engineer immediately and obtain approval of any deviations from the previously approved closure schedule. The contractor shall be responsible for road closure barricades and signs; work zone and pavement condition signs; advanced warning signs; additional signs as directed by the Engineer; and variable message signs.

Under special circumstances, KYTC reserves the right to restrict the use of lane closures and/or road closures due to unforeseen special events.

#### MAINTAIN & CONTROL TRAFFIC.

Will be measured only once for payment.

#### 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.

#### LANE CLOSURES

Other than the allowed 2 week road closure, do not leave lane closures in place during non-working hours. Do not leave lane closures in place during prohibited periods, holidays, and special events. No long term lane closures will be allowed; therefore, contrary to Section 112, lane closures will not be measured for payment. For information on Lane Closure setup, please refer to the Sepia Drawing 017, "Lane Closure Two-Lane Highway".

#### VARIABLE MESSAGE SIGNS.

If deemed necessary by the Engineer, variable message signs will be installed, operated and maintained by the Contractor. Specifically, signs indicating the insufficient lane width for oversized loads may be required.

#### **BARRICADES**

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04.

#### PAVEMENT EDGE DROP-OFFS

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1½ inches. Warning signs (MUTCD W8-9 or W8-9A, or W8-11) shall be placed in advance of and at 1500 feet intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. All transverse transitions between newly surfaced pavement and the existing pavement areas that traffic may cross shall be wedged with asphalt mixture for leveling and wedging. Remove wedges prior to placement of the final surface course.

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" - No protection required.

2" to 4" – Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight hours. Wedge with 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.

Temporary drop-offs during working hours, where construction operations are taking place, should be kept to minimum.

#### **INGRESS AND EGRESS**

Reasonable means of ingress and egress shall be maintained to all properties within the project limits. Access to fire hydrants must also be maintained at all times.

#### SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.

Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices" as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

#### SPECIAL NOTE FOR EROSION CONTROL

#### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with any other notes in the Proposal, 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 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 steam.

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.

#### 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, the Department will measure "K.P.D.E.S. Permit & Temporaty Erosion Control" as one lump sum. 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. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for "K.P.D.E.S. Permit & Temporaty Erosion Control", shall be full compensation 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.

	Right-of-Way Cer	rtific	cation F	orm	Revised 2/22/11
✓ Fee	deral Funded		Original		
Sta	ate Funded		Re-Certifi	cation	
Interstate, Appalach projects that fall und apply, KYTC shall r	completed and submitted to FHWA with the hia, and Major projects. This form shall also der Conditions No. 2 or 3 outlined elsewhere submit this ROW Certification prior to condition shall be completed and retained	iso be : ere in t enstruci	submitted to this form. W tion contrac	FHWA for <u>all</u> federal- /hen Condition No. 2 of t Award. For all other	
Date: 10/14/201	4				
Project Name:	US 68 Safety Improvements	Le	etting Date:	11/21/2014	
Project #:	HSIP 2681 (029)	Co	ounty: N	fercer	
Item #:	07-9000.00	Fe	ederal#		
Description of F	Project: US 68 Mercer County (Harrodsburg to Lexin MP 20.058 (Jessamine County line), a dista	ngton Ro ince of 7	pad) MP 12 500 7 558 miles Hig	(Chatham Road) extending thway Safety Improvements	East to Project.
Projects that re	equire NO new or additional right	-of-w	/ay acqui	sitions and/or rele	ocations
properties to improveme  Projects that re  Per 23 CFR sanitary hot accordance Relocation those that a court be right-of-	ion 1. All necessary rights-of-way, includi cquired including legal and physical posse ut legal possession has been obtained. Ti -way, but all occupants have vacated the l	way a li reloca oreloca directivo of the ling coression. Here mands a	acquisition atees have leatees adequeve(s) covering following the leatens are appropriately following the leatens are appropriately be some and improve	ons and/or relocated, ons and/or relocated, ons and/or relocated to deceate replacement housing the administration of the conditions has been serights when applicate peal of cases may be perimprovements remains and KYTC has	ions ent, safe, and ing in of the Highway en met. (Check oble, have pending in ning on the physical
Condition to use a appeal been of vacated improve market constru	sion and the rights to remove, salvage, or value has been paid or deposited with the lion 2. Although all necessary rights-of-war all rights-of-way required for the proper extends of some parcels may be pending in court abtained, but right of entry has been obtained, and KYTC has physical possession and ements. Fair market value has been paid value for all pending parcels will be paid obtained contract. (See note 1 below.)  It 1: The KYTC shall re-submit a right-of-all Federal-Aid construction contracts. Aw legal possession and fair market value for	ay have ecution and on ed, the I right t I or deport way co	e not been for of the project occupants to remove, sposited with the certification for ust not to be	fully acquired, the right ect has been acquired els full legal possessio of all lands and improvalvage, or demolish althe court for most parthe court prior to AWAF orm for this project price made until after KYTO	to occupy and Trial or In has not vernents have cels. Fair RD of or to AWARD C has obtained
and	I FHWA has concurred in the re-submitted	ı right-	-of-way certi	fication.	

### Right-of-Way Certification Form

Revised 2/22/11

Condition 3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635,309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA concurrence. (See note 2.)

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

Approved:

Right-of-Way Supervisor

Approved:

Signature No Signature Required

20 OCT 2014 KYTC. Director of ROW &Utilities

Approved:

as per FHWA - KYTC

2013 Stewardship Agreement

FHWA, ROW Officer (when applicable)

**Printed Name** 

Signature

# **Right-of-Way Certification Form**

Revised 2/22/11

Project : Project : Item #: Letting I	#:	US 68 S HSIP 268 07-9000.0 11/21/201	0	County: Federal #:	Mercer	
This project be relocated	has <u>0</u> d, as we	total nun li as _0 t	nber of parcels to be acquired otal number of businesses to	d, and 0to be relocated.	al number of in	idividuals or families to
_	Parcels with the	have been a	ired by a signed fee simple dacquired by IOJ through conceed at this time (exp	lemnation and f	air market valu	•
	been de	eposited with	acquired or have a "right of en the court (explain below for ot been relocated from parcels	each parcel)		·
	(explain	below for e	ach parcel)	· · · · · · · · · · · · · · · · · · ·	11	_,, and
	(explain	e/Station	Explanation for delay relocation, or delayed pa	ed acquisition	, delayed	Proposed date of payment or of relocation
	(explain	below for e	ech parcel)  Explanation for delay	ed acquisition	, delayed	Proposed date of payment or of
Parcel #	(explain	below for e	ech parcel)  Explanation for delay	ed acquisition	, delayed	Proposed date of payment or of
Parcel #	Nam	e/Station	ech parcel)  Explanation for delay	ed acquisition lyment of fair r	, delayed narket value	Proposed date of payment or of

#### UTILITY NOTES

#### **HSIP PROJECT**

# MERCER COUNTY US 68 (LEXINGTON TO HARRODSBURG ROAD) FROM MILEPOINT 12.5 TO MILEPOINT 20.058

The Contractor should note Utility locations shown in the plans are approximate and have not been specifically located by the Department. The Contractor is advised to contact the BUD one-call system; however, the Contractor should be aware that not all owners may be a member of the BUD one-call system.

#### COORDINATION WITH UTILITY FACILITY OWNERS

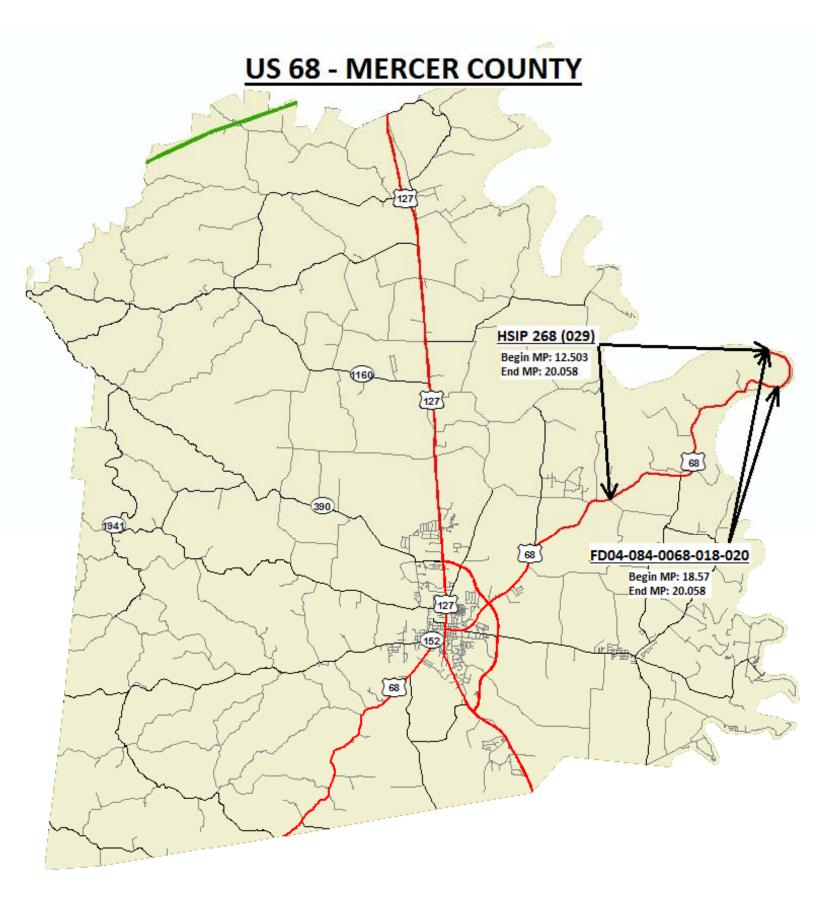
The Contractor will be responsible for identifying and contacting all utility facility owners on the subject project to have existing facilities located in the field. The Contractor will coordinate his activities with the utility facility owners to minimize and, where possible, avoid conflicts with utility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

Where conflicts with utility facilities are unavoidable the Contractor will coordinate any necessary relocation work with the facility owner. <u>There will be no damages awarded for delays caused by necessary utility relocations and/or adjustments.</u>

#### **PROTECTION OF UTILITY FACILITIES**

There has been no attempt to provide a location for utility facilities in the contract documents; consequently, it will be the roadway Contractor's responsibility to locate utility facilities prior to excavating by calling the various utility facility owners, and by examining any supplemental information supplied by the Cabinet. The Contractor shall determine the exact location and elevation of underground utility facilities, by hand digging if necessary, to expose utilities prior to beginning excavation in the area of underground utility facilities. The cost for repair, and any other associated costs, for any damage to utility facilities caused by the roadway Contractor's operation will be borne by the roadway Contractor.

It is the Contractor's responsibility to contact the BUD One-Call system; however, the Contractor should be aware that owners of underground facilities are not required to be members of the BUD One-Call system. It may be necessary for the Contractor to contact the County Court Clerk to determine what utility Companies have facilities in the project area.



# **MATERIAL SUMMARY**

CONTRACT ID: 144207	084GR14T012-HSIP & FD04	0708400681401
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LEXINGTON RD (US 68) FROM CHATHAM RD EXTENDING EAST TO THE MERCER/JESSAMINE COUNTY LINE GRADE & DRAIN WITH ASPHALT SURFACE, A DISTANCE OF 7.56 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0001	23312EC	ROCK REMOVAL	1,099.00	CUYD
0002	23131ER701	PIPELINE VIDEO INSPECTION	726.00	LF
0003	03269	TRIM & REMOVE TREES & BRUSH	3,676.00	LF
0004	10030NS	ASPHALT ADJUSTMENT	26,034.00	DOLL
0005	10020NS	FUEL ADJUSTMENT	10,365.00	DOLL
0006	06514	PAVE STRIPING-PERM PAINT-4 IN	51,164.00	LF
0007	03235	EXCAVATION AND BACKFILL	1,709.00	CUYD
8000	03234	RAILROAD RAILS-DRILLED	3,354.00	LF
0009	02696	SHOULDER RUMBLE STRIPS-SAWED - (8 INCH)	10,666.00	LF
0010	02676	MOBILIZATION FOR MILL & TEXT - (MERCER CO. US	1.00	LS
0010		MAINTAIN & CONTROL TRAFFIC - (MERCER CO. US 68)	1.00	LS
0011		RETAINING WALL-GABION	288.00	
0012		FABRIC-GEOTEXTILE TYPE IV	873.00	
0013		EDGE KEY	374.00	LF
0014		DITCHING	34,802.00	LF
0016		OBJECT MARKER TYPE 2	· ·	EACH
0017		TEMPORARY SIGNS	197.00	
0017		REMOVE TREES OR STUMPS		EACH
0019		GUARDRAIL END TREATMENT TYPE 4A		EACH
0020		REMOVE GUARDRAIL	12,612.50	LF
0021		GUARDRAIL END TREATMENT TYPE 1		EACH
0021		GUARDRAIL TERMINAL SECTION NO 1		EACH
0023		G/R STEEL W BEAM-S FACE (7 FT POST)	11,760.00	LF
0024		BARRICADE-TYPE III	,	EACH
0025		EXCAVATION-UNCLASSIFIED	883.00	
0026		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	220.00	
0027		ASPHALT PAVE MILLING & TEXTURING	693.00	TON
0028		CL2 ASPH SURF 0.38B PG64-22	1,317.00	TON
0029		LEVELING & WEDGING PG64-22	624.00	TON
0030		ASPHALT SEAL COAT	43.00	TON
0031		ASPHALT SEAL AGGREGATE	356.00	TON
0032		DGA BASE	2,980.00	TON
0033		DEMOBILIZATION	1.00	LS
0034		REMOVE HEADWALL	24.00	
0035		CHANNEL LINING CLASS II	4.00	TON
0036		PAVED DITCH TYPE 2	864.00	
0037		SAFETY BOX INLET-18 IN DBL SDB-5	1.00	
0038		DROP BOX INLET TYPE 13G	6.00	
0039	01497	DROP BOX INLET TYPE 3 MOD	9.00	
0040	01310	REMOVE PIPE	641.00	LF
0041	00464	CULVERT PIPE-24 IN	108.00	LF
0042		CULVERT PIPE-18 IN	485.00	LF

## **MATERIAL SUMMARY**

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0043	00461	CULVERT PIPE-15 IN	133.00	LF
0044	00440	ENTRANCE PIPE-15 IN	48.00	LF
0045	00263	ASPHALT MIX FOR PAVEMENT WEDGE	328.00	TON
0046	00221	CL2 ASPH BASE 0.75D PG64-22	5,612.00	TON
0047	02726	STAKING - (MERCER US 68)	1.00	LS
0048	02714	SHOULDERING	28,950.00	LF
0049	05950	EROSION CONTROL BLANKET	25,054.00	SQYD
0050	23143ED	KPDES PERMIT AND TEMP EROSION CONTROL - (MERCER US 68)	1.00	LS
0051	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH
0052	06510	PAVE STRIPING-TEMP PAINT-4 IN	65,000.00	LF
0053	01204	PIPE CULVERT HEADWALL-18 IN	1.00	EACH

CONTRACT ID: 144207 084GR14T012-HSIP & FD04 0708400681402

LEXINGTON RD (US 68) FROM 1.028 MI EAST OF COGHILL LN EXTENDING EAST TO THE MERCER/ JESSAMINE COUNTY LINE GRADE & DRAIN WITH ASPHALT SURFACE, A DISTANCE OF 1.43 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0054	00001	DGA BASE	183.00	TON
0055	00100	ASPHALT SEAL AGGREGATE	88.00	TON
0056	00103	ASPHALT SEAL COAT	11.00	TON
0057	00190	LEVELING & WEDGING PG64-22	42.00	TON
0058	00221	CL2 ASPH BASE 0.75D PG64-22	373.00	TON
0059	00263	ASPHALT MIX FOR PAVEMENT WEDGE	639.00	TON
0060	00307	CL2 ASPH SURF 0.38B PG64-22	1,044.00	TON
0061	00440	ENTRANCE PIPE-15 IN	72.00	LF
0062	00461	CULVERT PIPE-15 IN	172.00	LF
0063	00462	CULVERT PIPE-18 IN	262.00	LF
0064	00464	CULVERT PIPE-24 IN	45.00	LF
0065	01202	PIPE CULVERT HEADWALL-15 IN	3.00	EACH
0066	01204	PIPE CULVERT HEADWALL-18 IN	5.00	EACH
0067	01310	REMOVE PIPE	372.00	LF
0068	01559	DROP BOX INLET TYPE 13G	13.00	EACH
0069	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	150.00	EACH
0070	02014	BARRICADE-TYPE III	4.00	EACH
0071	02158	PAVED DITCH TYPE 2	1,679.00	SQYD
0072	02237	DITCHING	1,300.00	LF
0073	02367	GUARDRAIL END TREATMENT TYPE 1	5.00	EACH
0074	02369	GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH
0075	02377	GUARDRAIL CONNECTOR TO BRIDGE END TY C	2.00	EACH
0076	02381	REMOVE GUARDRAIL	6,950.00	LF
0077	02460	REMOVE TREES OR STUMPS	4.00	EACH
0078	02483	CHANNEL LINING CLASS II	3.00	TON
0079	02562	TEMPORARY SIGNS	197.00	SQFT
0800	02565	OBJECT MARKER TYPE 2	16.00	EACH
0081	02585	EDGE KEY	22.00	LF

# **MATERIAL SUMMARY**

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0082	02599	FABRIC-GEOTEXTILE TYPE IV	814.00	SQYD
0083	02625	REMOVE HEADWALL	16.00	EACH
0084	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0085	02677	ASPHALT PAVE MILLING & TEXTURING	46.00	TON
0086	03234	RAILROAD RAILS-DRILLED	3,125.00	LF
0087	03235	EXCAVATION AND BACKFILL	1,592.00	CUYD
8800	06514	PAVE STRIPING-PERM PAINT-4 IN	31,428.00	LF
0089	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	6,600.00	LF
0090	03269	TRIM & REMOVE TREES & BRUSH	10,760.00	LF
0091	23131ER701	PIPELINE VIDEO INSPECTION	479.00	LF
0092	23229EC	HIGH FRICTION SURFACE TREATMENT	4,449.00	SQYD
0093	23312EC	ROCK REMOVAL	1,208.00	CUYD
0094	23326EC	EXCAVATION-UNCLASSIFIED	1,855.00	CUYD
0095	02569	DEMOBILIZATION	1.00	LS
0096	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH
0097	02696	SHOULDER RUMBLE STRIPS-SAWED - (8 INCH)	15,714.00	LF
0098	06510	PAVE STRIPING-TEMP PAINT-4 IN	40,000.00	LF
0099	02714	SHOULDERING	1,550.00	LF
0100	05950	EROSION CONTROL BLANKET	578.00	SQYD

 MERCER COUNTY
 Contract ID: 144207

 084GR14T012-HSIP & FD04
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#### US 68, Mercer County

Project: Safety Improvement Plan

Contents: Mile point Segment: Ditch, Pavement, Pipes, Retaining Walls, Rock Outcrop, Trees, and Tree Canopy Clearing

Date: 10/20/2014

Dute.	10/20/2014							
Description	Begin	End	Begin	End	Length	Side	Comment	Misc.
	Mile Point	Mile Point	Station	Station				Comment
								Comment
Ditch	12.50	12.57	660+00.00	663+59.04	359.04	Lt		
Ditch	12.50	12.57	660+00.00	663+59.04	359.04	Rt		
Ditch	12.63	12.71	667+01.49	670+86.93	385.44	Rt		
Ditch	12.70	12.79	670+71.09	675+46.29	475.20	Rt		
Ditch	12.72	12.85	671+87.25	678+47.25	660.00	Lt		
Ditch	12.80	12.92	675+95.33	682+28.93	633.60	Rt		
Ditch	12.85	12.91	678+41.41	681+79.33	337.92	Lt		
Ditch	12.91 12.91	13.15 12.99	681+70.08	694+20.49	1250.41 417.12	Lt		
Ditch Ditch	13.15	13.31	681+70.08 694+20.49	685+87.20 702+70.57	850.08	Lt Lt		
Ditch	13.20	13.34	696+79.21	704+40.33	761.12	Rt		
Ditch	13.31	13.34	694+20.49	702+70.57	850.08	Lt		
Ditch	13.52	13.96	713+70.66	736+90.92	2320.26	Lt		
Ditch Ditch	13.52 14.10	13.97 14.59	713+79.27 744+21.72	737+65.77 770+19.10	2386.50 2597.38	Rt Lt		
Ditch	14.38	14.59	759+39.27	770+23.22	1083.95	Rt		
Ditch	14.59	14.82	770+23.22	782+60.67	1237.45	Rt		
Ditch	14.70	14.83	776+32.27	783+11.65	679.38	Lt		
Ditch Ditch	14.92 14.94	15.01 15.06	787+94.76 788+74.02	792+64.74 795+34.02	469.98 660.00	Lt Rt		
Ditch	15.06	15.31	795+28.74	808+46.80	1318.06	Lt		
Ditch	15.07	15.18	795+60.42	801+41.22	580.80	Rt		
Ditch Ditch	15.18 15.31	15.25 15.42	801+41.22 808+46.80	805+42.50 814+22.32	401.28 575.52	Rt Lt		
Ditch	15.31	15.42	814+22.32	814+22.32 822+51.28	828.96	Lt		
Ditch	15.61	15.60	805+42.50	823+90.50	1848.00	Rt		
Ditch	15.73	15.77	830+73.57	832+84.77	211.20	Lt		
Ditch	15.78	15.91	833+11.17	840+18.69	707.52	Lt		
Ditch	15.91	16.00	840+18.69	845+00.22	481.53	Lt		
Ditch	16.02	16.13	845+63.58	851+80.68	617.10	Rt		
Ditch	16.15	16.32	852+59.88	861+94.44	934.56	Rt		
Ditch	16.16	16.32	853+02.12	861+94.44	892.32	Lt		
Ditch	16.35	16.40	863+52.84	866+16.84	264.00	Lt		
Ditch Ditch	16.42 16.57	16.57 16.71	866+96.04 875+09.16	875+09.16 882+42.77	813.12 733.61	Lt Lt		
Ditch	16.99	17.35	897+26.45	915+95.57	1869.12	Rt		
Ditch	17.38	17.57	917+53.97	927+78.29	1024.32	Rt		
Ditch	17.57	17.65	927+78.29	932+16.53	438.24	Rt		
Ditch Ditch	17.65 17.73	17.72 17.95	932+16.53 936+07.02	935+59.73 947+52.78	343.20 1145.76	Rt Rt		
Ditch	17.96	18.57	948+50.60	980+49.60	3199.00	Lt	Paved Ditch Type 2	
Ditch	18.57	18.08	980+49.60	1042+68.83	6219.23	Lt	Paved Ditch Type 2	Begin FD04-084-0068-018-020
Ditch	19.78 12.68	20.02 0.00	1044+30.37 669+32.78	1057+30.25	1299.88 329.31	Lt Left	Compa 1	2.40/
Pavement Pavement	12.74	0.00	672+66.45		529.51	Leit	Curve 1 tangent	2.4% NC
Pavement	12.90	0.00	680+99.26		245.77	Right	Curve 2	6.2%
Pavement	12.98	0.00	685+46.88				tangent	NC
Pavement	13.22	0.00	698+23.49		451.8	Left	Curve 3	7.8%
Pavement Pavement	13.57 14.41	0.00	716+46.11 760+59.99		714.69	Right	Curve 4 tangent	8.0% NC
Pavement	14.51	0.00	766+35.89				tangent	NC NC
Pavement	14.74	0.00	778+17.19		2044.35	Left	Curve 5	7.6%
Pavement Pavement	15.30 15.47	0.00	807+68.59 816+79.28		531.88	left	tangent  Curve tan/curve 6	NC 5.2%
Pavement	15.47	0.00	816+79.28		331.88	ieit	curve tanycurve 6 tangent	5.2% NC
Pavement	15.68	0.00	827+67.37				tangent	NC
Pavement	15.81	0.00	834+85.01		486.59	Right	Curve 7	7.4%
Pavement Pavement	16.06 16.15	0.00	848+01.47 852+94.24		282.15 222.91	Left left	Curve 8 Curve 9	2.6% 7.8%
Pavement	16.24	0.00	857+67.34			1010	tangent	NC
Pavement	16.31	0.00	860+91.66				tangent	NC
Pavement	16.37	0.00	864+49.54	-	228.49	right	Curve 10	8.0%
Pavement Pavement	16.43 16.72	0.00	867+48.04 883+05.04		287.93 316.04	right right	Curve 11 Curve 12	8.0% NC
Pavement	16.88	0.00	891+15.60		444.31	left	Curve 13	5.4%
Pavement	16.99	0.00	896+96.46		401.82	left	Curve 14	8.0%
Pavement	17.02 17.23	0.00	898+81.37			-	tangent	NC NC
Pavement Pavement	17.23	0.00	909+54.76 915+41.03			<del> </del>	tangent  Curve tangent/15	NC NC
Pavement	17.42	17.95	919+77.60	947+50.28	2772.68		Pavement Resurfacing	
Pavement	17.45	0.00	921+49.31		40.7.		tangent	NC
Pavement	17.61	0.00	930+03.82		196.1	left	Curve 16	8.0%
		U.OU	934+56.00	1	569.74	right	Curve 17	3.0%
Pavement	17.70 17.83		941+29.22		426.42	right	Curve 18	8,0%
	17.70 17.83 17.92	0.00	941+29.22 946+39.64		426.42 158.05	right right	Curve 18 Curve 19	8.0% 6.6%

escription	Begin	End	Begin	End	Length	Side	Comment	Misc.
	Mile Point	Mile Point	Station	Station				Comment
avement	17.97	0.00	948+74.17		151.99	right	Curve 20	7.4%
Pavement	18.10	0.00	955+67.54 959+12.92		220.66	left	Curve 21 22 (PCC 1)	7.8%
avement avement	18.17 18.21	0.00	959+12.92		144.11 316.58	right right	22 (PCC 1) 23 (PCC 2)	7.60% 4.40%
evement	18.36	0.00	969+20.40		128.36	right	Curve 24	4.2%
evement	18.41	0.00	972+20.40		188.34	left	Curve 25	5.4%
avement	18.48	0.00	975+70.40		133.22	Left	Curve 26	4.4%
evement	18.52	0.00	977+70.40	000 - 40 - 60	125.04	right	Curve 27	6.6%
evement evement	18.53 18.57	18.57 18.87	978+12.68 980+49.60	980+49.60 996+44.84	236.92 1595.24	<del>                                     </del>	Pavement Resurfacing Pavement Resurfacing	Begin FD04-084-0068-018-020
vement	18.55	0.00	979+20.40	330111.01	150.36	right	Curve 28	5.2%
vement	18.73	0.00	989+16.71		489.49	left	Curve 29	
vement	18.87	19.39	996+44.84	1023+61.61	2716.77		Pavement Resurfacing	
vement	18.90	0.00	997+92.00				tangent	NC .
vement vement	19.10 19.20	0.00	1008+48.00 1013+76.00		184.93 440.87	left left	30 (PCC 1) Curve 31 (PCC 2)	6.20%
vement	19.30	0.00	1019+04.00		125.57	left	Curve 32 (PRC 2)	4.4%
/ement	19.39	20.03	1023+61.61	1057+58.40	3396.79		Pavement Resurfacing	
/ement	19.40	0.00	1024+32.00		159.44	right	Curve 33 (PRC 2)	7.8%
rement	19.45	0.00	1026+96.00		153.69	left	Curve 34	8.0%
rement	19.80	0.00	1045+44.00				tangent	NC
rement	20.00	0.00	1056+00.00				tangent	NC
ement	20.03	0.00	1057+49.50		137.16	Right	Curve 35	6.4%
Pipe Pipe	12.61 12.71	0.00	665+55.82 670+99.86		28.60' 29.82'		Pipe 18"CMP Pipe 15'x5.3' RCBC	18" -34' New Pipe
ipe	12.71	0.00	675+58.87		29.82		Pipe 5'x4' RCBC	
Pipe	12.99	0.00	686+07.75		28.85'		Pipe 24" CMP	24" - 37' New Pipe
Pipe	13.07	0.00	690+26.59		29.48'		Pipe 18" CMP	18" - 35' New Pipe
ipe	13.15	0.00	694+21.26		28.76'		Pipe 18" CMP	18" - 31' New Pipe
Pipe	13.72	0.00	724+64.64		64.81'		Pipe 24" CMP	
Pipe	13.78	0.00	727+62.03 731+11.83		76.26'		Pipe 18" CMP	
Pipe Pipe	13.85 13.90	0.00	731+11.83 734+11.34		60.25' 55.97'		Pipe 18" CMP Pipe 18" CMP	
Pipe	14.02	0.00	740+02.05		120.22'		Pipe 64"Tx56"W OVAL CMP	
Pipe	14.20	0.00	749+75.53		65.18'		Pipe 18" CMP	
Pipe	14.26	0.00	752+76.73		51.92'		Pipe 18" CMP	
Pipe	14.31	0.00	755+75.91		65.64'		Pipe 18" CMP	
Pipe	14.37	0.00	758+75.19		47.63'		Pipe 21" CMP	
Pipe	14.63	0.00	772+69.99		121.66'		Pipe 30" CMP	
Pipe	14.70	0.00	776+36.01		101.77'		Pipe 18" CMP	
Pipe	14.86	0.00	784+73.86		93.64'		Pipe 18" CMP	
Pipe	15.28	0.00	806+76.42		32.53'		Pipe 15" RCP	15" RCP 4' Ext.
Pipe	15.39	0.00	812+32.88		32.20'		Pipe 15" RCP	2 ~ 15" RCP 4' Ext.
-					28.44'			
Pipe D:	15.54	0.00	820+26.23				Pipe 15" RCP LT /18" CMP RT	18" - 32' New Pipe
Pipe	15.70	0.00	828+89.55		32.75'		Pipe 18" RCP	18" RCP 4' Ext.
Pipe	15.90	0.00	839+28.07		31.62'		Pipe 15" RCP	2 ~ 15" RCP 4' Ext.
Pipe	16.05	0.00	847+47.21		29.98'		Pipe 15" RCP LT/15" CMP RT	15" - 37' New Pipe
Pipe	16.27	0.00	858+89.30		32.10'		Pipe ELIPTICAL 1.7'W x1.3'T CMP	
Pipe	16.35	0.00	863+34.26		35.88'		Pipe 27x20 CMP	
Pipe	16.50	0.00	871+25.95		31.38'		Pipe 15" CMP	
Pipe	16.59 16.70	0.00	876+01.47 881+94.36		30.03' 32.34'		Pipe 15" CMP LT / 15" RCP RT Pipe 15" RCP	15" - 38' New Pipe
Pipe Pipe	16.70	0.00	881+94.36 888+39.14		27.97'		Pipe 15" RCP LT /15" CMP RT	15" RCP/CMP
Pipe	17.17	0.00	906+39.41		29.93'		Pipe 18" RCP LT /18" CMP RT	18" - 35' New Pipe
Pipe	17.17	0.00	910+33.36		36.27'		Pipe ELIPTICAL 2.3' x1.7' CMP	25 55 New Tipe
Pipe	17.38	0.00	917+75.89		28.62'		Pipe 15" CMP LT / 15" RCP RT	15" - 38' New Pipe
Pipe	17.53	0.00	925+73.52		28.12'		Pipe 18" RCP LT /18" CMP RT	18" - 38' New Pipe
Pipe	17.60	0.00	929+45.85		41.46'		Pipe 18" CMP	
Pipe	17.66	0.00	932+29.66		29.10'		Pipe 18" CMP	18" - 33' New Pipe
Pipe	17.73	0.00	935+90.33		29.42'		Pipe 18" CMP Pipe 24" CMP	18" - 37' New Pipe
Pipe	17.81 17.87	0.00	940+15.13 943+74.13		33.54'		·	24" - 38' New Pipe 18" - 36' New Pipe
Pipe	17.87	0.00	943+74.13		26.71' 25.83'		Pipe 18"CMP Pipe 18" RCP	18" - 36' New Pipe 18" - 35' New Pipe
Pipe Pipe	18.04	0.00	952+76.07		25.83		Pipe Rock built up at pipe ends	10 - 35 New Pipe
								1011 2011
Pipe	18.12	0.00	956+71.80		25.22'		15" RCP LT /18" CMP RT	18" - 36' New Pipe 24" - 33' New Pipe
Pipe Pipe	18.23 18.34	0.00	962+38.22 968+18.97		25.06' 24.86'		24" CMP 18" CMP	24" - 33' New Pipe 18" - 31' New Pipe
Pipe	18.46	0.00	974+67.45		24.80		18" CMP	18" - 35' New Pipe
Pipe	18.50	0.00	976+74.20		25.60'		18" CMP	18" - 33' New Pipe
	18.58	0.00	981+26.90		24.61'			18" - 27' New Pipe
Pipe							18" CMP	Begin FD04-084-0068-018-020
Pipe	18.63	0.00	983+73.70		30.71'		18" CMP	18" - 32' New Pipe
Pipe	18.80	0.00	992+39.95		27.59'		Pipe 15" CMP	15" - 31' New Pipe
Pipe	18.93	0.00	999+24.01		27.21'		Pipe 15" CMP	15" - 32' New Pipe
Pipe	18.98	0.00	1002+15.67		29.69'		Pipe 15" CMP	15" - 35' New Pipe
Pipe	19.05	0.00	1005+74.16		24.88'		Pipe 18" RCP	18" - 36' New Pipe
Pipe	19.12 19.24	0.00	1009+75.57		24.39'		Pipe RCP asphalt covered LT/ 18" RCP RT  Pipe 18" RCP	18" - 34' New Pipe
Pipe Pipe	19.24	0.00	1015+75.97 1019+79.76		24.83' 25.18'		Pipe 18" RCP Pipe 18" RCP	18" - 31' New Pipe 18" - 32' New Pipe
Pipe	19.31	0.00	1019+79.76		40.48'		Pipe 18" KCP Pipe 24" CMP	24" - 45' New Pipe
Pipe	19.44	0.00	1026+18.92		24.21'		Pipe 15" CMP	15" - 34' New Pipe
Pipe	19.62	0.00	1036+02.53		35.08'		Pipe 18" CMP	18" - 35' New Pipe
Pipe	19.75	0.00	1042+68.83		25.82'		Pipe 18" CMP	18" - 35' New Pipe

Description	Begin	End	Begin	End	Length	Side	Comment	Misc.
	Mile Point	Mile Point	Station	Station				Comment
Embankment	Wille Follit	Wille Follit	Station	Station				Comment
Repair Gabion	17.80	17.81	939+91.00	940+39.00	48.00	Rt		
Wall							Retaining Wall Gabion Baskets	
Embankment Repair Gabion	17.87	17.88	943+50.00	943+98.00	48.00	Rt		
Wall							Retaining Wall Gabion Baskets	
Embankment Repair RR Steel	18.00	18.18	950+50.00	960+00.00	950.00	Rt	Retaining Wall Drilled Railroad Steel - Assume 12' high Steel	
Embankment	18.35	18.53	969+00.00	978+50.00	950.00	Rt	Netaning wan Drilled Nailroad Steel - Assume 12 High Steel	
Repair RR Steel Embankment	10.55	10.33	303+00.00	976+30.00	930.00	NI.	Retaining Wall Drilled Railroad Steel - Assume 12' high Steel	
Repair RR Steel	18.58	18.63	981+26.00	983+82.00	256.00	Rt	Retaining Wall Drilled Railroad Steel - Assume 12' high Steel	Begin FD04-084-0068-018-020
Rock Outcrop	18.08	18.15	954+73.64	958+32.68	359.04	Lt	Rock Outcrop Remove with Hoe Ram (Caution to not damage entrance side slope)	
Rock Outcrop	18.28	18.39	965+13.80	971+10.44	596.64	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	18.39 18.50	18.50 18.53	971+10.44 976+59.56	976+59.56 978+12.68	549.12 153.12	Lt	Rock Outcrop Remove with Hoe Ram Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	18.53	18.60	978+12.68	982+03.40	390.72	Lt Lt	Rock Outcrop Remove with Hoe Ram	Begin FD04-084-0068-018-020
Rock Outcrop	18.60	18.66	982+03.40	985+41.32	337.92	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop  Rock Outcrop	18.66 18.68	18.68 18.71	985+41.32 986+46.92	986+46.92 987+78.92	105.60 132.00	Lt Lt	Rock Outcrop Remove with Hoe Ram  Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.07	19.12	1006+85.00	1009+43.72	258.72	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.20	19.21	1013+92.52	1014+40.04	47.52	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.29	19.31	1018+62.44	1019+36.36	73.92	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.33	19.37	1020+41.96	1022+74.28	232.32	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.44	19.47	1026+57.29	1027+89.29 1028+89.61	132.00	Lt Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.47	19.49	1027+89.29		100.32	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.49	19.53	1028+89.61	1031+06.09	216.48	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.53	19.56	1031+06.09	1032+90.89	184.80	Lt	Rock Outcrop Remove with Hoe Ram	
Rock Outcrop	19.56	19.57	1032+90.89	1033+12.01	21.12	Lt	Rock Outcrop Remove with Hoe Ram	
Tree	12.84	0.00	677+96.58			L	Tree on Fence Line	
Tree	15.26	0.00	805+90.02			L	Tree on Rock Fence (1)	
Tree	15.72	0.00	830+02.98			R	Tree Behind Guardrail within 4 ft.	
Tree Tree	15.88 15.91	0.00	838+51.68 839+83.68			R R	Tree at Plank fence Tree at Plank fence	
Tree	15.94	0.00	841+68.48			R		
Tree	16.04	0.00	847+07.04	051.01.26	240.20	L	T 161 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Tree Tree	16.09 16.20	16.13 16.27	849+43.08 855+37.15	851+91.36 859+08.86	248.28 371.71	R R	Tree and Shrub need removed from R/W Tree and Shrub need removed from R/W	
Tree	16.95	0.00	895+20.53			L	Trees and Shrub block sight distance	
Tree Tree	17.63 18.00	0.00 18.49	930+63.41 950+22.29	976+04.21	2581.92	R R	Tree on Rock Wall Line (May not be able to cut)  Trees Several small trees to be removed behind guardrail	
Tree	18.13	0.00	957+42.92	370+04.21	2301.32	L	Trees (2)	
Tree	18.19	0.00	960+37.92			L	· · · · · · · · · · · · · · · · · · ·	
Tree	18.29	0.00	965+93.00			L	Tree Over hanging on top of rock.	
Tree Tree	18.33 18.50	0.00	967+56.00 976+64.16			L L		
Tree	19.04	0.00	1005+04.80			L		Begin FD04-084-0068-018-020
Tree	19.06	0.00	1006+10.40			L		
Tree Tree	19.65 19.68	0.00	1037+46.72 1039+29.77			L L	Large Tree almost in Road	
Tree Canopy	17.67	17.69	932+79.89	933+79.89	100.00	R		
Clearing Tree Canopy							Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing	17.67	17.94	932+79.89	947+00.21	1420.32	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy Clearing	17.90	17.99	945+20.69	949+81.92	461.23	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	17.97	18.02	948+58.61	951+38.45	279.84	L		
Clearing Tree Canopy							Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing	18.15	18.25	958+32.68	963+60.68	528.00	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	18.27	18.44	964+70.88	973+57.92	887.04	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing Tree Canopy	18.27	18.59	064.97.40	091,20.40	1642.08	L	recountry clear from steet on edge of pavement, vertically up to 55 feet	Regin ED04-004-0059-049-020
Clearing	18.27	18.59	964+87.40	981+29.48	1042.08	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	Begin FD04-084-0068-018-020
Tree Canopy Clearing	18.62	18.65	983+35.40	984+88.52	153.12	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	18.67	18.96	985+67.72	1001+30.60	1562.88	L		
Clearing Tree Canopy							Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing	18.72	18.74	988+31.72	989+31.72	100.00	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy Clearing	18.89	18.97	997+45.16	1001+62.28	417.12	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	19.02	19.37	1004+47.40	1022+74.28	1826.88	L		
Clearing Tree Canopy							Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing	19.22	19.34	1014+92.84	1021+21.16	628.32	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	19.38	19.47	1023+45.77	1028+15.69	469.92	R	Tree Capony Clear from 5 feet off odgs of payament Matinibus to 25 feet	
Clearing Tree Canopy	10.20	10.45					Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Clearing	19.39	19.45	1023+98.57	1026+83.69	285.12	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy Clearing	19.47	19.84	1027+89.29	1047+42.89	1953.60	L	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy	19.48	19.52	1028+68.49	1030+79.69	211.20	R		
Clearing							Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	

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Description	Begin	End	Begin	End	Length	Side	Comment	Misc.
	Mile Point	Mile Point	Station	Station				Comment
Tree Canopy Clearing	19.54	19.56	1031+58.89	1032+90.89	132.00	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy Clearing	19.58	19.78	1033+91.21	1044+57.77	1066.56	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	
Tree Canopy Clearing	19.81	19.87	1045+89.77	1049+01.29	311.52	R	Tree Canopy Clear from 5 feet off edge of pavement, Vertically up to 35 feet	

<b>\(\sum_{\substack}\)</b>					Mercel	r Count	Mercer County - US 68						z-HSIF & F
Project:	Project: Highway Safety Improvement Plan	Improvemen	t Plan						Mile Point:	Mile Point: 12.503 to 20.058			
Contents:	Curve Inventory (Geometrics and X-Slopes)	(Geometrics	and X-Slope	(5					Classification:	Classification: Rural Minor Arterial	-		
Date:	10/20/2014								Posted Speed: 55 mph	55 mph			
	recommend				ıΣ	Rte Assigned Using e=8%	sing e=8%		AADT:	AADT: 2942 (2012)			
	modification				S	SL = 55 mph Rmin=960'@55	min=960'@55	11' Lé	11' Lanes				
Mile Point	X-Sec Station	Curve #	Curve Direction	Radius (ft)	Curve	Posted/ Advisory Speed	Horz. DS (mph)	Existing Cross Slope Left	Existing Cross Slope Right	Desired X-Slope (eMAX 8%)	Milling (Tons)	Asphalt Base and Leveling & Wedging (Tons)	1" Asphalt Surface (Tons)
12.68	669+32.78	1	Left	5870	329.31	55	55	-2.12%	0.12%	2.4%			
12.74	672+66.45	tangent	1	1	1	55	55	-2.53%	-3.28%	NC			
12.90	680+99.26	2	Right	1900	245.77	55	55	-2.25%	-2.94%	6.2%	27	242	42
12.98	685+46.88	tangent				55	55	-0.85%	-4.26%	NC			
13.22	698+23.49	3	Left	1170	451.8	55	55	-8.54%	7.08%	7.8%	49	444	29
13.57	716+46.11	4	Right	760	714.69	55	50	10.88%	-9.98%	8.0%			
14.41	760+59.99	tangent				55	55	-2.10%	-3.09%	NC			
14.51	766+35.89	tangent				55	55	-3.42%	-5.30%	NC			
14.74	778+17.19							-5.39%	5.34%		223	2010	262
14.81	781+92.57	2	Left	1290	2044.35	55	55	-8.26%	5.38%	7.6%			
14.91	787+32.70							-3.69%	2.63%				
15.30	807+68.59	tangent				55	55	-5.39%	-3.85%	NC			
15.47	<b>816+79.28</b> t	tan/curve 6	left	2350	531.88	55	55	-6.25%	-4.28%	2.2%	89	523	77
15.62	824+84.72	tangent				55	55	1.21%	%6£'9-	NC			
15.68	827+67.37	tangent				55	55	-4.37%	-4.39%	NC			
15.81	834+85.01	7	Right	018	786 50	7.5	77	-2.08%	-6.32%	7 /%			
15.86	837+23.77	`	1118111			ì	ì	5.48%	-10.27%	0/1:/			12
16.06	848+01.47	8	Left	3710	282.15	45	45	-2.30%	-1.95%	2.6%			
16.15	852+94.24	6	left	1140	222.91	45	55	1.01%	-3.00%	7.8%	24	219	39
16.24	857+67.34	tangent				45	45	-3.68%	-6.11%	NC			
16.31	860+91.66	tangent				45	45	0.83%	-4.32%	NC			
16.37	864+49.54	10	right	200	228.49	45	40	2.91%	-8.05%	8.0%	25	225	40
16.43	867+48.04	11	right	750	287.93	45	45	0.56%	-2.81%	8.0%			
16.72	883+05.04	12	right	7150	316.04	55	55	-3.67%	-0.23%	NC			
16.88	891+15.60	13	left	1550	444.31	55	45	-3.58%	1.06%	5.4%			
16.99	896+96.46	14	left	700	401.82	55	45	-6.06%	2.61%	8.0%	44	395	61
17.02	898+81.37	tangent				55	55	-1.47%	-3.15%	NC			

MERCER COUNTY 084GR14T012-HSIP & FD04

Resurfacing @ KY River Bridge MP 18.57 - Bridge High Friction Surface (SQYD) MP 17.56 - 18.57 **3egin Continuous End Continuous** Surface (Tons) Asph Surface Asph Surface Resurfacing @ MP 17.56 1" Asphalt 1044 Tons 717 Tons between between Mainline Mainline Approx. Approx. 2361 4449 Asphalt Base and Wedging (Tons) Leveling & 6651 419 149 217 217 217 311 311 185 131 148 123 135 193 Milling (Tons) 739 16 17 17 24 24 16 17 17 21 15 14 15 21 47 **Desired X-Slope** (eMAX 8%) 986+80.00 End Sta. TOTAL 7.4% 7.8% 7.6% 5.4% 4.4% %9.9 4.4% 4.2% 9.6% 5.2% 6.2% 4.4% 7.8% 6.4% 8.0% 8.0% +%8 R.C. NC NC NC 2 RC2 Existing Cross Slope Right 968+60.00 Beg. Sta. -10.32% 1.94% -8.42% 6.27% -5.62% 0.32% 2.34% 1.28% -4.56% -0.53% -7.26% 0.74% -9.66% -4.07% -0.09% 4.29% -4.89% 2.63% 5.70% 1.87% 6.59% Existing Cross Slope Left End MP -4.88% 4.14% 6.92% 3.86% 0.22% -2.75% -1.01% -2.22% -4.66% -6.42% -2.00% 18.69 2.56% -4.65% -8.15% 7.33% 1.90% 5.46% 0.67% 1.74% 1.05% Beg. MP Horz. DS (mph) 18.34 35 35 35 35 35 35 35 25 25 55 40 25 25 25 25 25 25 25 20 20 20 20 20 25 High Friction Surface Treatment Advisory 55 40 555 555 555 555 335 255 255 25 25 151.99 220.66 144.11 316.58 128.36 188.34 489.49 440.87 159.44 426.42 125.04 150.36 184.93 153.69 Curve Length 158.05 125.57 137.16 196.1 Radius (ft) 3300 760 760 275 210 540 600 600 600 960 270 270 440 160 300 700 1900 2910 400 265 160 287 Direction Curve Right right right left right right left right right right right right left Left left left left left left tangent/15 22 (PCC 1) 23 (PCC 2) 30 (PCC 1) 31 (PCC 2) 33 (PRC 2) tangent 32 (PRC 2) tangent tangent Curve # tangent tangent 29 16 18 20 21 24 25 26 27 28 34 35 X-Sec Station 1008+48.00 1013+76.00 1045+44.00 1024+32.00 1056+00.00 948+74.17 961+48.75 909+54.76 915+41.03 934+56.00 955+67.54 959+12.92 972+20.40 997+92.00 1057+49.50 921+49.31 977+70.40 979+20.40 930+03.82 989+16.71 Mile Point 19.10 17.23 18.10 18.36 18.41 18.55 19.20 19.40 19.45 19.80 17.45 17.61 17.83 17.97 18.21 18.52 18.73 19.30 20.00 20.03

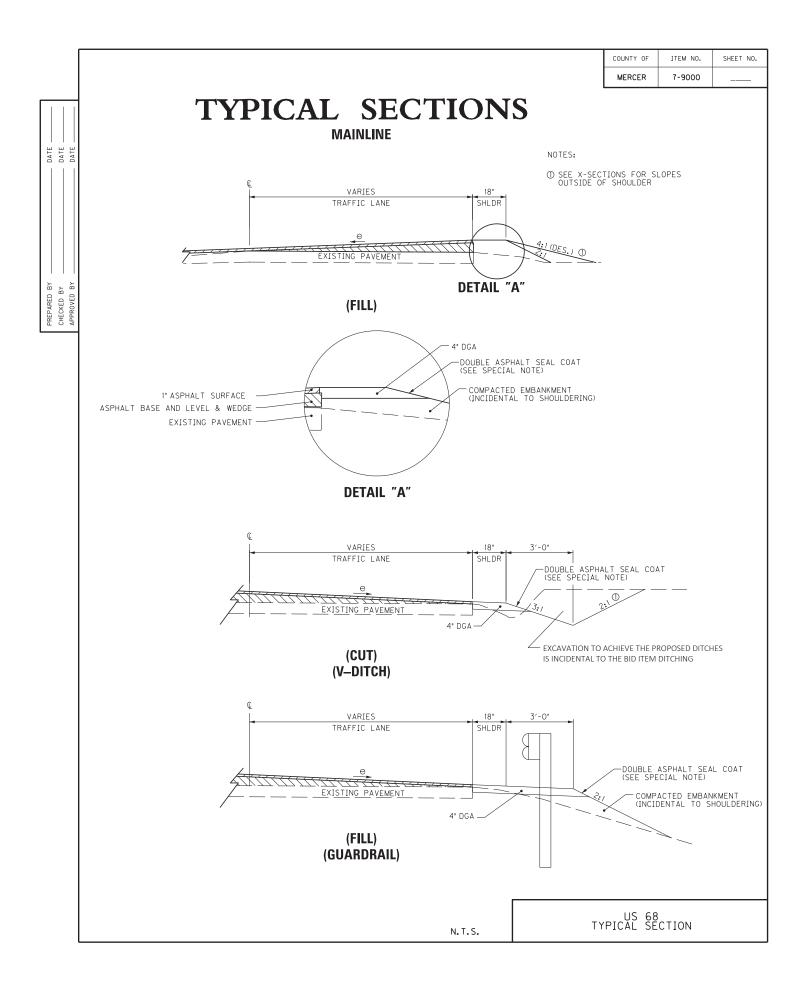
# US 68, Mercer County

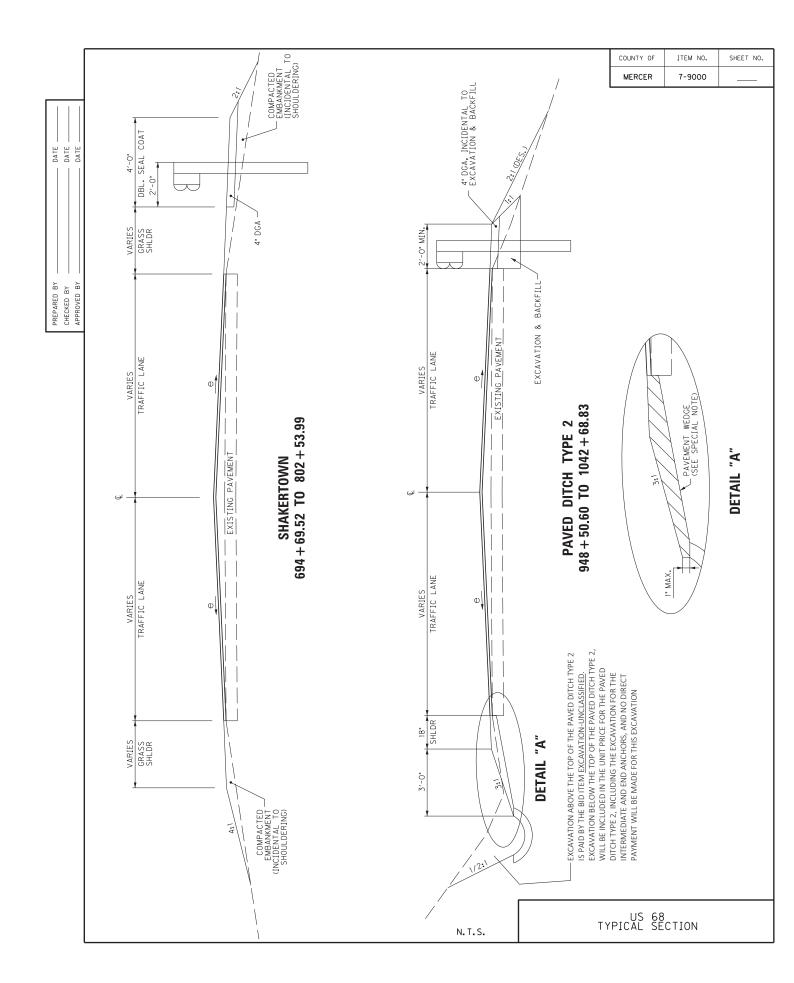
 Project:
 Safety Improvement Plan

 Contents:
 Drainage Structure and Pipe Inventory

- 0+0	110/00/01/01										
במות.	Date: 10/20/2014										
+4:00 01:14	20:403	Existing Cross Drains	Headwall	wall	Chons	Existing		Pro	Proposed		
IVIIIE FOIIIL	Station	Pipe / Type	Left	Right	Skew	Length	Pipe & Size	Left Hdwl	Right Hdwl	Ch Lining	COMMISSION
12.61	665+55.82	18"CMP	STANDARD	STANDARD	0	28.60'	18" -34' New Pipe		Double Safety Box Inlet		
12.71	98.66+029	15'x5.3' RCBC	ELL	ELL	42^50'24" LT	29.82					
12.80	675+58.87	5'x4' RCBC	FLARED	FLARED	0	29.36'					
12.99	686+07.75	24" CMP	STANDARD	STANDARD	0	28.85	24" - 37' New Pipe			CL II Ch Lining L	4 Tons
13.07	690+56.59	18" CMP	STANDARD	STANDARD	10^16'15" LT	29.48'	18" - 35' New Pipe				
13.15	694+21.26	18" CMP	STANDARD	STANDARD	0	28.76'	18" - 31' New Pipe				New Slope
13.72	724+64.64	24" CMP	PARALLEL	PARALLEL	30^47'01" RT	64.81'					
13.78	727+62.03	18" CMP	PARALLEL	PARALLEL	0	76.26'					
13.85	731+11.83	18" CMP	PARALLEL	PARALLEL	0	60.25					
13.90	734+11.34	18" CMP	PARALLEL	PARALLEL	2^39'48" LT	'76'32					
14.02	740+02.05	ELIPTICAL 64"x56" CMP	FLARED	FLARED	46^58'40" LT	120.22'					
14.20	749+75.53	18" CMP	STANDARD	STANDARD	0	65.18'					
14.26	752+76.73	18" CMP	ELL	STANDARD	29^14'21" RT	51.92'					
14.31	755+75.91	18" CMP	ELL	STANDARD	28^28'37" RT	65.64'					
14.37	758+75.19	21" CMP	ELL	STANDARD	30^11'09" RT	47.63'					
14.63	772+69.99	30" CMP	FLARED	FLARED	15^09'37" LT	121.66'					
14.70	776+36.01	18" CMP	ELL	STANDARD	39^50'46" RT	101.77					
14.86	784+73.86	18" CMP	STANDARD	STANDARD	0	93.64'					
15.28	806+76.42	15" RCP	NO	ON	0	32.53'	15" RCP 4' Ext.				Right Side
15.39	812+32.88	15" RCP	ON	ON	0	32.20'	2 ~ 15" RCP 4' Ext.				4' Ext. L - 4' Ext. R
15.54	820+26.23	15" RCP LT /18" CMP RT	NO	ON	0	28.44'	18" - 32' New Pipe				New Slope
15.70	828+89.55	18" RCP	NO	NO	0	32.75'	18" RCP 4' Ext.	Modified DBI 3			
15.90	839+28.07	15" RCP	NO	NO	0	31.62'	2 ~ 15" RCP 4' Ext.	Modified DBI 3			4' Ext. L - 4' Ext. R
16.05	847+47.21	15" RCP LT/15" CMP RT	NO	NO	0	29.98'	15" - 37' New Pipe				New Slope
16.27	858+89.30	ELIPTICAL 1.7'x1.3' CMP	NO	NO	6^59'33" LT	32.10'					
16.35	863+34.26	27x20 CMP	NO	NO	7^58'24" LT	35.88'					Caution: Wetland Area
16.50	871+25.95	15" CMP	STANDARD	NO	0	31.38'					
16.59	876+01.47	15" CMP LT / 15" RCP RT	NO	NO	0	30.03'	15" - 38' New Pipe				
16.70	881+94.36	15" RCP	NO	NO	3^21'09" RT	32.34					
16.83	888+39.14	15" RCP LT /15" CMP RT	NO	NO	0	27.97'	15" - 40' New Pipe				Skew Pipe to avoid tree
17.17	906+39.41	18" RCP LT /18" CMP RT	STANDARD	STANDARD	0	29.93'	18" - 35' New Pipe		Modified DBI 3		
17.24	910+33.36	ELIPTICAL 2.3' x1.7' CMP	NO	NO	0	36.27'					
17.38	917+75.89	15" CMP LT / 15" RCP RT	STANDARD	NO	0	28.62'	15" - 38' New Pipe	Modified DBI 3			

12-11317		αι												1														$\neg$
Comments															Begin FD04-084-0068- 018-020							3 tons						
	Ch Lining																					CL II Ch Lining R						
Proposed	Right Hdwl		Modified DBI 3	Modified DBI 3	Modified DBI 3	Modified DBI 3	Modified DBI 3					18" Pipe Culvert Hdwl			18" Pipe Culvert Hdwl	18" Pipe Culvert Hdwl	15" Pipe Culvert Hdwl	15" Pipe Culvert Hdwl				18" Pipe Culvert Hdwl	18" Pipe Culvert Hdwl		15" Pipe Culvert Hdwl	18" Pipe Culvert Hdwl		
Pro	Left Hdwl							DBITY 13		DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	DBITY 13	
	Pipe & Size	18" - 38' New Pipe		18" - 33' New Pipe	18" - 37' New Pipe	24" - 38' New Pipe	18" - 36' New Pipe	18" - 35' New Pipe		18" - 36' New Pipe	24" - 33' New Pipe	18" - 31' New Pipe	18" - 35' New Pipe	18" - 33' New Pipe	18" - 27' New Pipe	18" - 32' New Pipe	15" - 31' New Pipe	15" - 32' New Pipe	15" - 35' New Pipe	18" - 36' New Pipe	18" - 34' New Pipe	18" - 31' New Pipe	18" - 32' New Pipe	24" - 45' New Pipe	15" - 34' New Pipe	18" - 35' New Pipe	18" - 35' New Pipe	
Existing	Length	28.12'	41.46'	29.10'	29.42'	33.54'	26.71'	25.83'	29.60'	25.22'	25.06'	24.86	24.91'	25.60'	24.61'	30.71'	27.59'	27.21'	29.69'	24.88'	24.39'	24.83'	25.18'	40.48'	24.21'	35.08'	25.82'	
	Skew	0	0	0	0	6^07'34" LT	0	0	0	0	0	0	0	0	0	0	0	0	6^44'41" LT	0	0	0	0	0	0	0	0	
wall	Right	STANDARD	ON	STANDARD	ON	STANDARD	ON	YES	ON	ON	ON	YES	YES	YES	YES	ON	YES	YES	NO	STANDARD	STANDARD	STANDARD	STANDARD	NO	NO	ON	NO	
Headwall	Left	ON	STANDARD	ON	ON	ON	YES	YES	ON	ON	YES	YES	YES	YES	YES	YES	ON	ON	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD	YES	NO	ON	YES	
Existing Cross Drains	Pipe / Type	18" RCP LT /18" CMP RT	18" CMP	18" CMP	18" CMP	24" CMP	18"CMP	18" RCP	Rock built up at pipe ends	15" RCP LT /18" CMP RT	24" CMP	18" CMP	18" CMP	18" CMP	18" CMP	18" CMP	15" CMP	15" CMP	15" CMP	18" RCP	1009+75.57 RCP asphalt covered LT/ 18" RCP RT	18" RCP	18" RCP	24" CMP	15" CMP	18" CMP	18" CMP	
90:403	Station	925+73.52	929+45.85	932+29.66	935+90.33	940+15.13	943+74.13	952+76.07	953+20.75	956+71.80	962+38.22	968+18.97	974+67.45	976+74.20	981+26.90	983+73.70	992+39.95	999+24.01	1002+15.67	1005+74.16	1009+75.57	1015+75.97	1019+79.76	1023+58.11	1026+18.92	1036+02.53	1042+68.83	
+4:10 DO:14	IVIIIe POINT	17.53	17.60	17.66	17.73	17.81	17.87	18.04	18.05	18.12	18.23	18.34	18.46	18.50	18.58	18.63	18.80	18.93	18.98	19.05	19.12	19.24	19.31	19.39	19.44	19.62	19.75	





MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 91 of 268 MATCHLINE STA. 690+00 US 68 MP 12.50 TO MP 13.07 STA. 660+00 TO STA. 690+00 NOTE: STATIONS ARE BASED ON ACTUAL MILEPOINTS WHERE I MILE = 5,280 FEET 7-9000.00 ITEM NO. COUNTY OF MERCER 00+089 PC 680+12, 77 TREE REMOVAL STA. 677+96.58 LT. TREE ON FENCELINE **≱(** ← 00+919 CONVENTIONAL SIGNS OVERHEAD WIRE
TY. 2 PAVED DITCH SWAMP OR MARSH STONE FENCE WATER MAJN GAS MAJN PT 672+60,92 SHOULDERING

STA. 660+00 TO STA. 690+00, CONST. 18' DCA SHLD. LT
STA. 660+00 TO STA. 690+00, CONST. 18' DCA SHLD. RT | | | | | | PRC 669+31.61 EXIST. RIGHT OF WAY & PROPERTY LINE EXISTING ROAD AND HEDGE) FENCE (EXCEPT STONE SURVEY LINE GRADE LINE GROUND LINE 00+999 PC 665+\$6.17 GUARDRAIL DRAWING PROVIDED FOR INFORMATION ONLY.
OUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES. 99.90+699 19 DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. BEGIN PROJECT US 68 STA. 660+00, MP 12.5 00+099 MAHTAHO FILE NAME: T:/KYTC/I4 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANS&PROFILES/R00300PL.DGN USER: jnorris DATE PLOTTED: October 20, 2014 MicroStation v8.11.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 93 of 268 US 68 MP 13.07 TO MP 13.64 STA. 690+00 TO STA. 720+00 ITEM NO. 7-9000.00 COUNTY OF MERCER SCALE: 1"=100" SHA 699-00 TO STA 694-69, CONST. 18" DGA SHLD. LT
STA 699-00 TO STA, 694-69, CONST. 18" DGA SHLD. LT
STA 694-69 TO STA, 720-00, CONST. 69455/DGA SHLD. LT
STA, 694-69 TO STA, 720-00, CONST. 69455/DGA SHLD. RT
STA, 694-69 TO STA, 720-00, CONST. 69455/DGA SHLD. RT 00+012 00+901 00+001 DRAWING PROVIDED FOR INFORMATION ONLY.
OUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES. DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. 00+969 696+60,23 MATCHLINE STA. 690+00 USER: Jnorris DATE PLOTTED: October 20, 2014 MicroStotion v8.11.7.443 E-SHEET NAME: FILE NAME: T:/KYTC/IM PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANSAPROFILES/R00500PL.DGM

MERCER COUNTY 084GR14T0 2- SIP & FD04 Contract ID: 144207 Page 95 of 268 SHEET US 68 MP 13.64 T0 MP 14.20 STA. 720+00 T0 STA. 750+00 7-9000,00 ITEM NO. COUNTY OF MERCER 745+00 SHOULDERING STA, 720+00 TO STA, 750+00, CONST, GRASS/DGA SHLD. LT STA, 720+00 TO STA, 750+00, CONST, GRASS/DGA SHLD. RT 740+00 00+921 730+00 DRAWING PROVIDED FOR INFORMATION ONLY.
OUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES. DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. PT 720+93,17 MATCHLINE STA. 720+00 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: T:/KYTC/IM PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANSAPROFILES/R00700PL.DGM MicroStation v8.11.7.443 E-SHEET NAME:



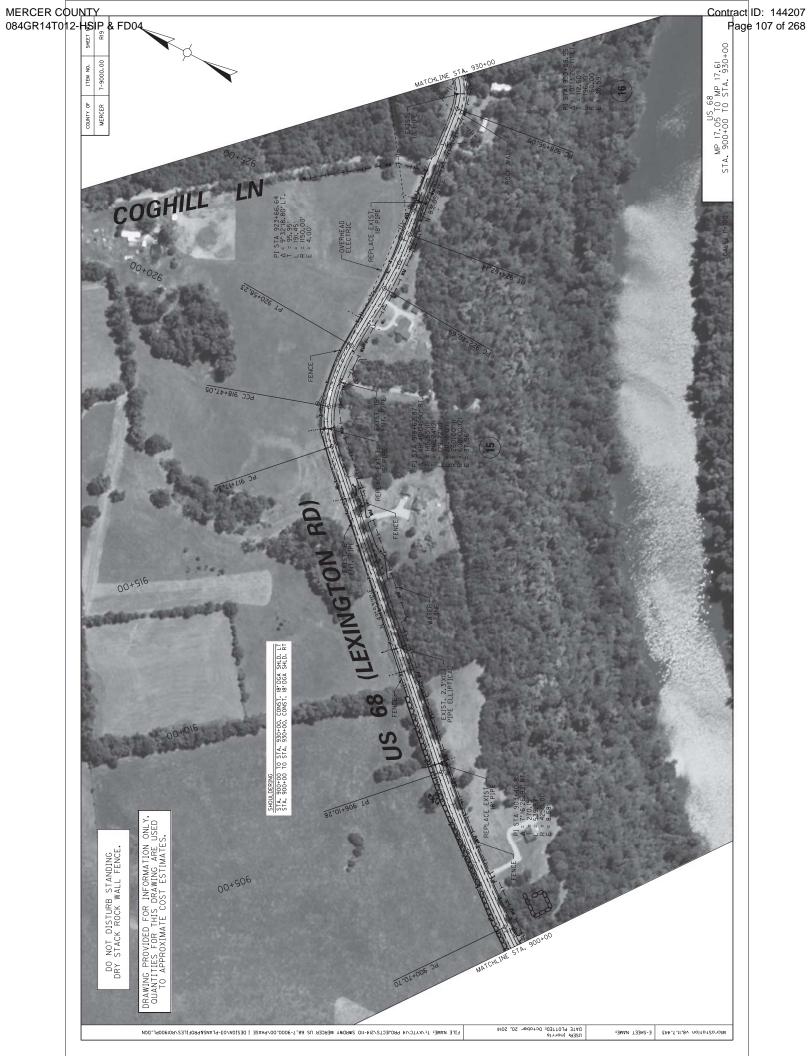
MERCER COUNTY
084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 99 of 268 SHEET US 68 14.77 TO MP 15.34 780+00 TO STA. 810+00 ITEM NO. 7-9000,00 COUNTY OF MERCER DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE STA. DRAWING PROVIDED FOR QUANTITIES FOR THIS ( TO APPROXIMATE CC 00+908 PT 803+01.4I PC 801+96.51 00+008 IS 68 (LEXINGTON RD) LENGTH SHOULDERING STA, 780+00 TO STA, 802+54, CONST, GRASS/DGA SHLD. STA, 780+00 TO STA, 802+54, CONST, GRASS/DGA SHLD. STA. 802+54 TO STA. 810+00, CONST. 18° DGA SHLD. LT STA. 802+54 TO STA. 810+00, CONST. 18° DGA SHLD. RT 00+961 STA. 805+90.02 LT. TREE NEAR ROCK FENCE BEGIN STATION 783+12 792+64 18,17+787 19 TERM. END SEC. TREAT. US 29 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: T:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/03-PLANS&PROFILES/R01100PL.DGM MicroStation v8.II.7.443 E-SHEET NAME:

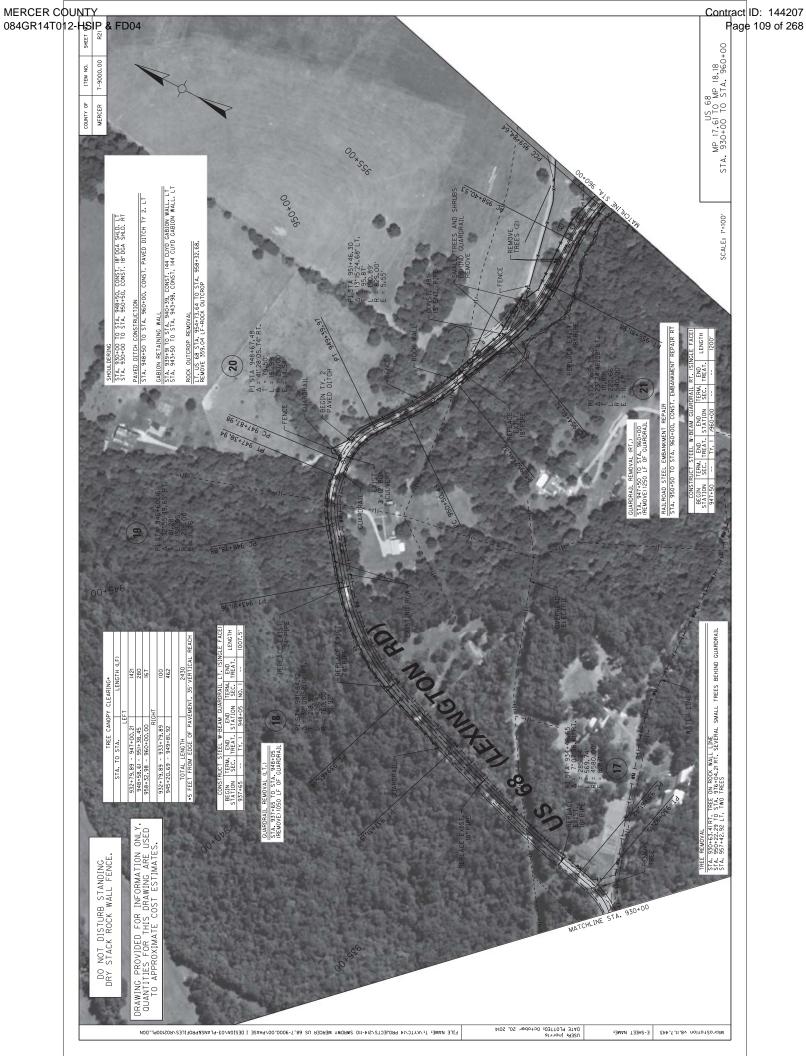
MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 101 of 268 US 68 15.34 TO MP 15.91 810+00 TO STA. 840+00 ITEM NO. COUNTY OF MERCER STA. 00+058 SHOULDERING STA. 810+00 TO STA. 840+00, CONST. 18" DGA SHLD. LT STA. 810+00 TO STA. 840+00, CONST. 18" DGA SHLD. RT DRAWING PROVIDED FOR INFORMATION ONLY.
OUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES. DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. 00+918 PC 812+80,14 USER: jnorris DATE PLOTIED: October 20, 2014 FILE NAME: T:/KYTC/M PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANS&PROFILES/R01300PL.DGM MicroStation v8.11.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP Contract ID: 144207 Page 103 of 268 SHEET US 68 MP 15.91 TO MP 16.48 STA. 840+00 TO STA. 870+00 7-9000.00 ITEM NO. COUNTY OF MERCER BRUCE AD MADROM CAUTION: WETLAND DO NOT DISTURB SCALE: 1"=100' TREE AND SHRUB IN R/W TREE AND SHRUB IN R/W IREE REMOVAL 514. 841+68.48 RT. 514. 847+07,04 LT. 514. 849+3.08 T0 STA. 851+91.36 RT. I STA. 855+37,15 T0 STA. 859+08.86 RT. 00+998 CONST. 18" DGA SHLD. LT CONST. 18" DGA SHLD. RT 07,53+028 19 STA. 840+00 TO STA. 870+00. STA. 840+00 TO STA. 870+00. STA. 840+00 TO STA. 870+00. PC 847+80,55 00+548 DRAWING PROVIDED FOR INFORMATION ONLY. OUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES. NOT DISTURB STANDING STACK ROCK WALL FENCE. PC 841+51.98 DRY S USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: T:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESICN/03-PLANS&PROFILES/R01500PL.DCM MicroStation v8.11.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 105 of 268 SHEET US 68 MP 16.48 TO MP 17.05 STA. 870+00 TO STA. 900+00 ITEM NO. 7-9000,00 COUNTY OF MERCER TREES AND SHRUBS-13 00+968 TREE REMOVAL STA. 895+20.53 LT. TREES AND SHRUBS BLOCK SIGHT DISTANCE SHOULDERING

STA. 870+00 TO STA. 900+00, CONST. 18' DGA SHLD. LT
STA. 870+00 TO STA. 900+00, CONST. 18' DGA SHLD. RT 00+068 PC 890+35.40 00+588 PT 884+93,36 75-68 ; PROVIDED FOR INFORMATION ONLY. TIES FOR THIS DRAWING ARE USED APPROXIMATE COST ESTIMATES. DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. PT 872+47, 36 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: T;/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/03-PLANSAPROFILES/R01700PL.DGN MicroStation v8.11.7.443 E-SHEET NAME:

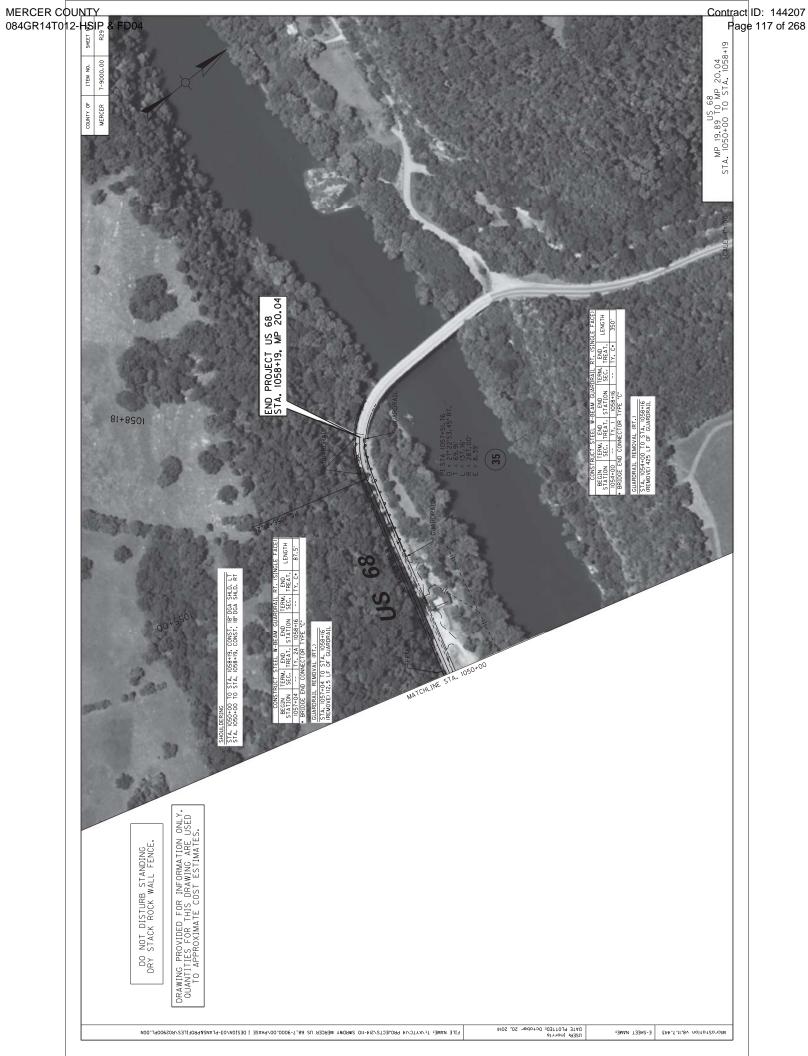


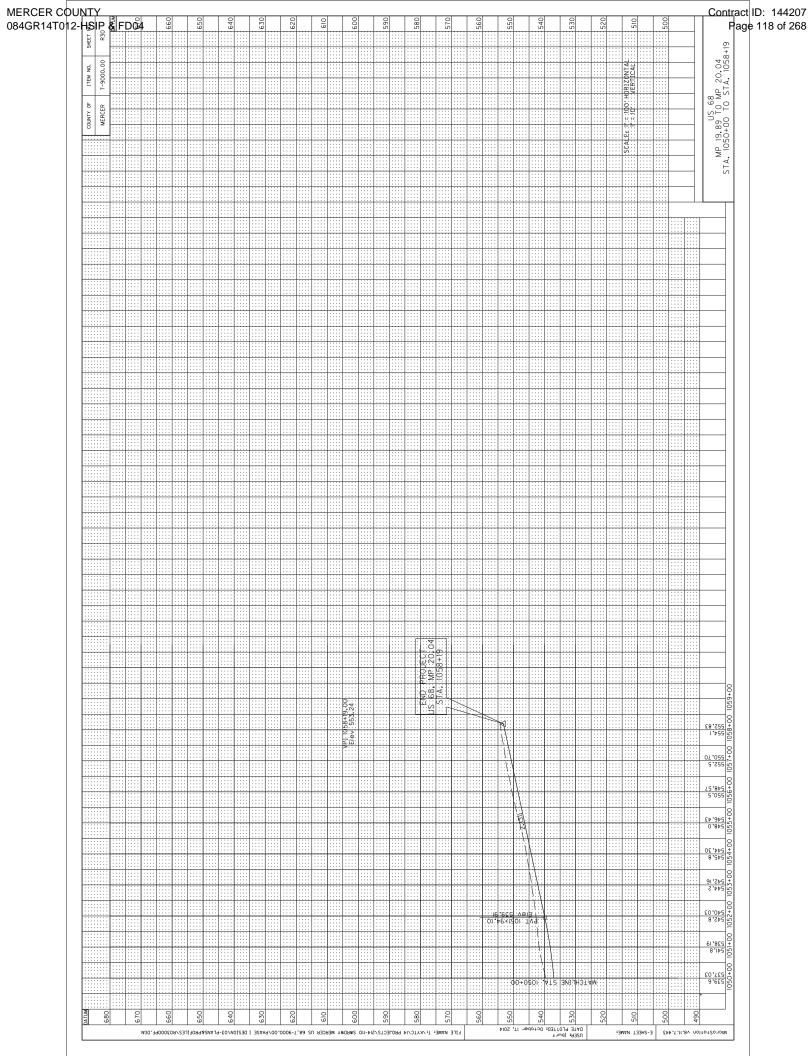


MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 111 of 268 SHEET DRAWING PROVIDED FOR INFORMATION ONLY OUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES. US 68 MP 18.18 TO MP 18.75 . 960+00 TO STA. 990+00 ITEM NO. 7-9000.00 DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. COUNTY OF MERCER STA. LT. US 68 STA. 976+59.56 TO STA. 978+12.68, REMOVE 153.12 LF~ROCK OUTCROP LT. US 68 STA. 978+12.68 TO STA. 982+03.40, REMOVE 390.72 LF-ROCK OUTCROP LT. US 68 STA. 982+03.40 TO STA. 985+41.32, REMOVE 337.92 LF~ROCK OUTCROP LT. US 68 STA. 985+41.32 TO STA. 986+46.92, REMOVE 105.60 LF~ROCK OUTCROP LI. US 68 STA. 986+49.92 TO STA. 987+78.92, REMOVE 132.00 LF~ROCK OUICROP LT. US 68 STA. 971+10.44 TO STA. 976+59.56. REMOVE 549.12 LF~ROCK OUTCROP 00+9L6 00+996 MATCHLINE STA. USER: Jnorris DATE PLOTTED: October 20, 2014 MicroStation v8.11.7.443 E-SHEET NAME: FILE NAME: T:/KYTC/14 PROJECTS/2/14-IIO SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANS&PROFILES/R02300PL.DGN

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 113 of 268 US 68 MP 18.75 TO MP 19.32 STA. 990+00 TO STA. 1020+00 ITEM NO. 7-9000.00 DRAWING PROVIDED FOR INFORMATION O QUANTITIES FOR THIS DRAWING ARE UTO APPROXIMATE COST ESTIMATES. DO NOT DISTURB STANDING DRY STACK ROCK WALL FENCE. COUNTY OF MERCER 32 PAVED DITCH CONSTRUCTION STA. 990+00 TO STA. 1020+00, CONST. PAVED DITCH TY 2. ROCK OUTCROP REMOVAL LT. US 68 STA. 1006+85.00 TO STA. 1009+43.72, REMOVE 258.72 LF-ROCK OUTCROP LT. US 68 STA, 1013+92.52 TO STA, 1014+40.04, REMOVE 47.52 LF~ROCK OUTCROP LT. US 68 STA. 1018+62.44 TO STA. 1019+36.36. REMOVE 73.92 LF~ROCK OUTCROP 00+0101 TREE REMOVAL STA. 1005+04.80 LT. STA. 1006+10.40 LT. 00+9001 00+0001 USER: jnorris DATE PLOTTED: October 17, 2014 MicroStotion v8.II.7.443 E-SHEET NAME: FILE NAME: T:/KYTC/I4 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE | DESIGN/03-PLANS&PROFILES/ROS500PL.DCM







MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 119 of 268 STA.669+33 TO STA.680+99 MP 12.68 TO MP 12.90 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == X. FENCE EX BYW ₩\\$ .X3 82W EX. FENCE -30 -30 -80 -110 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 -130 -130 -150 MicroStation v8.11,7.443 E-SHEET NAME: X00100XS DATE PLOTIED: October 17, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000,00/PHASE 1 DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, 604

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 120 of 268 860 860 830 850 830 820 SHEET 82 150 STA.685+47 TO STA.698+23 MP 12.98 TO MP 13.22 ITEM NO. COUNTY OF MERCER 130 9 9 00 00 HORIZONTAL VERTICAL 9 8 8 8 óó == 9 9 20 20 4 40 20 20 GRASS & DGA SHOULDER STATION 694+69.52 698+23 0 0 30 EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 20 330 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: X00200X DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 121 of 268 SHEET MAINLINE STA.716+46 TO STA.766+36 MP 13.57 TO MP 14.51 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó M/8 \*X3 == EX B/W ₩\8.8.8\W 716+46 -30 EX, R/W WA .x∃ 880 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -130 -150 MicroStation v8.11,7.443 E-SHEET NAME: X00300X3 DATE PLOTIED: October 17, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000,00/PHASE 1 DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, 604

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 122 of 268 906 900 920 890 950 920 880 SHEET 150 MAJNLINE STA.778+17 TO STA.781+93 MP 14.74 TO MP 14.81 ITEM NO. COUNTY OF MERCER 8 130 9 9 00 00 HORIZONTAL VERTICAL 9 8 8 80 óó == 2 9 9 20 20 9 40 *₹*/ 20 20 781+93 0 0 -30 M/8 EX B/W 0-<u>@</u> 0 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 900 950 920 90 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA MicroStation v8.11,7,445 E-SHEET WAME: x00400xs DATE PLOTTED; 00+0ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 123 of 268 940 930 930 90 920 90 930 920 900 SHEET 150 150 STA.787+33 TO STA.816+79 MP 14.91 TO MP 15.47 COUNTY OF MERCER 130 130 9 9 9 00 00 001 HORIZONTAL VERTICAL 90 96 8 80 80 80 óó == 2 9 9 9 EX. FENCE 20 20 20 40 4 40 828 EX. RVW 20 20 20 1.4 ÷/ GRASS & DGA SHOULDER STATION 802+53.99 jΙ 807+69 787+33 816+79  $\dagger$ 0 0 END X3 88 -30 W\8 EX, R√W -80 -80 -100 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 -130 -130 930 930 9 MicroStation v8. II. 7.443 E-SHEET NAME: X00500XS DATE PLOTTED: 00100Per 17, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000,00/PHASE 1 DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, 604

Contract ID: 144207 MERCER COUNTY 084GR14T012-HSIP & FD04 Page 124 of 268 87¢ 9 930 906 880 940 930 890 SHEET 150 MAINLINE STA.824+85 TO STA.827+67 MP 15.62 TO MP 15.68 ITEM NO. COUNTY OF MERCER 130 9 9 00 00 HORIZONTAL VERTICAL 9 8 8 80 óó == 2 9 9 20 20 4 40 EX FENCE 20 20 = <del>- (</del> BEGIN 2.5" MILL STATION 832+99.35 827+67  $\parallel$ 0 0 888 30 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -150 930 920 9 80 930 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: x00600xs DATE PLOTTED; 0010ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 125 of 268 SHEET MAINLINE STA.834+85 TO STA.837+24 MP 15.81 TO MP 15.86 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == 834+85 -30 0-<u>@</u> NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 -130 -150 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,00/PHASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA MicroStation v8.11,7.445 E-SHEET WAME: X00700X DATE PLOTTED; 00+00ber 17, 2014

Contract ID: 144207 MERCER COUNTY 084GR14T012-HSIP & FD04 Page 126 of 268 906 940 930 920 SHEET 150 150 MAINLINE STA.848+01 TO STA.852+94 MP 16.06 TO MP 16.15 ITEM NO. COUNTY OF 130 MERCER 130 130 9 9 00 00 HORIZONTAL VERTICAL 96 8 80 8 óó == 2 9 9 20 20 4 40 29 20 848+01 0 0 EX. FENCE -30 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -180 -130 90 900 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X00800XS DATE PLOTTED; 0010ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 127 of 268 950 930 930 96 920 SHEET 150 MAINLINE STA.857+67 TO STA.860+92 MP 16.24 TO MP 16.31 ITEM NO. COUNTY OF MERCER 8 130 9 9 00 00 HORIZONTAL VERTICAL 9 8 8 80 óó == 2 9 9 20 20 9 40 EX. FENCE 20 il h Ш 1 857+67 # 0 0 -30 - 40 <u>@</u> 0 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 990 200 9 950 930 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA MicroStation v8.11,7.445 E-SHEET WAME: x00900xs DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 128 of 268 SHEET STA.864+50 TO STA.867+48 MP 16.37 TO MP 16.43 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == END 2.5" MILL STATION 869+22.61 SEX. RVW -30 EX. FENCE 0-NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -150 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA MicroStation v8.11,7.445 E-SHEET WAME: X01000XS DATE PLOTTED; 00100ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 129 of 268 SHEET MAINLINE STA.883+05 TO STA.891+16 MP 16.72 TO MP 16.88 COUNTY OF MERCER HORIZONTAL VERTICAL óó == EX BVW 891+16 -30 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -150 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: X01100XS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 130 of 268 SHEET MAINLINE STA.896+96 TO STA.898+81 MP 16.99 TO MP 17.02 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == 96+968 888 EX. R/W EX B/W -30 EX. FENCE <u>@</u> NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 -130 -150 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X01200XS USER: jnorris 2014 PLOTTED: 00140ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 131 of 268 SHEET MAINLINE STA.909+55 TO STA.915+41 MP 17.23 TO MP 17.34 COUNTY OF MERCER óó == EX\* LENCE 915+41 X, FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X01300XS USER: jnorris 2014 PLOTTED: 00140ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 132 of 268 SHEET STA.921+49 TO STA.930+04 MP 17.45 TO MP 17.61 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == 921+49 :\| EX FENCE -30 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -180 -130 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: X01400XS USER: jnorris 2014 PLOTTED: 00140ber 17, 2014

Contract ID: 144207 MERCER COUNTY 084GR14T012-HSIP & FD04 Page 133 of 268 SHEET MAINLINE STA.934+56 TO STA.941+29 MP 17.70 TO MP 17.83 COUNTY OF MERCER HORIZONTAL VERTICAL óó == EX. R/W EX. R/W -30 -40 - 70 -80 -110 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -140 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X01500XS USER: jnorris 2014 PLOTTED: 00140ber 17, 2014

MERCER COUNTY Contract ID: 144207 084GR14T012-HSIP & FD04 Page 134 of 268 SHEET STA.946+40 TO STA.948+74 MP 17.92 TO MP 17.97 ITEM NO. COUNTY OF MERCER HORIZONTAL VERTICAL óó == 948+74 BECIN PAVED DT. TY STA. 948+50 (LEFT) NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 FIFE NAME: 1:/XYTC/14 PROJECTS/224-110 SWROWY MERCER US 68.7-9000.00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW FON MicroStation v8.11,7.445 E-SHEET WAME: X01600XS DATE PLOTTED; 00100ber 17, 2014

MERCER COUNTY
084GR14T012-HSIP & FD04 Contract ID: 144207 Page 135 of 268 800 760 790 780 820 770 SHEET 150 STA.955+68 TO STA.955+68 MP 18.10 TO MP 18.10 ITEM NO. COUNTY OF MERCER 130 9 00 HORIZONTAL VERTICAL 8 8 óó == 9 20 40 STA. 950+50 TO STA. 960+00 EXCAVATION & BACKFILL: 739 CU 20 0 Exc. EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 800 96 70 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X01700XS USER: jnorris Rotober 17, 2014

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 136 of 268 760 790 780 750 820 770 SHEET 150 STA.959+13 TO STA.959+13 MP 18.17 TO MP 18.17 ITEM NO. COUNTY OF 130 9 00 8 8 óó == 9 20 40 20 959+13 NOT DISTURB STANDING STACK ROCK WALL FENCE. EX. FENCE -130 140 9 96 80 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X01800XS USER: jnorris 2014 PLOTTED: 00100ber 17, 2014

MERCER COUNTY
084GR14T012-HSIP & FD04 Contract ID: 144207 Page 137 of 268 SHEET STA.961+49 TO STA.961+49 MP 18.21 TO MP 18.21 ITEM NO. COUNTY OF 120 HORIZONTAL VERTICAL 9 óó == 90 8 2 20 9 20 2.0 961+49 ×C. EX. FENCE -50 2 NOT DISTURB STANDING STACK ROCK WALL FENCE. -100 140 9 96 80 09. Micro54otion v8.II.7.443 E-SHEET NAME: X01900XS USER: jhorri8

DATE PLOTTED: October I7, 2014 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 138 of 268 MAINLINE 969+20 TO STA.969+20 18.36 TO MP 18.36 ITEM NO. COUNTY OF STA.9 HORIZONTAL VERTICAL 750 780 760 == 9 20 40 STA, 969+00 TO STA, 978+50 EXCAVATION & BACKFILL: 739 CUN 29 7. 969+20 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 96 80 09 50 9 USER: joorris DATE PLOTIED: October 17, 2014 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN Microstotton va.II.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 139 of 268 SHEET STA.972+20 TO STA.972+20 MP 18.41 TO MP 18.41 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 760 750 680 == 9 20 40 20 972+20 0 ĸ Ċ NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 9 09 40 30 20 00 690 USER: joorris DATE PLOTIED: October 17, 2014 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA Microstotton va.II.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 140 of 268 STA. 975+70 TO STA. 975+70 MP 18.48 TO MP 18.48 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 760 99 650 == 9 20 40 X 20 Unclassified 0 č Š NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 2 92 9 9 90 670 USER: jnorris DATE PLOTTED: October 17, 2014 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA Microstotton va.II.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 141 of 268 STA, 977+70 TO STA, 977+70 MP 18.52 TO MP 18.52 ITEM NO. COUNTY OF MERCER 1" = 10' HORIZONTAL 1" = 10' VERTICAL 99 909 9 20 4 5.4 977+70 . - Unclassified S.007 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 590 30 20 9 90 989 650 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8. II. 7.443 E-SHEET NAME: X03800XS DATE PLOTTED: 00100Per 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 142 of 268 STA. 979+20 TO STA. 979+20 MP 18.55 TO MP 18.55 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 720 9 2 650 640 750 630 2 20 9 30 CRIBBING NOT ANTICIPATED STA, 978-50 TO STA, 981-26 CCAVATION & BACKFILL: 62 CUN 20 9. 979+20 0 Exc. NOT DISTURB STANDING STACK ROCK WALL FENCE. -15-1 20 8 20 9 9 90 980 850 630 USER: jnorris DATE PLOTTED: October 17, 2014 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA Microstotton va.II.7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207

Page 143 of 268 MAINLINE 982+70.40 TO STA. 982+70.40 MP 18.61 TO MP 18.61 ITEM NO. 7-9000.00 COUNTY OF MERCER 1" = 10' HORIZONTAL 1" = 10' VERTICAL 720 700 680 670 999 9 20 4 RAILROAD STEEL REPAIR STAL 981426 TO STA. 983+82 EXCAVATION & BACKFILL: 240 CUYD 20 =.2 982+70 . - Unclassified -80 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 650 20 20 9 00 680 670 MicroStation v8. II. 7.445 E-SHEET NAME: XOSSOOXS USER; Joorn's PAIC PLOTTED; October 17, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68.7-9000.00/PHASE 1 DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. 400

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 144 of 268 MAINLINE STA.989+17 TO STA.989+17 MP 18.73 TO MP 18.73 ITEM NO. COUNTY OF MERCER CRIBBING NOT ANTICIPATED STA. 1045+05 EXCAVATION & BACKFILL: 1361 CU) 989+17 ° × CAUTION: ROCK DETERIORATING 80/12: -30 NOT DISTURB STANDING STACK ROCK WALL FENCE -80 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: X02000XS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 145 of 268 STA.997+92 TO STA.997+92 MP 18.90 TO MP 18.90 ITEM NO. COUNTY OF HORIZONTAL VERTICAL óó == NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: XOZIOOXS DATE PLOTTED; 00100ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 146 of 268 909 590 150 MAINLINE STA.1008+48 TO STA.1008+48 MP 19.10 TO MP 19.10 ITEM NO. COUNTY OF 130 9 00 HORIZONTAL VERTICAL 8 8 óó == 9 20 40 29 EX. R/W 0 Exc. NZB KEN 889/ NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 00 90 980 929 920 630 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: XOSZOOXS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 147 of 268 909 969 929 590 580 570 150 MAINLINE STA.1013+76 TO STA.1013+76 MP 19.20 TO MP 19.20 COUNTY OF MERCER 130 9 00 HORIZONTAL VERTICAL 8 80 óó == 9 20 40 29 1013+76 NOT DISTURB STANDING STACK ROCK WALL FENCE. -130 00. 90 980 650 930 90 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: X02500XS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 148 of 268 MAINLINE STA.1019+04 TO STA.1019+04 MP 19.30 TO MP 19.30 COUNTY OF HORIZONTAL VERTICAL óó == 1019+04 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 9 70 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7,445 E-SHEET WAME: XO2400XS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 149 of 268 SHEET MAINLINE STA.1024+32 TO STA.1024+32 MP 19.40 TO MP 19.40 COUNTY OF HORIZONTAL VERTICAL óó == NOT DISTURB STANDING STACK ROCK WALL FENCE -130 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA MicroStation v8.11,7.445 E-SHEET WAME: XOSSOOXS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 150 of 268 999 630 560 540 550 530 150 MAINLINE STA.1026+96 TO STA.1026+96 MP 19.45 TO MP 19.45 ITEM NO. COUNTY OF 130 9 00 HORIZONTAL VERTICAL 8 8 óó == 9 20 40 29 PAVED DT. TY 2 1042+69 (LEFT) Exc. END STA. NOT DISTURB STANDING STACK ROCK WALL FENCE -130 650 93 90 580 550 530 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8.11,7.445 E-SHEET WAME: XOZGOOXS DATE PLOTTED; 00+00ber 17, 2014

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 151 of 268 MAINLINE STA.1045+44 TO STA.1045+44 MP 19.80 TO MP 19.80 ITEM NO. 520 590 99 620 580 560 COUNTY OF 130 120 HORIZONTAL VERTICAL 9 óó == 80 2 9 20 W .X3 / ₩/8 **.**X∃ NOT DISTURB STANDING STACK ROCK WALL FENCE. -120 650 630 9 909 980 96 Micro54otion v8.II.7.443 E-SHEET NAME: XO2700X DATE PLOTTED: October I7, 2014 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA

MERCER COUNTY 084GR14T012-HSIP 8 FD04 Contract ID: 144207 Page 152 of 268 MAINLINE STA.1056+00 TO STA.1056+00 MP 20.00 TO MP 20.00 ITEM NO. COUNTY OF 1" = 10' HORIZONTAL 1" = 10' VERTICAL 019 Į įI. T 1 DRY STACK ROCK WALL FENCE. 099 940 910 2 Micro51dfion v8.II.7.443 E-SHEET NAME: X02800XS DATE PLOTTED: October 17, 2014 FILE NAME: 1;/KYTC/14 PROJECTS/2PI4-110 SWRDWY MERCER US 68,7-9000,007PIASE [ DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW, DOA

MERCER COUNTY 084GR14T0 12-HSIP 8 FD04 Contract ID: 144207 Page 153 of 268 MAINLINE STA.1057+50 TO STA.1057+50 MP 20.03 TO MP 20.03 ITEM NO. Excavation & E RR STEE REPAIR REPAIR W/O CRIBBING COUNTY OF MERCER Unclassified 2734 75 2809 HORIZONTAL VERTICAL GABION BASKETS
PROJECT TOTALS óó == 100 630 570 560 540 9 590 530 620 580 550 96 9 20 4 20 057+50 0 -30 NOT DISTURB STANDING STACK ROCK WALL FENCE. -80 650 640 630 9 909 980 530 96 FILE NAME: T;/KYTC/14 PROJECTS/2/14-110 SWRDWY MERCER US 68,7-9000,00/PHASE | DESIGN/09-X-SECTIONS/MERCER CROSS SECTIONS CURVE SET ROW. BCN MicroStation v8. II. 7.443 E-SHEET NAME: XO2900XS USER; Joorn's PAIC PLOTTED; October 17, 2014

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 154 of 268 PIPE SECTIONS STA.665+56 TO STA.675+59 MP 12.61 TO MP 12.80 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 1 = 10 SAFETY BOX EX. R/M DBL. EX. FENCE .E. 816.51 Ĩ. S=0.0217 ft, /ft. CONST. 34'-18' PIPE S=0.0217 FT/FT 671+00 50'24" SKEW S=0.001 ft, 1ft. 675+59 95+599 0.6. 816.47 EX. FENCE EX. FENCE EX. R/W -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -130 MicroStation v8.11,7,443 E-SHEET NAME: X03000XS DATE PLOTTED; October 20, 2014 FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 155 of 268 830 830 820 150 PIPE SECTIONS STA.686+08 TO STA.690+27 MP 12.99 TO MP 13.07 ITEM NO. COUNTY OF MERCER 130 130 8 9 9 001 HORIZONTAL VERTICAL 90 8 8 8 1 = 10 9 9 50 EX. FENCE EX. FENC 9 40 827.73 - J/ 1 30 5 S-a 042 ft. /ft. CONST. 37"~24" PIPE S=0.042 FT/FT 690+27 16/15" SKEW CONST. CH. LINING OL II 10' EACH SIDE - 4 TONS 0 EX. FENCE EX LENCE 830,46 H -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 800 88 860 850 840 830 820 810 850 830 820 810 MicroStation v8.11,7.445 E-SHEET NAME: X03100XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 156 of 268 PIPE SECTIONS STA.694+21 TO STA.724+65 MP 13.15 TO MP 13.72 ITEM NO. COUNTY OF 1 = 10 0E = 825 BEGIN GRASS & DGA SHOULDER STATION 694+69.52 .046 ft. 17 EX. FENCE 828.36 828.10 EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 Microstation v8.11,7.445 E-SHEET NAME: X03200XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 157 of 268 870 800 810 PIPE SECTIONS STA.727+62 TO STA.727+62 MP 13.78 TO MP 13.78 COUNTY OF 9 8 1. = 10, 9 W\R .X3 - EX. B. CAP. a. E. 824.28 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 870 860 850 840 820 MicroStation v8.II.7.443 E-SHEET NAME: X03300XS DATE PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 158 of 268 800 810 PIPE SECTIONS STA, 731+12 TO STA, 731+12 MP 13.85 TO MP 13.85 ITEM NO. COUNTY OF 130 9 8 1" = 10' 9 £ = = = EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 800 870 860 850 840 820 810 MicroStation v8.II.7.445 E-SHEET NAME: X03400XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY
084GR14T012-HSIP & FD04 Contract ID: 144207 Page 159 of 268 SHEET PIPE SECTIONS STA.734+11 TO STA.740+02 MP 13.90 TO MP 14.02 ITEM NO. COUNTY OF 읃 1 = 10 EX. 64 TX 26 M OVAL CMP. S-0.095 Ft. / Ft. 740+02 46°58′40°SKEW mm. £=1 M/8 NOT DISTURB STANDING STACK ROCK WALL FENCE EX. R/W -130 MicroStation v8.II.7.445 E-SHEET NAME: X03500XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 160 of 268 890 880 STA.749+76 TO STA.752+77 MP 14.20 TO MP 14.26 ITEM NO. COUNTY OF 130 120 9 9 9 8 8 1 = 10 W\N. EX, R/W 9 9 20 0.5. 837.67 40 20 .099 ft. /f) 752+77 14'21" SKEW 0 1.6. 855.6 ₩/8 EX. R/W M78 EX B/M NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 840 88 830 890 880 860 850 880 870 850 840 MicroStation v8.II.7.445 E-SHEET NAME: X03600XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 161 of 268 900 880 150 150 PIPE SECTIONS STA.755+76 TO STA.758+75 MP 14.31 TO MP 14.37 ITEM NO. 140 COUNTY OF 5 130 120 9 9 90 9 8 8 8 1 = 10 2 EX. R/W EX. R/W 9 9 20 40 40 19:688 9:01 758+75 11'09" SKEW S=0.033 ft. -40 EX. R/W W/8 .X3 82W 0--80 -90 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 88 920 900 890 880 910 900 870 860 850 910 890 MicroStation v8.II.7.445 E-SHEET NAME: X03700XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 162 of 268 900 910 PIPE SECTIONS STA.772+70 TO STA.776+36 MP 14.63 TO MP 14.70 ITEM NO. COUNTY OF 8 130 120 9 9 EX. BVW HORIZONTAL VERTICAL 9 8 EX, R/W 8 8 1 = 10 9 20 40 20 7.6% 7.6% 886.19 EX. R/W W/R .X3 82W NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 88 900 880 870 860 900 890 870 860 850 910 890 MicroStation v8.II.7.443 E-SHEET NAME: X03800X2 DATE PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 163 of 268 PIPE SECTIONS STA.784+74 TO STA.812+33 MP 14.86 TO MP 15.39 ITEM NO. COUNTY OF 1 = 10 EX. FENCE 0.6. IE = 916. EX. R/W GRASS & DGA SHOULDER STATION 802+53.99 806+76 2 EX. R/W 2.2' PIPE 4' EXTENSION~15" RCP W\R .X3 88 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 -130 Microstation v8.11,7.445 E-SHEET NAME: X03900XS DATE PLOTTED; October 20, 2014 FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 164 of 268 PIPE SECTIONS STA.820+26 TO STA.828+90 MP 15.54 TO MP 15.70 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 1 = 10 EX. FENCE 5.222 2.222 2.222 2.202 2. BEGIN 2.5" MILL STATION 832+99.35 828+90 CONST. MODIFIED DBI TY 3, H=2'-8"
REMOVE 2' PIPE
CONST. 4 EXTENSION~18" RCP r TG = 905.28' 90 BS EX. RYW 08-NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStation v8.11,7,443 E-SHEET NAME: X04000XS DATE PLOTTED; October 20, 2014 FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 165 of 268 870 910 890 890 PIPE SECTIONS STA.839+28 TO STA.847+47 MP 15.90 TO MP 16.05 ITEM NO. COUNTY OF MERCER 130 130 8 9 9 90 HORIZONTAL VERTICAL 90 8 8 8 1 = 10 9 9 20 9 40 CONST. 4 - 15" RCP IE = 906.72' | | ₩ | W 20 25 - 16 - 898.54' 4 893. 16 - 696.77 - 26.52.52 END 2.5" MILL STATION 840+68.39 847+47 H=2'-11" 0 CONST. MODIFIED OBLITY 3. X\* LENCE P. 305.8 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 880 88 870 920 900 890 910 890 880 910 MicroStation v8.11,7,445 E-SHEET NAME: X04100XS DATE PLOTTED; October 20, 2014 FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 166 of 268 PIPE SECTIONS STA.858+89 TO STA.863+34 MP 16.27 TO MP 16.35 ITEM NO. COUNTY OF HORIZONTAL VERTICAL 1 = 10 EX. FENCE 8/4 33.14 1.6. 305.03 1.6. 94.87 TOTAL TOTAL TOTAL SEE END 2.5" MILL STATION 869+22.61 BEGIN 2,5" MILL STATION 861+17,73 863+34 58'24" SKEW CAUTION: WETLAND DO NOT DISTURB -40 0--80 -90 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStation v8.II.7.445 E-SHEET NAME: X04200XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 167 of 268 PIPE SECTIONS STA.871+26 TO STA.876+01 MP 16.50 TO MP 16.59 ITEM NO. COUNTY OF 1 = 10 a.E. 895.27' a.E. 895.43 EX. FENCE 876+01 871+26 1.6. 896.25 EX. R/W 896.64 EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStation v8.II.7.445 E-SHEET WAME: X04300XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 168 of 268 SHEET PIPE SECTIONS STA.881+94 TO STA.888+39 MP 16.70 TO MP 16.83 ITEM NO. COUNTY OF 1 = 10 PIPE TO AVOID TREE AT INLET DETERMINED BY FIELD ENGINEER REMOVE EXISTING PIPE CONST. APPROX. 40'-15' PIPE SLOPE & SKEW TBD SKEW TO BE EX. FENCE EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStation v8.II.7.445 E-SHEET NAME: XO4400XS DATE PLOTIED; October 20, 2014 FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 169 of 268 890 880 850 SHEET 150 PIPE SECTIONS STA.906+39 TO STA.910+33 MP 17.17 TO MP 17.24 ITEM NO. COUNTY OF 5 130 130 9 9 9 9 8 8 1 = 10 9 9 50 4 IE = 867.6 EX. FENCE 10 = 869,51' U CONST. 35'~18' PIPE S=0.002 FT/FT 906+39 910+33 0 0 EX. R/W EX. FENCE EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 88 900 890 880 870 860 850 870 860 850 MicroStation v8.II.7.445 E-SHEET NAME: X04500XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 170 of 268 PIPE SECTIONS STA.917+76 TO STA.925+74 MP 17.38 TO MP 17.53 ITEM NO. COUNTY OF MERCER 1 = 10 900,73 # 30 / 5:2 04 F1/F1 A.S. 903 98 CONST. 38 -15: PIPE 925+74 r TG = 904.23 EX. FENCE X' LENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStotion v8.II.7.443 E-SHEET NAME: X04600XS DATE PLOTTED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 171 of 268 900 860 910 860 910 PIPE SECTIONS STA.929+46 TO STA.932+30 MP 17.60 TO MP 17.66 ITEM NO. COUNTY OF 130 120 9 9 9 8 8 1 = 10 9 9 20 MODIFIED DBI TY 3, H=3'-O" 40 REMOVE 2' PIPE CONST. MODIFIED DBI IE = 888.5 29 890.84′ 7 S-0.058 11.71. <u>1</u>2 1.6. CONST. 33'~18' PIPE S=0.018 FT/FT 5=0.018 ft./ft. 0 A:1 EX, R/W 887.92′ -E. NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 · 음설 860 860 900 890 880 870 910 900 880 870 910 Microstation v8.11,7,445 E-SHEET NAME: X04700XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 172 of 268 890 SHEET 150 150 STA.935+90 TO STA.940+15 MP 17.73 TO MP 17.81 ITEM NO. 140 COUNTY OF 000 130 120 9 9 90 9 8 8 1 = 10 2 9 9 20 DBI TY 3, H=3'-0" 40 30 MODIFIED DBI IE = 841,35 : Э MODIFIED 29 CONST. A CONST. A 72.35′ -CONST. 37'~18' PIPE S=0.037 FT/FT 940+15 '34" SKEW 7.59% CONST. CABION RETAINING WALL STA. 939+91 TO STA, 940+39 0 a.E. 868.78 0--80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 88 840 870 860 850 840 830 820 900 890 880 860 850 MicroStation v8.II.7.445 E-SHEET WAME: X04800XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 173 of 268 SHEET PIPE SECTIONS STA.943+74 TO STA.952+76 MP 17.87 TO MP 18.04 ITEM NO. COUNTY OF MERCER 1 = 10 CONST. MODIFIED DBI TY 3, H-2'-8" OE = 780.23 TG = 821.15' CONST. 35'~18' PIPE S=0.017 FT/FT S=0.02 FT/FT 952+76 BEGIN PAKED DT. T' 2 STA. 948+50 (LEFT) CONST. GABION RETAINING WALL STA. 943+50 TO STA. 943+98 TY 13, H=3'-5" BEGIN PAVED DT. TY STA. 948+50 CONST. DBI 7E = 818.37 -80 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 -130 MicroStation v8.11,7,443 E-SHEET NAME: X04900XS USER: jnorris FILE NAME: T:/XYTC/14 PROJECTS/214-IIO SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DGN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 174 of 268 830 800 780 810 PIPE SECTIONS STA.953+21 TO STA.953+21 MP 18.05 TO MP 18.05 COUNTY OF 9 8 1. = 10, 9 EX. FAVE S=0.051 ft. 1ft. .x∃ / EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 760 830 820 810 800 780 MicroStation v8.II.7.445 E-SHEET NAME: X05000XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 175 of 268 820 800 PIPE SECTIONS STA.956+72 TO STA.956+72 MP 18.12 TO MP 18.12 ITEM NO. COUNTY OF 9 8 1 = 10 9 CONST. 36'~18' PIPE S=0.01| FT/FT r TG = 776.04' CONST. DBI TY 13, H=3'-5" 0 EX. FENCE NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 820 810 800 790 760 750 USER: jnorris DATE PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valle, 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 176 of 268 800 780 PIPE SECTIONS STA.962+38 TO STA.962+38 MP 18.23 TO MP 18.23 ITEM NO. COUNTY OF 9 8 1 = 10 9 40 L OE = 750.84' CONST. 33"~24" PIPE S=0.046 FT/FT 0 TY 13, 1 CONST. DBI NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 730 800 790 780 770 750 740 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 177 of 268 780 750 SHEET PIPE SECTIONS STA.968+19 TO STA.968+19 MP 18.34 TO MP 18.34 ITEM NO. COUNTY OF 9 8 8 1 = 10 9 PIPE CULV CONST. 31"-18" PIPE S=0.045 FT/FT r TG = 735,90° CONST. DBI NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 700 800 790 780 770 760 750 740 720 710 USER: jnorris DATE PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 178 of 268 750 740 069 680 150 PIPE SECTIONS STA.974+67 TO STA.974+67 MP 18.46 TO MP 18.46 ITEM NO. COUNTY OF 9 8 1 = 10 9 700,46′ В 1.6. 76.17 a.c. 70.45 7 TG = 707.21 TY 13, H 704.46′ NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 670 760 750 740 730 720 690 680 710 USER: jnorris DATE PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 179 of 268 SHEET PIPE SECTIONS STA.976+74 TO STA.976+74 MP 18.50 TO MP 18.50 ITEM NO. COUNTY OF 069 700 1 = 10 9 0E = 698.35 CONST. 33'~18" PIPE S=0.099 FT/FT CONST. DBI TY 13, H=3'-5" NOT DISTURB STANDING STACK ROCK WALL FENCE -- <del>82</del> 760 750 740 730 710 2007 069 680 670 099 640 630 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 180 of 268 PIPE SECTIONS STA.981+27 TO STA.981+27 MP 18.58 TO MP 18.58 ITEM NO. COUNTY OF 1. = 10, 9 = 694,16 PIPE CULY CONST. 18 1. 695.47 a.E. 695.16 CONST. 27'~18" PIPE S=0.014 FT/FT 981+27 CONST. DBI TY 13, H=3'-5\* BRING IN 2.5' CLOSER TO EOP TO AVOID ROCK WALL 0 NOT DISTURB STANDING STACK ROCK WALL FENCE 88 720 730 710 700 069 680 670 099 650 640 630 610 009 590 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 181 of 268 PIPE SECTIONS STA.983+74 TO STA.983+74 MP 18.63 TO MP 18.63 ITEM NO. COUNTY OF 1. = 10, 9 CONST. 18 PIPE CULYERT HDWL CONST. 32'~18" PIPE S=0.005 FT/FT 983+74 F TG = 697.75' CONST. DBI TY 13, H=3'-5" 0 695,00 NOT DISTURB STANDING STACK ROCK WALL FENCE 88 720 710 700 069 680 670 099 650 640 630 610 009 590 USER: Jnorris DATE PLOTTED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN Microstation valin. 7.443 E-SHEET NAME:

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 182 of 268 SHEET PIPE SECTIONS STA.992+40 TO STA.992+40 MP 18.80 TO MP 18.80 ITEM NO. COUNTY OF 670 680 1 = 10 8 9 PIPE CULVERT a.E. 694.61 CONST. 15 CONST. 31'~15" PIPE S=0.005 FT/FT r TG = 696,80° CONST. DBI TY 13, H=3'-1" 694, 38′ NOT DISTURB STANDING STACK ROCK WALL FENCE 88 600 730 720 700 690 680 670 099 650 640 620 610 710 MicroStation v8.11,7.445 E-SHEET NAME: XOSIOOXS USER: PLOTIED: October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 183 of 268 720 099 710 150 PIPE SECTIONS STA.999+24 TO STA.999+24 MP 18.93 TO MP 18.93 ITEM NO. COUNTY OF 9 8 1 = 10 9 VERT HDWL PIPE CULY r TG = 693.49' TY 13, H EX. FENCE Щ NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 640 720 710 700 690 680 099 650 MicroStation v8.II.7.445 E-SHEET WAME: XOSZOOXS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 184 of 268 720 099 710 PIPE SECTIONS STA.1002+16 TO STA.1002+16 MP 18.98 TO MP 18.98 ITEM NO. COUNTY OF 9 8 1 = 10 9 687.99 TO 690.59° III K CONST. 35'~15' PIPE S=0.005 FT/FT TY 13, H NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 640 720 710 700 690 680 099 650 MicroStation v8.II.7.445 E-SHEET NAME: X05300XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 185 of 268 700 690 150 PIPE SECTIONS STA.1005+74 TO STA.1005+74 MP 19.05 TO MP 19.05 ITEM NO. COUNTY OF 9 8 1 = 10 9 CONST. 36'~18' PIPE S=0.015 FT/FT TC = 679.61′ CONST. DBI TY 13, H=3'-5" NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 710 2007 069 680 670 099 640 630 MicroStation v8.II.7.445 E-SHEET NAME: XOS400XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 186 of 268 700 099 650 009 SHEET PIPE SECTIONS STA.1009+76 TO STA.1009+76 MP 19.12 TO MP 19.12 ITEM NO. COUNTY OF 9 8 1 = 10 9 S=0.099 ft./ff. CONST. 34"~18" PIPE S=0.005 FT/FT r TG = 654.33 EX. FENCE W\R .X∃580 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 580 700 9 680 670 999 650 640 630 620 009 590 Microstation v8.11,7.445 E-SHEET NAME: X05500X5 DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 12-HSIP & FD04 Contract ID: 144207 Page 187 of 268 9 650 640 590 SHEET PIPE SECTIONS STA.1015+76 TO STA.1015+76 MP 19.24 TO MP 19.24 ITEM NO. COUNTY OF 130 9 HORIZONTAL VERTICAL 8 1 = 10 9 CONST. 18" PIPE CULNERT HDWL CONST. CHANNEL LINING - 3 TDNS CONST. DBI TY 13, H=3'-5' CAUTION: ROCK WALL DETERIORATING Щ NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 570 700 069 680 099 650 640 630 620 610 590 580 MicroStation v8.11,7.445 E-SHEET NAME: XOS600XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 188 of 268 PIPE SECTIONS STA.1019+80 TO STA.1019+80 MP 19.31 TO MP 19.31 ITEM NO. COUNTY OF 1 = 10 - 0E = 620.83' PIPE CULVERT CONST. 1 F TG = 625.85 TY 13, H=3'-5" NOT DISTURB STANDING STACK ROCK WALL FENCE -130 MicroStation v8.II.7.445 E-SHEET NAME: XOS700XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T012-HSIP & FD04 Contract ID: 144207 Page 189 of 268 680 630 620 SHEET PIPE SECTIONS STA.1023+58 TO STA.1023+58 MP 19.39 TO MP 19.39 ITEM NO. COUNTY OF 9 8 1 = 10 9 5-a 038 ft./ft. CONST. 45'~24'PIPE S-10.005 FT/FT F TG = 620.63' TY 13, 1 EX. R/W 888 NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 670 550 680 099 650 640 630 620 610 600 590 560 MicroStation v8.II.7.445 E-SHEET NAME: XOS800XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 190 of 268 099 009 610 PIPE SECTIONS STA.1026+19 TO STA.1026+19 MP 19.44 TO MP 19.44 ITEM NO. COUNTY OF 9 8 1 = 10 9 608.28 HDWL J 0E CONST. 1 TY 13, H=3'-1" CONST. DBI NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 530 670 099 650 640 630 620 919 909 590 580 550 MicroStation v8.II.7.445 E-SHEET NAME: X05900XS DATE PLOTIED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 191 of 268 099 009 610 PIPE SECTIONS STA.1036+03 TO STA.1036+03 MP 19.62 TO MP 19.62 ITEM NO. COUNTY OF 9 8 1 = 10 9 HDWL CONST. 18" CONST. 35'~18' PIPE S=0.005 FT/FT CONST. DBI TY 13, EX. R/W NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 530 670 099 650 640 630 620 919 909 590 580 550 MicroStation v8.11,7.445 E-SHEET WAME: X06000XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

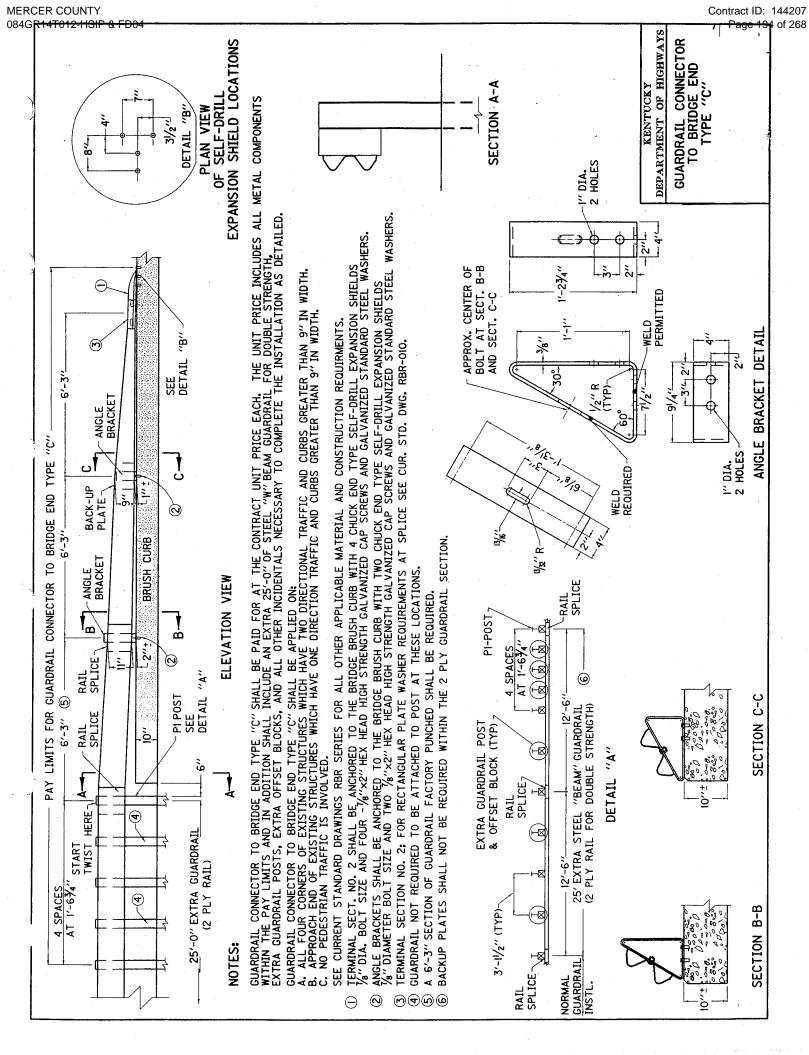
MERCER COUNTY 084GR14T0 2-HSIP & FD04 Contract ID: 144207 Page 192 of 268 099 650 009 590 PIPE SECTIONS STA.1042+69 TO STA.1042+69 MP 19.75 TO MP 19.75 ITEM NO. COUNTY OF 9 8 1 = 10 9 CONST. 39'~18" PIPE S=0.012 FT/FT TG = 547.92' CONST. DBI TY 13. NOT DISTURB STANDING STACK ROCK WALL FENCE -130 88 999 650 640 630 610 909 590 580 570 560 530 MicroStation v8.11,7.445 E-SHEET WAME: X06100XS DATE PLOTTED; October 20, 2014 FILE NAME: 1:/KYTC/14 PROJECTS/214-110 SWRDWY MERCER US 68.7-9000.00/PHASE I DESIGN/09-X-SECTIONS/MERCER PIPE SECTIONS ROW.DCN

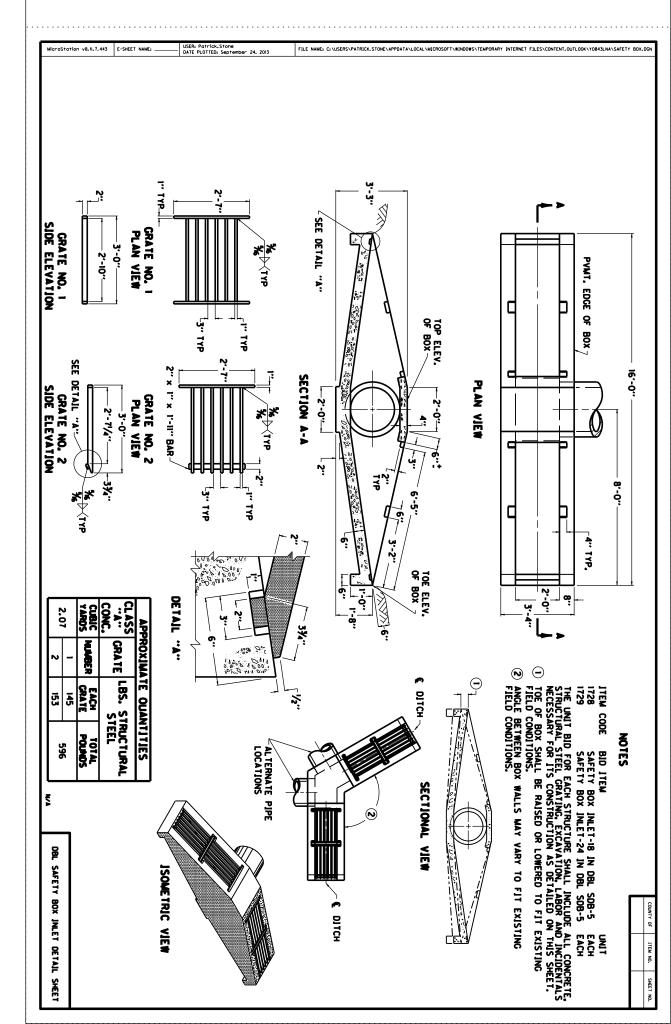
MERCER COUNTY 084GR14T012-HSIP & FD04

#### **GUARDRAIL DELIVERY VERIFICATION SHEET**

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Contract Id:		Contractor:			
Section Engineer:		District & County:			
<u>DESCRIPTION</u>	<u>UNIT</u>	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD		
GUARDRAIL (Includes End treatments & crash cushions) STEEL POSTS	LF EACH				
STEEL BLOCKS	EACH				
WOOD OFFSET BLOCKS	EACH				
BACK UP PLATES	EACH				
CRASH CUSHION	EACH				
NUTS, BOLTS, WASHERS	BAG/BCKT				
DAMAGED RAIL TO MAINT. FACILIT	ΓY LF				
DAMAGED POSTS TO MAINT. FACI	LITY EACH				
*Required Signatures before	e Leavina Proie	ct Site			
Printed Section Engineer's Re			& Data		
Signature Section Engineer's	•				
Printed Contractor's Represe					
Signature Contractor's Repre	esentative		_& Date		
*Required Signatures after A quantity received column co			on truck must be counted & the		
Printed Bailey Bridge Yard Re			& Date		
Signature Bailey Bridge Yard					
Printed Contractor's Represe					
Signature Contractor's Repre	esentative		_& Date		
	ent will not be	made for guardrail removal	uantities shown in the Bailey Bridge until the guardrail verification sheets e Yard Representative.		
Completed Form Submitted to	Section Enginee	r Date:	Ву:		





#### SPECIAL NOTE FOR PRE-BID CONFERENCE

The Department will conduct a mandatory Pre-Bid Conference of the subject project on November 14, 2014, at 9:00 a.m. Eastern Time at:

Department of Highways, District Office 7
763 W. New Circle Rd
Lexington, KY 40512

Any company that is interested in bidding on the subject project or being part of a joint venture must be represented at the conference by at least <u>one person of sufficient authority to bind the company</u>. No individual can represent more than one company. At the conference, the Department will take a roster of the representatives present. Only companies represented at the conference will be eligible to have their bids opened at the date of letting.

The purpose of the conference is to familiarize all prospective bidders with the contract requirements of the Contract.

Department of Highways officials will be present at the conference to answer questions concerning the project.

#### **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.

<b>Subsection:</b>	102.15 Process Agent.
Revision:	Replace the 1st paragraph with the following:
	Every corporation doing business with the Department shall submit evidence of compliance with
	KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-
	220, and file with the Department the name and address of the process agent upon whom process
	may be served.
<b>Subsection:</b>	105.13 Claims Resolution Process.
<b>Revision:</b>	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer
	available through the forms library and are forms generated within the AASHTO SiteManager
	software.
<b>Subsection:</b>	108.03 Preconstruction Conference.
<b>Revision:</b>	Replace 8) Staking with the following:
	8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
	109.07.02 Fuel.
<b>Revision:</b>	Revise item Crushed Aggregate Used for Embankment Stabilization to the following:
	Crushed Aggregate
	Used for Stabilization of Unsuitable Materials
	Used for Embankment Stabilization
	Delete the following item from the table.
	Crushed Sandstone Base (Cement Treated)
	110.02 Demobilization.
Revision:	Replace the first part of the first sentence of the second paragraph with the following:
	Perform all work and operations necessary to accomplish final clean-up as specified in the first
	paragraph of Subsection 105.12;
	112.03.12 Project Traffic Coordinator (PTC).
<b>Revision:</b>	Replace the last paragraph of this subsection with the following:
	Ensure the designated PTC has sufficient skill and experience to properly perform the task
	assigned and has successfully completed the qualification courses.
	112.04.18 Diversions (By-Pass Detours).
Revision:	Insert the following sentence after the 2nd sentence of this subsection.
	The Department will not measure temporary drainage structures for payment when the contract
	documents provide the required drainage opening that must be maintained with the diversion.
	The temporary drainage structures shall be incidental to the construction of the diversion. If the
	contract documents fail to provide the required drainage opening needed for the diversion, the
	cost of the temporary drainage structure will be handled as extra work in accordance with section
Cubaatian	109.04. 201.03.01 Contractor Staking.
Subsection:	
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the
	general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
	of ixentucky.

<b>Subsection:</b>	201.04.01 Contractor Staking.
<b>Revision:</b>	Replace the last sentence of the paragraph with the following: Complete the general layout of
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
<b>Subsection:</b>	206.04.01 Embankment-in-Place.
<b>Revision:</b>	Replace the fourth paragraph with the following: The Department will not measure suitable
	excavation included in the original plans that is disposed of for payment and will consider it
	incidental to Embankment-in-Place.
<b>Subsection:</b>	208.02.01 Cement.
<b>Revision:</b>	Replace paragraph with the following:
	Select Type I or Type II cement conforming to Section 801. Use the same type cement
	throughout the work.
	208.03.06 Curing and Protection.
<b>Revision:</b>	Replace the fourth paragraph with the following:
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the
	Department at least 3 day notice of the request for a shortened curing period. The Department
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish
	cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened
	curing time is requested. The Department will test cores using an unconfined compression test.
	Roadbed cores must achieve a minimum strength requirement of 80 psi.
	208.03.06 Curing and Protection.
Revision:	Replace paragraph eight with the following:
a	At no expense to the Department, repair any damage to the subgrade caused by freezing.
	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise <b>Seed Mix Type I</b> to the mixture shown below:
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)
	35% Hard Fescue (Festuca (Festuca longifolia)
	10% Ryegrass, Perennial (Lolium perenne)
	5% White Dutch Clover (Trifolium repens)
	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	2)  Deadle of the management with the full arriver.
	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course
	replace the crown vetch with Kentucky 31 Tall Fescue.

G 1	212.22.22.7
	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	[3]
<b>Revision:</b>	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
<b>Revision:</b>	Delete the first sentence of the section.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
<b>Revision:</b>	Replace the second and third sentence of the section with the following:
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural
	limestone to the seedbed when the Engineer determines it is needed. When required, place
	agricultural limestone at a rate of 3 tons per acre.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
<b>Revision:</b>	Change the title of part to D) Fertilizer.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
<b>Revision:</b>	Replace the first paragraph with the following:
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of
	an excessive application of fertilizer at no cost to the Department.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
<b>Revision:</b>	Delete the second paragraph.
<b>Subsection:</b>	212.04.04 Agricultural Limestone.
<b>Revision:</b>	Replace the entire section with the following:
	The Department will measure the quantity of agricultural limestone in tons.
<b>Subsection:</b>	212.04.05 Fertilizer.
<b>Revision:</b>	Replace the entire section with the following:
	The Department will measure fertilizer used in the seeding or sodding operations for payment.
	The Department will measure the quantity by tons.
-	

<b>Subsection:</b>	212.05 PAYMENT.			
<b>Revision:</b>	Delete the following item code:			
	Code Pay Item Pay Unit			
	05966 Topdressing Fertilizer Ton			
<b>Subsection:</b>	212.05 PAYMENT.			
<b>Revision:</b>	Add the following pay items:			
	Code Pay Item Pay Unit			
	05963 Initial Fertilizer Ton			
	05964 20-10-10 Fertilizer Ton			
	05992 Agricultural Limestone Ton			
<b>Subsection:</b>	213.03.02 Progress Requirements.			
Revision:	Replace the last sentence of the third paragraph with the following:			
	Additionally, the Department will apply a penalty equal to the liquidated damages when all			
	aspects of the work are not coordinated in an acceptable manner within 7 calendar days after			
	written notification.			
	213.03.05 Temporary Control Measures.			
Part:	E) Temporary Seeding and Protection.			
Revision:	Delete the second sentence of the first paragraph.			
	304.02.01 Physical Properties.			
Table:	Required Geogrid Properties			
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.			
	402.03.02 Contractor Quality Control and Department Acceptance.			
Part:	B) Sampling.			
<b>Revision:</b>	Replace the second sentence with the following:			
	The Department will determine when to obtain the quality control samples using the random-			
	number feature of the mix design submittal and approval spreadsheet. The Department will			
	randomly determine when to obtain the verification samples required in Subsections 402.03.03			
Subsections	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.  402.03.02 Contractor Quality Control and Department Acceptance.			
Part:	D) Testing Responsibilities.			
Number:	3) VMA.			
Revision:	Add the following paragraph below Number 3) VMA:			
Tet vision.	Retain the AV/VMA specimens and one additional corresponding $G_{mm}$ sample for 5 working			
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture			
	sample for 5 working days for mixture verification testing by the Department. When the			
	Department's test results do not verify that the Contractor's quality control test results are within			
	the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens			
	from the affected sublot(s) for the duration of the project.			
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.			
Part:	D) Testing Responsibilities.			
Number:	4) Density.			
Revision:	Replace the second sentence of the Option A paragraph with the following:			
	Perform coring by the end of the following work day.			
	5 - V			

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

**Number:** 5) Gradation.

**Revision:** Delete the second paragraph.

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: H) Unsatisfactory Work.
Number: 1) Based on Lab Data.

**Revision:** Replace the second paragraph with the following:

When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.

**Subsection:** 402.03.03 Verification.

**Revision:** Replace the first paragraph with the following:

**402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

**Subsection:** 402.03.03 Verification.

**Part:** A) Evaluation of Sublot(s) Verified by Department.

**Revision:** Replace the third sentence of the second paragraph with the following:

When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

**Subsection:** 402.03.03 Verification.

**Part:** B) Evaluation of Sublots Not Verified by Department.

**Revision:** Replace the third sentence of the first paragraph with the following:

When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.

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Subsections	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	· -
Revision:	Replace the third sentence of the second paragraph with the following: When the $F$ -test or $t$ -test indicates that the Contractor's data and Department's data are possibly
	· · · · · · · · · · · · · · · · · · ·
	not from the same population, the Department will investigate the cause for the difference
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.
	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following:
	When patterns indicate substantial differences between the verified and non-verified sublots, the
	Department will perform further comparative testing according to subsection 402.03.05.
	402.03 CONSTRUCTION.
Revision:	Add the following subsection: <b>402.03.04 Testing Equipment and Technician Verification.</b>
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the
	Department will obtain an additional verification sample at random using the Asphalt Mixture
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and
	Department's laboratory testing equipment and technicians. The Department will obtain a
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it
	according to AASHTO R 47. The Department will retain one split portion of the sample and
	provide the other portion to the Contractor. At a later time convenient to both parties, the
	Department and Contractor will simultaneously reheat the sample to the specified compaction
	temperature and test the mixture for AV and VMA using separate laboratory equipment
	according to the corresponding procedures given in Subsection 402.03.02. The Department will
	evaluate the differences in test results between the two laboratories. When the difference
	between the results for AV or VMA is not within $\pm 2.0$ percent, the Department will investigate
	and resolve the discrepancy according to Subsection 402.03.05.
<b>Subsection:</b>	402.03.04 Dispute Resolution.
<b>Revision:</b>	Change the subsection number to 402.03.05.
<b>Subsection:</b>	402.05 PAYMENT.
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
Table:	AC
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.
<b>Subsection:</b>	403.02.10 Material Transfer Vehicle (MTV).
Revision:	Replace the first sentence with the following:
	In addition to the equipment specified above, provide a MTV with the following minimum
	characteristics:
<b>Subsection:</b>	412.02.09 Material Transfer Vehicle (MTV).
<b>Revision:</b>	Replace the paragraph with the following:
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.

Subsections	412.03.07 Placement and Compaction.
Revision:	_
Revision:	Replace the first paragraph with the following:
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps
	and/or shoulders unless specified in the contract. When the Engineer determines the use of the
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that
	portion of pavement by a letter documenting the waiver.
	412.04 MEASUREMENT.
Revision:	Add the following subsection:
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for
	payment and will consider its use incidental to the asphalt mixture.
	501.03.19 Surface Tolerances and Testing Surface.
Part:	B) Ride Quality.
Revision:	Add the following to the end of the first paragraph:
	The Department will specify if the ride quality requirements are Category A or Category B when
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when
	the Department fails to classify which ride quality requirement will apply to the Contract.
<b>Subsection:</b>	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following:
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of
	Kentucky.
<b>Subsection:</b>	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following:
	605.03.04 Tack Welding. The Department does not allow tack welding.
<b>Subsection:</b>	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
<b>Revision:</b>	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
	decks prepared by hydrodemolition.
<b>Subsection:</b>	609.03 Construction.
<b>Revision:</b>	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.
<b>Subsection:</b>	611.03.02 Precast Unit Construction.
Revision:	Replace the first sentence of the subsection with the following:
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with
	KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the following
	exceptions and additions:
<u> </u>	Interpretation and additions.

Subsection	613.03.01 Design.
Number:	2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD
Kevision.	Bridge Design Specifications"
<b>Subsection:</b>	615.06.02
Revision:	Add the following sentence to the end of the subsection.
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled
	34 inch.
	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.
	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Revision:	Replace the subsection with the following:
	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured
	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,
	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section
	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded
	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires
	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing
	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to
	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be
	not more than 16 inches.
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
Revision:	Replace the subsection with the following:
ite vision.	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for
	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of
	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-
	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.
	center of the wife faulte sheet shall not be less than 2 filelies of filore than 8 filelies.

	615.08.01 Type of Test Specimen.
	Replace the subsection with the following:
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the
	first batch of concrete. Acceptable start-up results are required for production of the first unit.
	After the first unit has been established, random acceptance testing is performed daily for each
4	50 yd <sup>3</sup> (or fraction thereof). In addition to the slump, air content, unit weight, and temperature
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is
ļ	performed.
Subsection: (	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection: (	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
Subsection: (	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the
l	production facility. Units shall be inspected upon arrival for any evidence of damage resulting
f	from transport to the jobsite.
Subsection: 7	716.02.02 Paint.
Revision:	Replace sentence with the following: Conform to Section 821.
<b>Subsection:</b> 7	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current
i	interims,
Subsection:	716.03.02 Lighting Standard Installation.
Revision:	Replace the second sentence with the following:
]	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum
(	of four feet from the front face of the guardrail to the front face of the pole base.
Subsection: 7	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is
	positioned on the side away from on-coming traffic.
	716.03.02 Lighting Standard Installation.
	A) Conventional Installation.
	1) Breakaway Installation and Requirements.
	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of
	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,
	and Traffic Signals, 2013-6th Edition with current interims.
Subsection:	716.03.02 Lighting Standard Installation.
	B) High Mast Installation
Revision:	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans.
Revision: I Subsection: 7	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation.
Revision: I Subsection: 7 Part: I	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation. B) High Mast Installation
Revision: I Subsection: 7 Part: I Number: 2	B) High Mast Installation Replace the first sentence with the following: Install each high mast pole as noted on plans. 716.03.02 Lighting Standard Installation.

Drilled Shaft Depth Data							
		3:1 Ground		2:1 Ground		1.5:1 Ground	
Level Ground Slope		Slope		Slope (2)			
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft 7 ft		20 ft	7 ft	(1)	7 ft

Steel Requirements Vertical Bars Ties or Spiral Spacing or Size Total Size Pitch #4 #10 16

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

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

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

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

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

**Subsection:** 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

**Revision:** 

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

Subsection:	716.03.03 Trenching.
Part:	B) Trenching of Conduit for Non-Highmast Cables.
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for
ic vision.	either situation listed previously, obtain the Engineer's approval and maintain the required
	conduit depths coming into the junction boxes. No payment for additional junction boxes for
	greater depths will be allowed.
Subsection:	716.03.10 Junction Boxes.
Revision:	Replace subsection title with the following: Electrical Junction Box.
Subsection:	716.04.07 Pole with Secondary Control Equipment.
Revision:	Replace the paragraph with the following:
Kevision.	The Department will measure the quantity as each individual unit furnished and installed. The
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them
	incidental to this item of work. The Department will also not measure furnishing and installing
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,
	ground rods, and ground wires and will consider them incidental to this item of work.
Subsections	716.04.08 Lighting Control Equipment.
Revision:	
Revision:	Replace the paragraph with the following:  The Department will measure the quantity as each individual unit furnished and installed. The
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item
	of work. The Department will also not measure furnishing and installing electrical service
	conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground
	rods, and ground wires and will consider them incidental to this item of work.
Subsection:	716.04.09 Luminaire.
Revision:	Replace the first sentence with the following:
Revision:	The Department will measure the quantity as each individual unit furnished and installed.
Subsection:	716.04.10 Fused Connector Kits.
Revision:	Replace the first sentence with the following:
Revision:	The Department will measure the quantity as each individual unit furnished and installed.
<b>Subsection:</b>	716.04.13 Junction Box.
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.
-	716.04.13 Junction Box.
Part:	A) Junction Electrical.
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.
Subsection:	716.04.14 Trenching and Backfilling.
Revision:	Replace the second sentence with the following:
IXCVISIUII.	The Department will not measure excavation, backfilling, underground utility warning tape (if
	required), the restoration of disturbed areas to original condition, and will consider them
	incidental to this item of work.
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	T					
	716.04.18 Remove Lighting.					
Revision:	Replace the paragraph with the following:					
	The Department will measure the quantity as a lump sum for the removal of lighting equipment.					
	The Department will not measure the disposal of all equipment and materials off the project by					
	the contractor. The Department also will not measure the transportation of the materials and wil					
	consider them incidental to this item of work.					
<b>Subsection:</b>	716.04.20 Bore and Jack Conduit.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear					
	feet. This item shall include all work necessary for boring and installing conduit under an					
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,					
	paragraphs 1, 2, and 4.					
<b>Subsection:</b>	716.05 PAYMENT.					
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>					
	<u>Unit</u> with the following:					
	<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>					
	04810 Electrical Junction Box Each					
	04811 Electrical Junction Box Type B Each					
	20391NS835 Electrical Junction Box Type A Each					
	20392NS835 Electrical Junction Box Type C Each					
<b>Subsection:</b>	723.02.02 Paint.					
Revision:	Replace sentence with the following: Conform to Section 821.					
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural					
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current					
	interims,					
	723.03.02 Poles and Bases Installation.					
Revision:	Replace the first sentence with the following:					
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum					
	of four feet from the front face of the guardrail to the front face of the pole base.					
	723.03.02 Poles and Bases Installation.					
Part:	A) Steel Strain and Mastarm Poles Installation					
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section					
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions					
	encountered during drilling and slope condition at the site. Refer to the design chart below:					
	723.03.02 Poles and Bases Installation.					
Part:	B) Pedestal or Pedestal Post Installation.					
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports,					
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for					
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.					

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<b>Subsection:</b>	723.03.03 Trenching.				
Part:	A) Under Roadway.				
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,				
	obtain the Engineer's approval and maintain ether required conduit depths coming into the				
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.				
Subsection	723.03.11 Wiring Installation.				
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of				
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.				
<b>Subsection:</b>	723.03.12 Loop Installation.				
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of				
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.				
<b>Subsection:</b>	723.04.02 Junction Box.				
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.				
	723.04.03 Trenching and Backfilling.				
Revision:	Replace the second sentence with the following: The Department will not measure excavation,				
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to				
	original condition, and will consider them incidental to this item of work.				
<b>Subsection:</b>	723.04.10 Signal Pedestal.				
Revision:	Replace the second sentence with the following: The Department will not measure excavation,				
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling,				
	restoring disturbed areas, or other necessary hardware and will consider them incidental to this				
	item of work.				
<b>Subsection:</b>	723.04.15 Loop Saw Slot and Fill.				
Revision:	Replace the second sentence with the following: The Department will not measure sawing,				
	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider				
	them incidental to this item of work.				
<b>Subsection:</b>	723.04.16 Pedestrian Detector.				
	Replace the paragraph with the following: The Department will measure the quantity as each				
	individual unit furnished, installed and connected to pole/pedestal. The Department will not				
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for				
	sign and will consider them incidental to this item of work.				
	723.04.18 Signal Controller- Type 170.				
	Replace the second sentence with the following: The Department will not measure constructing				
	the concrete base or mounting the cabinet to the pole, connecting the signal and detectors,				
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, or				
	electrical inspection fees and will consider them incidental to this item of work. The Department				
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian				
	isolators, load switches, model 400 modem card; furnishing and installing electrical service				
	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground				
	wires and will consider them incidental to this item of work.				

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<b>Subsection:</b>	723.04.20 Install Signal Controller - Type 170.				
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each				
	individual unit installed. The Department will not measure constructing the concrete base or				
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,				
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical				
	inspection fees and will consider them incidental to this item of work. The Department will also				
	not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model				
	400 modem card; furnishing and installing electrical service conductors, specified conduits,				
	anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them				
	incidental to this item of work.				
<b>Subsection:</b>	723.04.22 Remove Signal Equipment.				
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as a lump				
	sum removal of signal equipment. The Department will not measure the return of control				
	equipment and signal heads to the Department of Highways as directed by the District Traffic				
	Engineer. The Department also will not measure the transportation of materials of the disposal				
	of all other equipment and materials off the project by the contractor and will consider them				
	incidental to this item of work.				
<b>Subsection:</b>	723.04.28 Install Pedestrian Detector Audible.				
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure installing sign				
	R10-3e (with arrow) and will consider it incidental to this item of work.				
<b>Subsection:</b>	723.04.29 Audible Pedestrian Detector.				
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure furnishing				
	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.				
<b>Subsection:</b>	723.04.30 Bore and Jack Conduit.				
	Replace the paragraph with the following: The Department will measure the quantity in linear				
	feet. This item shall include all work necessary for boring and installing conduit under an				
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,				
	paragraphs 1, 2, and 4.				
	723.04.31 Install Pedestrian Detector.				
	Replace the paragraph with the following: The Department will measure the quantity as each				
	individual unit installed and connected to pole/pedestal. The Department will not measure				
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.				
	723.04.32 Install Mast Arm Pole.				
	Replace the second sentence with the following: The Department will not measure arms, signal				
	mounting brackets, anchor bolts, or any other necessary hardware and will consider them				
	incidental to this item of work.				
	723.04.33 Pedestal Post.				
Revision:	Replace the second sentence with the following: The Department will not measure excavation,				
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,				
	restoration, or any other necessary hardware and will consider them incidental to this item of				
	work.				

Subsection:	723.04.36 Traffic Signal Pole Base.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or						
	restoration and will consider them incidental to this item of work.						
Subsection:	723.04.37 Install Signal Pedestal.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
110 (151011)	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,						
	backfilling, restoration, or any other necessary hardware and will consider them incidental to item of work.						
<b>Subsection:</b>	723.04.38 Install Pedestal Post.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,						
		_	dware and will consider them incidental to this				
	item of work.						
<b>Subsection:</b>	723.05 PAYMENT.						
Revision:	Replace items 04	1810-04811, 20391NS835 and, 20	392NS835 under Code, Pay Item, and Pay				
	Unit with the following:						
		<u> </u>					
	Code	Pay Item	Pay Unit				
	04810	Electrical Junction Box	Each				
	04811	Electrical Junction Box Type B	Each				
	20391NS835	Electrical Junction Box Type A	Each				
	20392NS835	Electrical Junction Box Type C	Each				
<b>Subsection:</b>	804.01.02 Crush	ed Sand.					
Revision:	Delete last senter	nce of the section.					
<b>Subsection:</b>	804.01.06 Slag.						
Revision:	Add subsection and following sentence.						
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only						
	in asphalt surface applications.						
<b>Subsection:</b>	804.04 Asphalt Mixtures.						
Revision:	Replace the subsection with the following:						
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as						
	necessary, to meet gradation requirements. The Department will allow any combination of						
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using						
	cold feeds at the plant. The Engineer may allow other fine aggregates.						
	806.03.01 Gener	<u> </u>					
Revision:	Replace the second sentence of the paragraph with the following:						
	Additionally, the material must have a minimum solubility of 99.0 percent when tested according						
	to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a $J_{NR}$						
	(nonrecoverable	creep compliance) between 0.1 and	d 0.5, when tested according to AASHTO TP				
	70.						

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Subsection:	806.03.01 General Requirements.			
	PG Binder Requirements and Price Adjustment Schedule			
	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table			
	with the following:			
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay 100% P			
	MSCR recovery, $\%^{(3)}$ 60 Min. ≥58 56 55 54 <53			
	(AASHTO TP 70)			
	806.03.01 General Requirements.			
	PG Binder Requirements and Price Adjustment Schedule			
<b>Superscript:</b>	(3)			
Revision:	Replace (3) with the following:			
	Perform testing at 64°C.			
<b>Subsection:</b>	813.04 Gray Iron Castings.			
<b>Revision:</b>	Replace the reference to "AASHTO M105" with "ASTM A48".			
<b>Subsection:</b>	813.09.02 High Strength Steel Bolts, Nuts, and Washers.			
Number:	A) Bolts.			
<b>Revision:</b>	Delete first paragraph and "Hardness Number" Table. Replace with the following:			
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as			
	applicable.			
<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.			
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph			
	4.1".			
	814.04.02 Timber Guardrail Posts.			
Revision:	Replace the first sentence of the fourth paragraph with the following:			
	Use any of the species of wood for round or square posts covered under AWPA U1.			
	814.04.02 Timber Guardrail Posts.			
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph			
	4.1".			
	814.04.02 Timber Guardrail Posts.			
	Delete the second sentence of the fourth paragraph.			
	814.05.02 Composite Plastic.			
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks			
	conforming to this section and assure blocks are from a manufacturer included on the			
	Department's List of Approved Materials.			
C14:	2) Delete the last paragraph of the subsection.			
	816.07.02 Wood Posts and Braces.			
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph			
Subsection:	4.1". 816.07.02 Wood Posts and Braces.			
	Delete the second sentence of the first paragraph.  818.07 Preservative Treatment.			
IVEA121011:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".			

<b>Subsection:</b>	834.14 Lighting Poles.				
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with				
	loading and allowable stress requirements of the AASHTO Standard Specifications for Structural				
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current				
	interims, with the exception of the following: The Cabinet will waive the requirement stated in				
	the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only).				
	The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).				
Subsection	834.14.03 High Mast Poles.				
Revision:					
	Remove the second and fourth sentence from the first paragraph.				
Revision:	834.14.03 High Mast Poles.				
Kevision:	Replace the third paragraph with the following: Provide calculations and drawings that are				
Subsection:	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.				
Revision:	834.14.03 High Mast Poles.  Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595				
Kevision.	grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield				
	strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a				
	constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential				
	welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are				
	telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and				
	the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the				
	inside diameter of the exposed end of the female section. Use longitudinal seam welds as				
	commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the				
	transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with				
	a telescopic welded joint or a full penetration groove weld with backup bar.				
	The handhole cover shall be removable from the handhole frame. One the frame side opposite				
	the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard				
	padlock as specified in Section 834.25. The handhole frame shall have two stainless studs				
	installed opposite the hinge to secure the handhole cover to the frame which includes providing				
	stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch				
	thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently				
	secured to the handhole frame to insure weather-tight protection. The hinge shall be				
	manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for				
	the cover. The minimum clear distance between the transverse plate and the bottom opening of				
	the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at				
	least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM				
	A123 (fabricated products) or ASTM A 153 (hardware items).				
<b>Subsection:</b>	834.16 ANCHOR BOLTS.				
<b>Revision:</b>	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall				
	follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.				

Subsection					
Subsection.	834.17.01 Conventional.				
<b>Revision:</b>	Add the following sentence after the second sentence: Provide a waterproof sticker mounted of				
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture				
	by providing the first two numbers of the wattage.				
<b>Subsection:</b>					
<b>Revision:</b>	Replace the last five sentences in the second paragraph with the following sentences:				
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean				
	metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin				
	traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and				
	utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the				
	top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex				
	receptacle in the enclosure with a separate 20 amp breaker.				
Subsection:	835.07 Traffic Poles.				
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall				
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for				
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with				
	current interims.				
<b>Subsection:</b>	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates				
	have a thickness $\geq 2$ inches.				
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall				
	not be less than 16.25 inches.				
<b>Subsection:</b>	835.07 Traffic Poles.				
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole				
	forces shall be positioned in such a manner to maximize the force on any individual anchor bolt				
	regardless of the actual anchor bolt orientation with the pole.				
<b>Subsection:</b>	835.07 Traffic Poles.				
Revision:	Replace the first and second sentence of the sixth paragraph with the following:				
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable				
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the				
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.				
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the				
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The				
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and				
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure				
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to				
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance				
	between the transverse plate and the bottom opening of the handhole shall not be less than the				
	diameter of the bottom tube but needs to be at least 12 inches.				

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	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	55.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway				
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace the second sentence of the second paragraph with the following:				
	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonw	vealth			
	of Kentucky.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations sh				
	be shown for all fatigue related connections. Provide the corresponding detail, stress categor	ry			
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis				
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should				
	be shown for all fatigue related connections. Provide the corresponding detail, stress categor	ry			
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.03 Anchor Bolts.				
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be				
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.				
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized				
	(ASTM A 153).				
	835.16.05 Optical Units.				
Revision:	Replace the 3rd paragraph with the following:				
G 1 4	The list of certified products can be found on the following website: http://www.intertek.com.				
	835.19.01 Pedestrian Detector Body.				
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum				
Cl4:	rectangular housing that is compatible with the pedestrian detector.				
	843.01.01 Geotextile Fabric.				
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING				
Revision:	Add the following to the chart:				
	Property Minimum Value <sup>(1)</sup> Test Method	_			
	CBR Puncture (lbs) 494 ASTM D6241				
	Permittivity (1/s) 0.7 ASTM D4491				

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<b>Subsection:</b>	843.01.01 Geotextile Fabric.					
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS					
<b>Revision:</b>	Add the following to the chart:					
	Property Minimum Value <sup>(1)</sup> Test Method					
	CBR Puncture (lbs)	210	ASTM D6241			
	Permittivity (1/s)	0.5	ASTM D4491			
<b>Subsection:</b>	843.01.01 Geotextile Fabri	2.				
Table:	TYPE III FABRIC GEOTE STABILIZATION	EXTILES FOR SUBGRADE OR EMBANK	MENT			
<b>Revision:</b>	Add the following to the ch	art:				
	Property	Minimum Value <sup>(1)</sup>	Test Method			
	CBR Puncture (lbs)	370	ASTM D6241			
	Permittivity (1/s)	0.05	ASTM D4491			
<b>Subsection:</b>	843.01.01 Geotextile Fabri	2.				
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND					
	PAVEMENT EDGE DRAINS					
<b>Revision:</b>	Add the following to the chart:					
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method			
	CBR Puncture (lbs)	309	ASTM D6241			
	Permittivity (1/s)	0.5	ASTM D4491			
<b>Subsection:</b>	843.01.01 Geotextile Fabric.					
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC					
<b>Revision:</b>	Make the following changes to the chart:					
	Property Minimum Value <sup>(1)</sup> Test Method					
	CBR Puncture (lbs)	618	ASTM D6241			
	Grab Strength (lbs)	700	ASTM D4632			
	Apparent Opening Size	Apparent Opening Size U.S. #40 <sup>(3)</sup> ASTM D4751				
	(3) Maximum average roll value.					

1I

#### SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

#### 2.0 MATERIALS.

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

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

#### 2.2 Sign and Controls. All signs must:

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

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- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

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

\*Insert numerals as directed by the Engineer.

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

#### 2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

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

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

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

**4.0 MEASUREMENT.** The final quantity of Variable Message Sign will be

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the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

**5.0 PAYMENT.** The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

### 2012 STANDARD DRAWINGS THAT APPLY

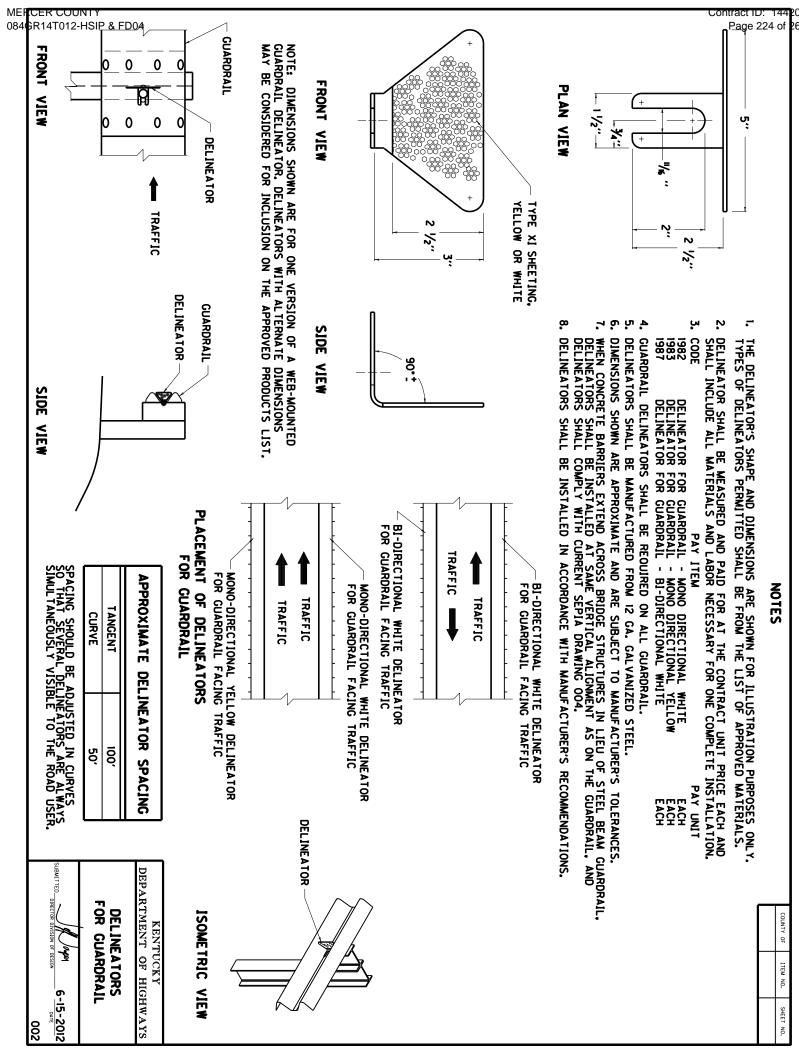
## ROADWAY ~ BARRIERS ~

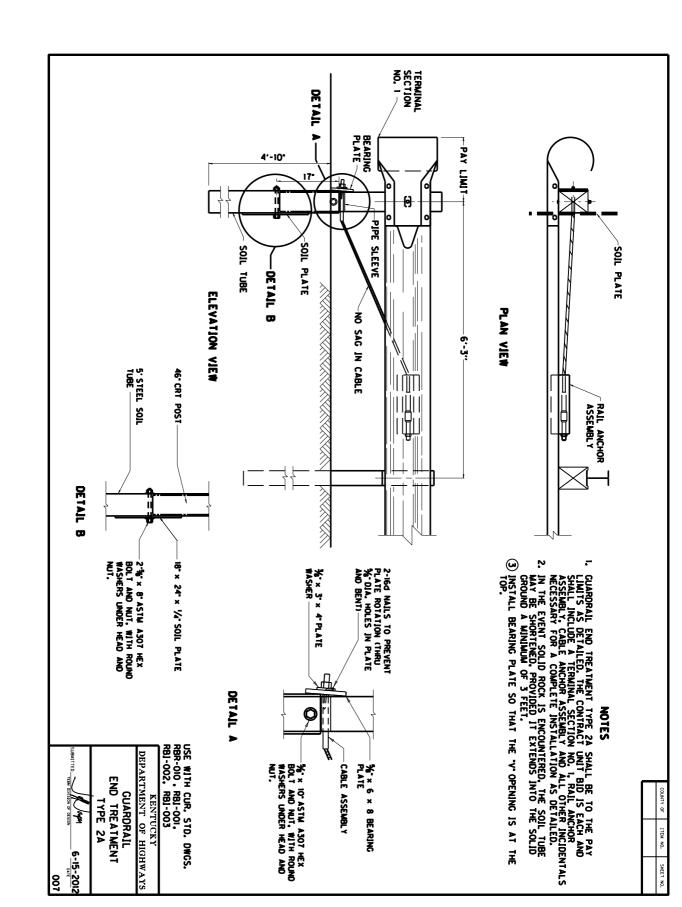
TYPICAL BARRIER INSTALLATIONS	
TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-10
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-06
TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A	RBI-003-08
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1	
GUARDRAIL HARDWARE	
GUARDRAIL TERMINAL SECTIONS	RRR-010-05
GUARDRAIL END TREATMENT TYPE 1	
GUARDRAIL END TREATMENT TYPE 1	
GUARDRAIL END TREATMENT TIFE 4A	KDK-033-10
~ DRAINAGE ~	
BOX INLETS AND OUTLETS	
DROP BOXES	
DROP BOX INLET TYPE 3	DDD 002 07
DROP BOX INLET TYPE 13 (DETAIL SHEET)	
DROP BOX INLET TYPE 13 (DETAIL SHEET)	RDD-013-00
DROP BOX INLET TYPE 13 (DETAIL & BAR CHART FOR LID)	
DROP BOX INLET TYPE 13 (PIPE CHAMBER - GRADE CONDITION)	
DROP BOX INLET TYPE 13 (PIPE CHAMBER - SAG CONDITION)	
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - RISER)	
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - CHAMBER)	RDB-019-03
DAVIED DITCHES ELLIME INLETS AND CHANNEL LININGS	
PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS	
PAVED DITCH TYPE 2	
CHANNEL LINING CLASS II AND III	RDD-040-04
TYPICAL DRAINAGE INSTALLATIONS	
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-001-09
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER PIPE	RDI-020-08
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER REINFORCED CONC. PIPE	RDI-021
PIPE BEDDING, TRENCH CONDITION	RDI-025-04
PIPE BEDDING, TRENCH CONDITION REINFORCED CONC. PIPE	RDI-026
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE	
TURF MAT SLOPE INSTALLATION	RDI-040
MISCELLANEOUS DRAINAGE	
INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE	RDX-060-03
INTERMEDIATE AND END ANCHORS FOR NON-CIRCULAR PIPE	
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS	RDX-160-05
TEMPORARY SILT FENCE	
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC	RDX-215
SILT TRAP - TYPE A	RDX-220-04
SILT TRAP - TYPE C	RDX-230

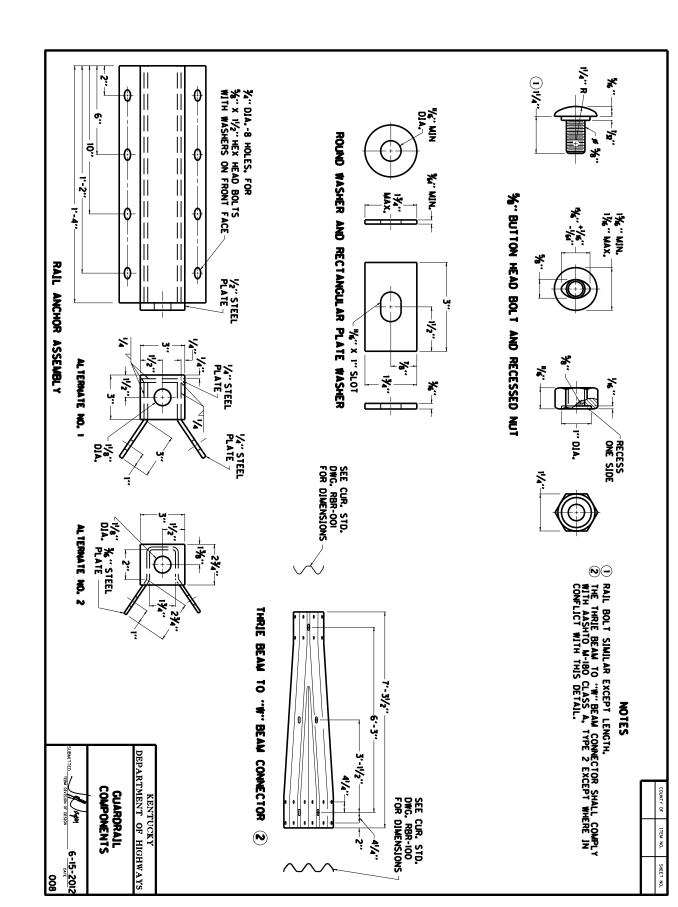
## 2012 STANDARD DRAWINGS THAT APPLY (Cont.)

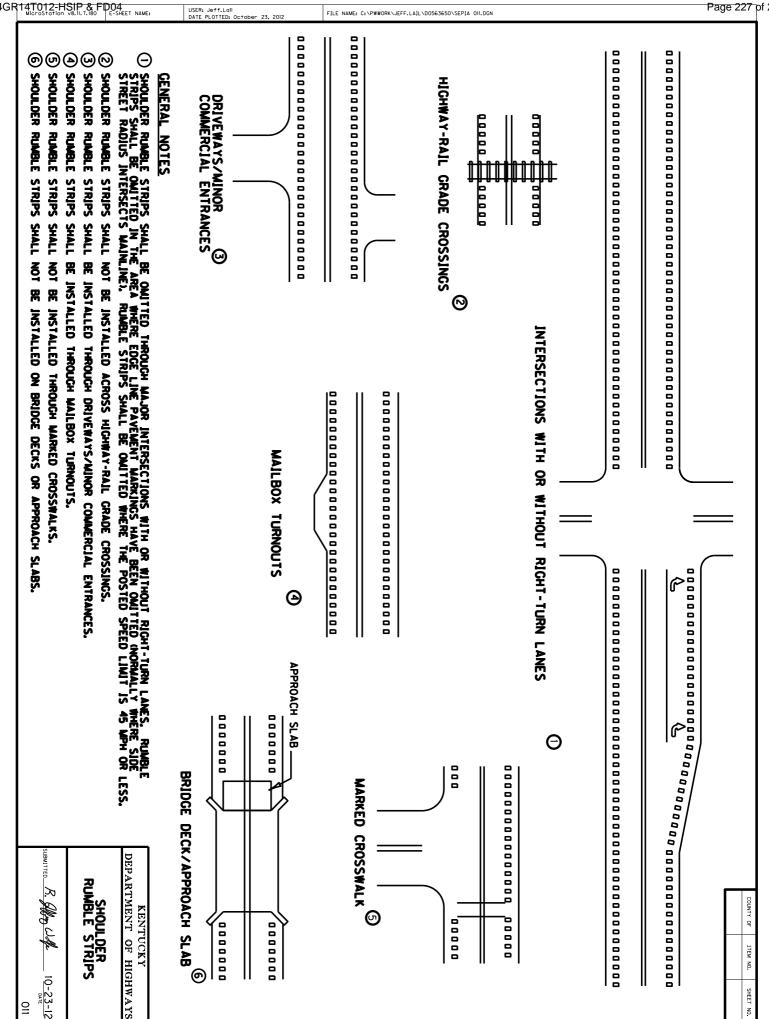
### ROADWAY ~ FENCES AND GATES ~ WOVEN WIRE FENCE

WOVEN WIRE FENCE			
WOVEN WIRE FENCE TYPE 1	RFW-005-07		
~ GENERAL ~			
CURVE WIDENING AND SUPERELEVATION			
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-06		
MISCELLANEOUS STANDARDS			
MISCELLANEOUS STANDARDS PART 1	RGX-001-05		
TYPICAL EMBANKMENT FOUNDATION BENCHES	RGX-010-03		
GABION RETAINING WALLS			
ONE POINT PROCTER FAMILY OF CURVES	RGX-200		
~ PAVEMENT ~			
MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC. APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	DDM 110 06		
AFFROACIES, ENTRANCES, AND MAIL BOX TURNOUT	KF WI-110-00		
TRAFFIC			
~ TEMPORARY ~			
TRAFFIC CONTROL			
SHOULDER CLOSURE	TTC-135-01		
DEVICES	TTD 110.01		
POST SPLICING DETAILPAVEMENT CONDITION WARNING SIGNS			
PAVEMENT CONDITION WARNING SIGNS	11D-125-01		
STRIPING OPERATIONS			
STRIPING OPERATIONS  MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-100-01		
MOBILE OPERATION FOR PAINT STRIPING CASE II			









THE CONTRACT UNIT PRICE BID SHALL BE:
GUARDRAIL-STEEL W BEAM-SINGLE FACE - LIN. FT.

COUNTY OF

ITEM NO.

SHEET NO.

DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES. GUARDRAIL-STEEL W BEAM-DOUBLE FACE - LIN. FT.

THE RAIL ELEMENT SHALL COMPLY WITH AASHTO M-180-CLASS A. TYPE II.

ALL LAPS SHALL BE PLACED IN THE DIRECTION OF TRAFFIC

TOLERANCE + 11/4". -1/4"

② 8 - 5%"× 11/4" LONG BUTTON HEAD BOLTS AND HEX HEAD RECESS NUTS REQUIRED FOR EACH RAIL SPLICE.

LENGTH EQUALS POST AND BLOCK WIDTH PLUS: 2" FOR BOLT OR  $2^1/4$ " FOR THREADED ROD.

GALVANIZED STEEL IOG COMMON COATED NAIL (DRIVE NAIL AT THE TOP OR BOTTOM CENTER OF BLOCK AND POST AFTER BOLT IS INSTALLED).

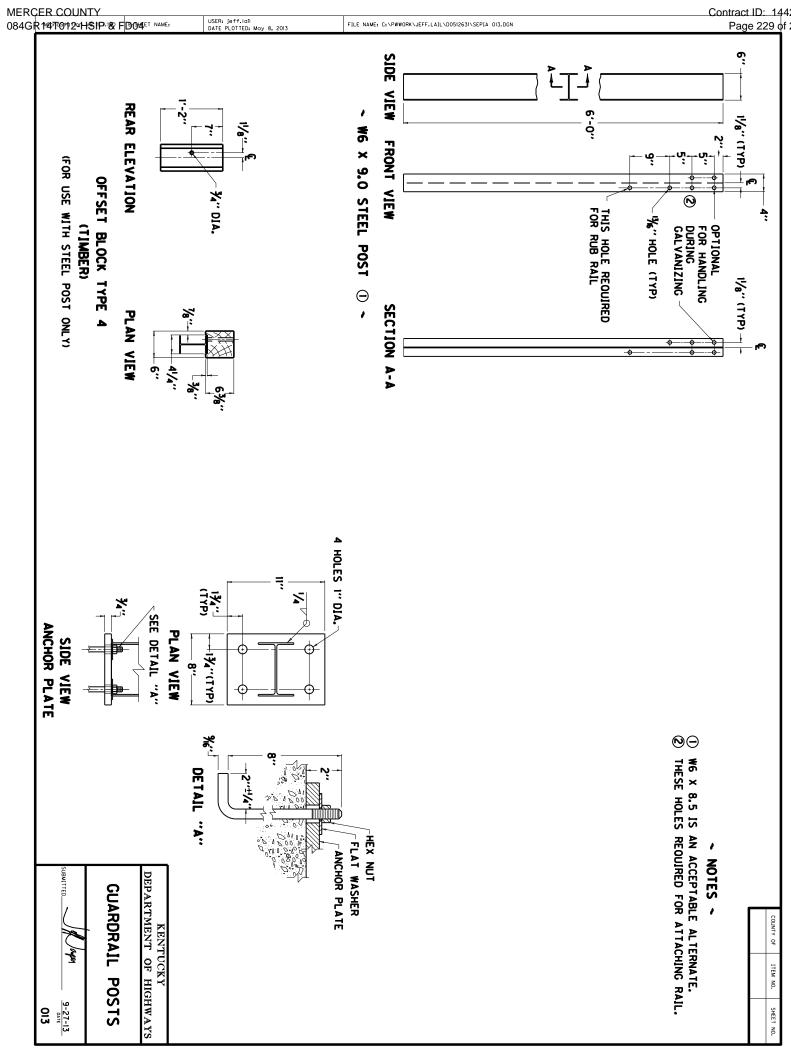
 $\%^{\prime\prime}\times$  ③ STEEL THREADED ROD AND TWO (2) HEX HEAD NUTS OR  $\%^{\prime\prime}\times$  ③ BUTTON OR HEX HEAD BOLT AND HEX HEAD NUT.

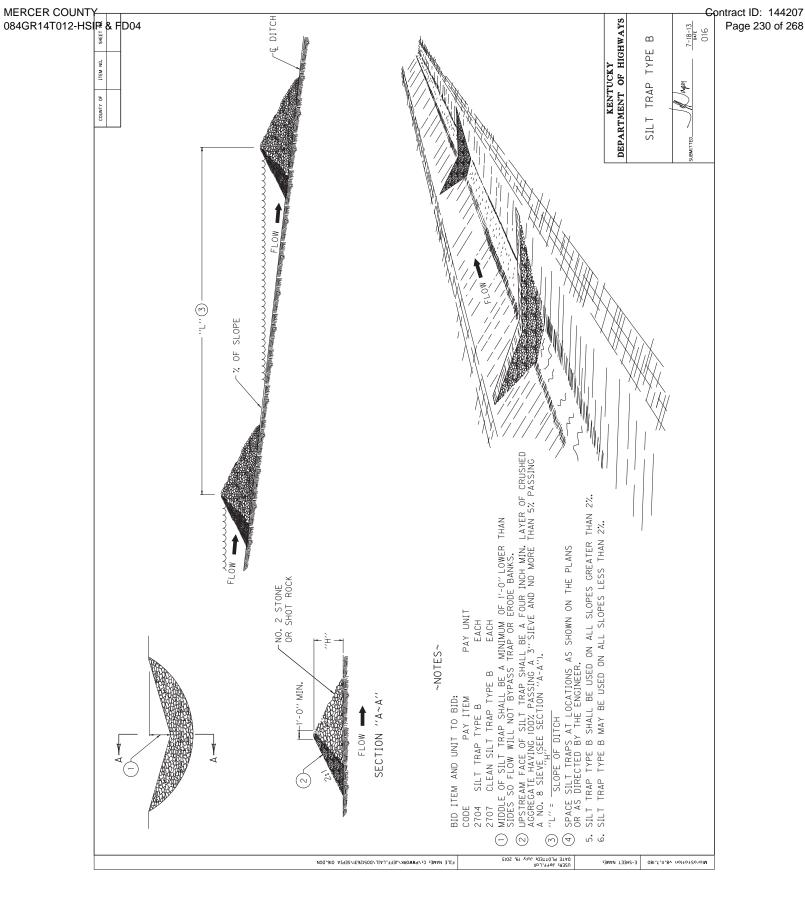
 $56^{\prime\prime\prime}$ ×8" BUTTON HEAD BOLT, HEX HEAD RECESS NUT AND ONE  $56^{\prime\prime\prime}$  ROUND WASHER (TYP.). BOLT SHALL HAVE A MINIMUM THREAD LENGTH OF 2".

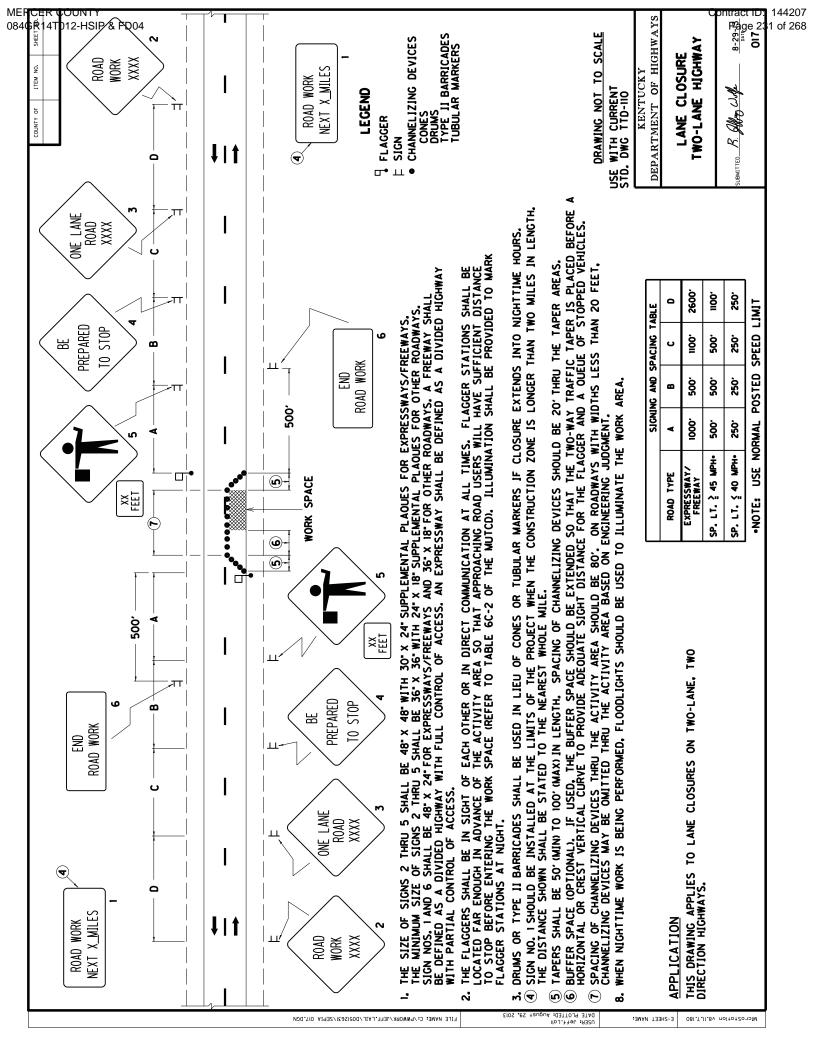
REQUIRED FOR DOUBLE RAIL

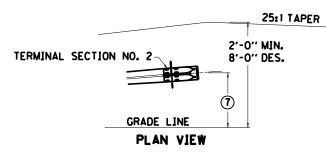
BOTH 12'-6' AND 25' LENGTHS OF "W" BEAM GUARDRAIL SECTIONS WILL BE PERMITTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

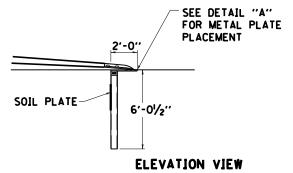


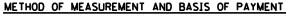












GUARDRAIL END TREATMENT TYPE 7 SHALL BE TO THE PAY LIMITS AS DETAILED AND THE CONTRACT UNIT PRICE EACH SHALL INCLUDE TERMINAL SECTION NO. 2, STEEL "W" BEAM GUARDRAIL (SINGLE FACE), GUARDRAIL POSTS MI, STEEL ANCHOR PLATE AND POST, SOIL PLATE, EXCAVATION, LABOR HARDWARE AND INCIDENTALS NECESSARY FOR THE INSTALLATION.

BID ITEM AND UNIT TO BID: GUARDRAIL END TREATMENT TYPE 7 - EACH

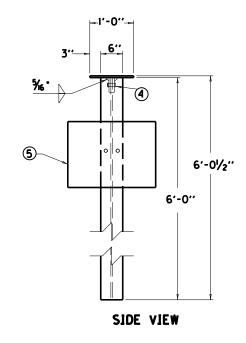
#### CONSTRUCTION REQUIREMENTS

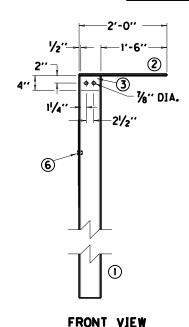
SPLICE BOLTS AT TERMINAL SECTION NO. 2 SHALL BE LOOSELY TIGHTENED AND CENTERED TO ALLOW MAXIMUM MOVEMENT DUE TO EXPANSION. ONE (1)1/6 "ROUND WASHER AND (1) RECTANGULAR PLATE WASHER REQUIRED FOR EACH SPLICE BOLT, AT TERMINAL SECTION NO. 2.

THE DESIREABLE OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE SHALL BE 4'-O'. THE MINIMUM OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE IS ZERO FEET.

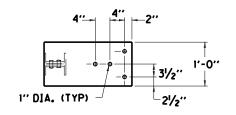
#### MATERIAL REQUIREMENTS

SEE CURRENT STD. DWG. RBR-001, RBR-005, RBR-010 AND RBR-015 FOR APPLICABLE DETAILS AND SPECIFICATIONS.





DETAIL "A"



TOP VIEW

BILL OF MATERIAL				
NO.	OTY.	DESCRIPTION		
①	1	W6×15 W-BEAM		
2	1	2' × 1' × 1/2" PLATE		
3	2	4" × 5" × 1/2" PLATE		
4	2	¾ DIA. × 21/2 HEAVY HEX HD BOLT w/NUT & (2) FLAT WASHERS		
(5)	1	2' x 18" x 1/4" PLATE		
6	2	¾ DIA. × 2 HEAVY HEX HD BOLT w/NUT & (2) FLAT WASHERS		

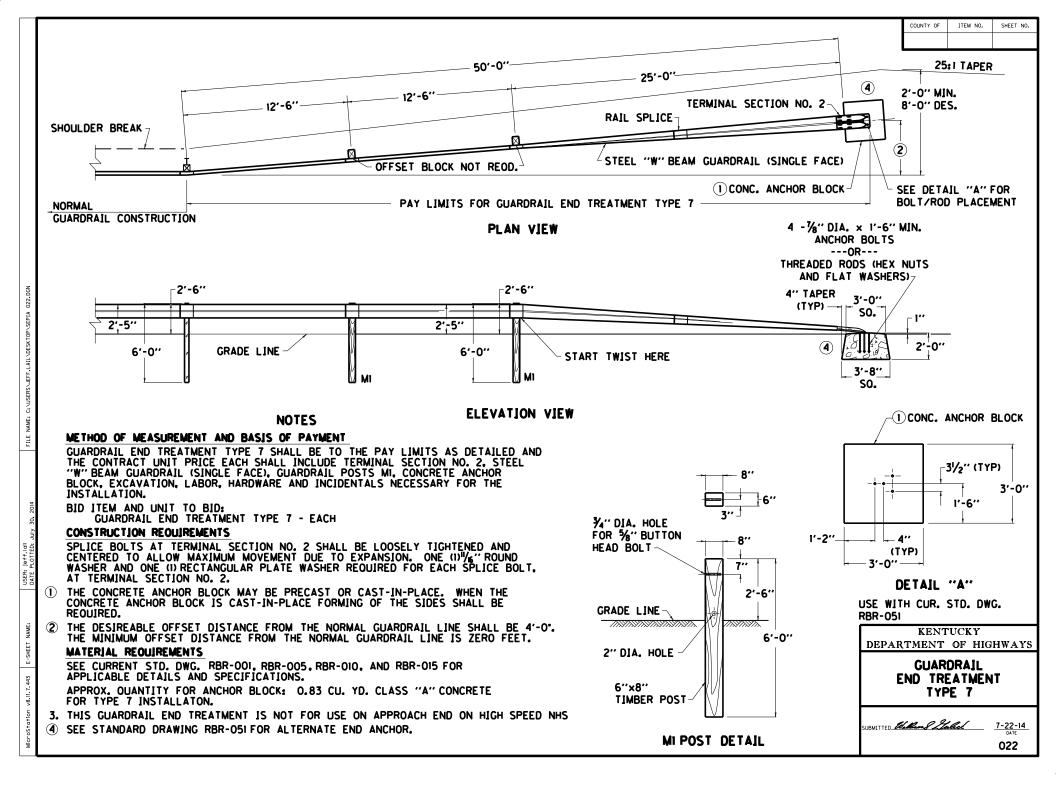
ĺ	KENTUCKY			
	DEPARTMENT OF HIGHWAYS			
	GUARDRAIL END			

TREATMENT TYPE 7

ALTERNATE ANCHOR

SUBMITTED Williams Laked 7-22-14

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### **PART III**

## EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

#### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
  - "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. 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 such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

#### 1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. "First Tier Covered
  Transactions" refers to any covered transaction between a
  grantee or subgrantee of Federal funds and a participant (such
  as the prime or general contract). "Lower Tier Covered
  Transactions" refers to any covered transaction under a First
  Tier Covered Transaction (such as subcontracts). "First Tier
  Participant" refers to the participant who has entered into a
  covered transaction with a grantee or subgrantee of Federal
  funds (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. You may contact the person to
  which this proposal is submitted for assistance in obtaining a
  copy of those regulations. "First Tier Covered Transactions"
  refers to any covered transaction between a grantee or
  subgrantee of Federal funds and a participant (such as the
  prime or general contract). "Lower Tier Covered Transactions"
  refers to any covered transaction under a First Tier Covered
  Transaction (such as subcontracts). "First Tier Participant"
  refers to the participant who has entered into a covered
  transaction with a grantee or subgrantee of Federal funds
  (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* :

## XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

#### KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

# EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

## 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 otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

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

REVISED: 12-3-92

#### **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.

General Decision Number: KY140100 10/24/2014 KY100

Superseded General Decision Number: KY20130100

State: Kentucky

Construction Type: Highway

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

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

Modification	Number	Publication	Date
0		01/03/2014	
1		02/14/2014	
2		04/18/2014	
3		05/09/2014	
4		05/23/2014	
5		06/06/2014	
6		06/27/2014	
7		07/04/2014	
8		07/18/2014	
9		07/25/2014	
10		08/22/2014	
11		10/24/2014	

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER	\$ 24.11	10.07

<sup>\*</sup> BRKY0001-005 06/01/2014

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

	Rates	Fringes
BRICKLAYER	\$ 25.37	10.50
BRKY0002-006 06/01/2011		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER	\$ 26.57	10.26
* BRKY0007-004 06/01/2014		
BOYD, CARTER, ELLIOT, FLEMING, GRE	EENUP, I	LEWIS & ROWAN COUNTIES:
	Rates	Fringes
BRICKLAYER	\$ 30.57	17.94
BRKY0017-004 06/01/2009		
ANDERSON, BATH, BOURBON, BOYLE, CI HARRISON, JESSAMINE, MADISON, MERC OWEN, SCOTT, WASHINGTON & WOODFORI	CER, MON	TGOMERY, NICHOLAS,
	Rates	Fringes
BRICKLAYER	\$ 24.11	9.97
CARP0064-001 04/01/2014		
	Rates	Fringes
CARPENTERS DiverS PILEDRIVERMANS	41.63	14.96 14.96 14.96
ELEC0212-008 06/02/2014		
BRACKEN, GALLATIN and GRANT COUNT	IES	
	Rates	Fringes
ELECTRICIAN	\$ 26.74	16.45
ELEC0212-014 07/01/2013		
BRACKEN, GALLATIN & GRANT COUNTIES	5:	
	Rates	Fringes
Sound & Communication Technician	\$ 22.50	9.51
ELEC0317-012 05/28/2014		
BOYD, CARTER, ELLIOT & ROWAN COUNT	TIES:	
	Rates	Fringes
ELECTRICIAN  Cable Splicer		18.13 21.45
ELEC0369-007 05/29/2013		

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

	Rates	Fringes
ELECTRICIAN	·	14.37
ELEC0575-002 06/02/2014		
FLEMING, GREENUP, LEWIS & MASON	COUNTIES:	
	Rates	Fringes
ELECTRICIAN	•	14.21
ENGI0181-018 07/01/2014		
	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1		14.15
GROUP 2	\$ 26.24	14.15

14.15

14.15

#### OPERATING ENGINEER CLASSIFICATIONS

GROUP 3.....\$ 26.65

GROUP 4....\$ 25.95

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

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

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

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

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

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

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

TDOMO044 000 06 /01 /0012

#### IRON0044-009 06/01/2013

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON, BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); CARROLL (Eastern third, including the Township of Ghent); FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington); NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

IRONWORKER

 Fence Erector...........\$ 22.50
 18.40

 Structural............\$ 24.80
 18.40

\_\_\_\_\_

IRON0070-006 06/01/2014

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD

BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);

CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville); CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte); OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);

SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

Rates Fringes

IRONWORKER.....\$ 26.97 19.75

IRON0372-006 06/01/2013

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, Excluding Townships of Beechburg, Colfax,

FLEMING (Western part, Excluding Townships of Beechburg, Colfax Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains,

Ringos Mills, Tilton & Wallingford);

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

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

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

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

Rates Fringes

IRONWORKER, REINFORCING......\$ 26.47 19.30

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

### IRON0769-007 12/01/2012

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

	Rates	Fringes	
IRONWORKER	\$ 32.54	20.18	

LABO0189-003 07/01/2014

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

	I	Rates	Fringes
Laborers:			
GROUP	1\$	21.80	11.96
GROUP	2\$	22.05	11.96
GROUP	3\$	22.10	11.96
GROUP	4\$	22.70	11.96

### LABORERS CLASSIFICATIONS

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

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

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

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

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

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LABO0189-008 07/01/2014

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

	F	Rates	Fringes
Laborers:			
GROUP	1\$	22.71	11.05
GROUP	2\$	22.96	11.05
GROUP	3\$	23.01	11.05
GROUP	4\$	23.61	11.05

### LABORERS CLASSIFICATIONS

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

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

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

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

LABO0189-009 07/01/2014

### BRECKINRIDGE & GRAYSON COUNTIES

	F	Rates	Fringes
Laborers:			
GROUP	1\$	22.66	11.10
GROUP	2\$	22.91	11.10
GROUP	3\$	22.96	11.10
GROUP	4\$	23.56	11.10

### LABORERS CLASSIFICATIONS

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

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

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

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste

- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0012-005 06/11/2005

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

	Rates	Fringes
PAINTER Bridge/Equipment Tender		
and/or Containment Builder\$ Brush & Roller\$		5.90 5.90
Elevated Tanks; Steeplejack Work; Bridge &	21.30	3.70
Lead Abatement\$ Sandblasting &	22.30	5.90
Waterblasting\$ Spray\$		5.90 5.90

PAIN0012-017 05/01/2014

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails -		
Lightpoles - Striping)		
Bridge Equipment Tender		
and Containment Builder	\$ 20.73	8.71
Brush & Roller	\$ 23.39	8.71
Elevated Tanks;		
Steeplejack Work; Bridge &		
Lead Abatement	\$ 24.39	8.71
Sandblasting & Water		
Blasting	\$ 24.14	8.71
Spray	\$ 23.89	8.71

PAIN0118-004 06/01/2014

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

	Rates	Fringes
PAINTER		
Brush & Roller	\$ 18.50	12.02
Spray, Sandblast, Power		
Tools, Waterblast & Steam		
Cleaning	\$ 19.00	12.02

PAIN1072-003 12/01/2013

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

Rates Fringes

Painters:

Bridges; Locks; Dams;

Tension Towers & Energized

 Substations......\$ 31.03
 15.10

 Power Generating Facilities.\$ 27.79
 15.10

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PLUM0248-003 06/01/2014

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

Rates Fringes

Plumber and Steamfitter.....\$ 33.00 18.95

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PLUM0392-007 06/01/2014

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

Rates Fringes

Plumbers and Pipefitters......\$ 29.80 17.79

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PLUM0502-003 08/01/2013

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

Rates Fringes

PLUMBER.....\$32.00 17.17

SUKY2010-160 10/08/2001

	F	Rates	Fringes
Truck driver	rs:		
GROUP 1	L\$	16.57	7.34
GROUP 2	2\$	16.68	7.34
GROUP 3	3\$	16.86	7.34
GROUP 4	1\$	16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment;

Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

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

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

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

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

Union Identifiers

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

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

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

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

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

\_\_\_\_\_

#### WAGE DETERMINATION APPEALS PROCESS

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

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

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

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

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

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

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

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END OF GENERAL DECISION

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

These rates are listed pursuant to the Kentucky Determination No. CR-14-III- HWY dated July 14, 2014.

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

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

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

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

## TO: EMPLOYERS/EMPLOYEES

# **PREVAILING WAGE SCHEDULE:**

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

## **OVERTIME:**

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

Diana Castle Radcliffe, P.E. Director, Division of Construction Procurement Frankfort, Kentucky 40622

# NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Mercer County.

# **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**

Page 1 of 2

144207

# **PROPOSAL BID ITEMS**

Report Date 10/29/14

Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	ED	AMOUNT
11NE	00001	DGA BASE	-	_	UNII PRIC		AWOUNT
020			3,163.00			\$	
	00100	ASPHALT SEAL COAT	444.00	_		\$	
030	00103	ASPHALT SEAL COAT	54.00	_		\$	
040	00190	LEVELING & WEDGING PG64-22	666.00	_		\$	
050	00221	CL2 ASPH BASE 0.75D PG64-22	5,985.00			\$	
060	00263	ASPHALT MIX FOR PAVEMENT WEDGE	967.00	_		\$	
070	00307	CL2 ASPH SURF 0.38B PG64-22	2,361.00			\$	
080	00440	ENTRANCE PIPE-15 IN	120.00			\$	
090	00461	CULVERT PIPE-15 IN	305.00			\$	
100	00462	CULVERT PIPE-18 IN	747.00			\$	
110	00464	CULVERT PIPE-24 IN	153.00	LF		\$	
120	01202	PIPE CULVERT HEADWALL-15 IN	3.00	EACH		\$	
130	01204	PIPE CULVERT HEADWALL-18 IN	6.00	EACH		\$	
140	01310	REMOVE PIPE	1,013.00	LF		\$	
150	01497	DROP BOX INLET TYPE 3 MOD	9.00	EACH		\$	
160	01559	DROP BOX INLET TYPE 13G	19.00	EACH		\$	
170	01728	SAFETY BOX INLET-18 IN DBL SDB-5	1.00	EACH		\$	
		DELINEATOR FOR GUARDRAIL BI					
180	01987	DIRECTIONAL WHITE		EACH		\$	
190	02014	BARRICADE-TYPE III	8.00	EACH		\$	
200	02158	PAVED DITCH TYPE 2	2,543.00	SQYD		\$	
210	02237	DITCHING	36,102.00	LF		\$	
220	02360	<b>GUARDRAIL TERMINAL SECTION NO 1</b>	2.00	EACH		\$	
230	02367	<b>GUARDRAIL END TREATMENT TYPE 1</b>	11.00	EACH		\$	
240	02369	<b>GUARDRAIL END TREATMENT TYPE 2A</b>	1.00	EACH		\$	
250	02371	<b>GUARDRAIL END TREATMENT TYPE 7</b>	2.00	EACH		\$	
260	02377	GUARDRAIL CONNECTOR TO BRIDGE END TY C	2.00	EACH		\$	
270	02381	REMOVE GUARDRAIL	19,562.50	LF		\$	
280	02391	<b>GUARDRAIL END TREATMENT TYPE 4A</b>	14.00	EACH		\$	
290	02460	REMOVE TREES OR STUMPS	21.00	EACH		\$	
300	02483	CHANNEL LINING CLASS II	7.00	TON		\$	
310	02562	TEMPORARY SIGNS	394.00	SQFT		\$	
320	02565	OBJECT MARKER TYPE 2		EACH		\$	
330	02585	EDGE KEY	396.00			\$	
340	02599	FABRIC-GEOTEXTILE TYPE IV	1,687.00			\$	
350	02610	RETAINING WALL-GABION		CUYD		\$	
360	02625	REMOVE HEADWALL		EACH		\$	
	02020	MAINTAIN & CONTROL TRAFFIC	40.00	LAGII		Ψ	
370	02650	(MERCER CO. US 68)	1.00	LS		\$	
380	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
390	02676	MOBILIZATION FOR MILL & TEXT (MERCER CO. US 68)	1.00			\$	
400	02677	ASPHALT PAVE MILLING & TEXTURING	739.00			\$	
		SHOULDER RUMBLE STRIPS-SAWED	700.00	. 0.11		Ψ	
410	02696	(8 INCH)	26,380.00	LF		\$	
420	02714	SHOULDERING	30,500.00			\$	
430	02726	STAKING (MERCER US 68)	1.00	LS		\$	

Contract ID: 144207 Page 268 of 268

# **PROPOSAL BID ITEMS**

144207

## **Report Date** 10/29/14

Page 2 of 2

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0440	03234		RAILROAD RAILS-DRILLED	6,479.00	LF		\$	
0450	03235		EXCAVATION AND BACKFILL	3,301.00	CUYD		\$	
0460	03269		TRIM & REMOVE TREES & BRUSH	14,436.00	LF		\$	
0470	05950		EROSION CONTROL BLANKET	25,632.00	SQYD		\$	
0480	06510		PAVE STRIPING-TEMP PAINT-4 IN	105,000.00	LF		\$	
0490	06514		PAVE STRIPING-PERM PAINT-4 IN	82,592.00	LF		\$	
0500	10020NS		FUEL ADJUSTMENT	10,365.00	DOLL	\$1.00	\$	\$10,365.00
0510	10030NS		ASPHALT ADJUSTMENT	26,034.00	DOLL	\$1.00	\$	\$26,034.00
0520	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	18,360.00	LF		\$	
0530	23131ER701		PIPELINE VIDEO INSPECTION	1,205.00	LF		\$	
0540	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL (MERCER US 68)	1.00	LS		\$	
0550	23229EC		HIGH FRICTION SURFACE TREATMENT	4,449.00	_		\$	
0560	23312EC		ROCK REMOVAL	2,307.00			\$	
0570	23326EC		EXCAVATION-UNCLASSIFIED	2,738.00			\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0580	02569	DEMOBILIZATION	1.00	LS		\$	