

CALL NO. 100

CONTRACT ID. 091300

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER ARRA 264-1 (166)

DESCRIPTION WATTERSON EXPRESSWAY (I-264)

WORK TYPE ASPHALT REHAB INTERSTATE/PARKWAY

PRIMARY COMPLETION DATE 10/1/2009

#### LETTING DATE: July 24, 2009

Sealed Bids will be received in the Division of Construction Procurement and/or the Auditorium located on the 1<sup>st</sup> floor of the Transportation Cabinet Office Building until 10:00 AM EASTERN DAYLIGHT TIME July 24, 2009. Bids will be publicly opened and read at 10:00 AM EASTERN DAYLIGHT TIME.

#### **DBE CERTIFICATION REQUIRED - 13.30%**

REQUIRED BID PROPOS  (Check quaranty subn	AL GUARANTY: Not less nitted: Cashier's Check		d. Bid Bond	
	SUBMITTED WILL BE RE		•	
DBE General Plan Inc	cluded			
BID 🗌	PROPOSAL ISSUED TO:			
SPECIMEN	Address	City	State	Zip

#### TABLE OF CONTENTS

#### PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- FEDERAL CONTRACT NOTES
- OPTION A
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- LIQUIDATED DAMAGES
- AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
- INSTALLATION OF TRAFFIC COUNTING INDUCTANCE LOOPS
- DATA COLLECTION STATION NOTES
- TRAFFIC CONTROL PLAN
- RIGHT OF WAY NOTES
- UTILITY CLEARANCE
- COMMUNICATING ALL PROMISES
- SUMMARY SHEET(S)
- DETAIL SHEET(S)

#### PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATIONS

#### PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- FEDERAL-AID CONSTRUCTION CONTRACTS FHWA 1273
- NONDISCRIMINATION OF EMPLOYEES
- EXECUTIVE BRANCH CODE OF ETHICS
- PROJECT WAGE RATES
- NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO

#### PART IV INSURANCE

#### PART V BID ITEMS

### PART I SCOPE OF WORK

JEFFERSON COUNTY ARRA 264-1 (166) Contract ID: 091300 Page 4 of 137

CONTRACT ID - 091300

ADMINISTRATIVE DISTRICT - 05

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - JEFFERSON

PCN - DE05602640901

ARRA 264-1 (166)

ARRA WATTERSON EXPRESSWAY (I-264) MILL 1 INCH THIN OVERLAY ON I-264 EB AND WB RAMPS (MP 22.970) TO I-71 (MP 22.610), A DISTANCE OF 0.36 MILES. ASPHALT REHAB INTERSTATE/PARKWAY. SYP NO. 05-02036.00.

GEOGRAPHIC COORDINATES LATITUDE 38^17'14" LONGITUDE 85^38'46"

COMPLETION DATE(S):

COMPLETION DATE - October 01, 2009 APPLIES TO ENTIRE CONTRACT

#### **CONTRACT NOTES**

#### PROPOSAL ADDENDA

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

#### **BID SUBMITTAL**

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

The Bidder must download the bid file located on the web site to prepare a bid packet for submission to the Department. The bidder must include the completed bid packet printed from the Program along with the disk created by said program.

#### JOINT VENTURE BIDDING

Joint Venture bidding is permissible. However, both companies MUST purchase a bidding proposal. Either proposal may be submitted but must contain the company names and signatures of both parties where required. 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.

01/01/2009

#### 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.

#### FHWA 1273

The requirements of Paragraph VI of FHWA 1273 does not apply to projects with a total cost of less than \$1,000,000.00.

#### **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 READ PUBLICLY. 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 printed bid packet. 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**

All bidders are encouraged to submit their General DBE Participation Plan with their bid on the official form. Lowest responsive bidders whose bid packages include DBE Participation Plans may be awarded the contract at the next Awards Committee meeting provided that the DBE goal is met. The DBE Participation Plan shall include the following:

- 1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- 2. 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;
- 3. 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;
- 4. 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
- 5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

The apparent low bidder who does not submit a General DBE Participation Plan with the bid shall submit it within 10 calendar days after receipt of notification that they are the apparent low bidder. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Participation Plan.

Detailed DBE Participation Plan forms will be included in the Contractor Package presented to successful bidders following the awarding of the project. The Detailed DBE Participation Plan must be completed and returned to Contract Procurement in accordance with Cabinet policy. A copy of the blank estimate will be included with the Detailed DBE Participation Plan to list sequence items by PCN (Project Control Number).

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:

- 1. Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- 2. Whether the bidder provided solicitations through all reasonable and available means:
- 3. 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;
- 4. 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;
- 5. 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;
- 6. Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- 7. 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;
- 8. 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;
- 10. 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
- 11. 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.

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: <a href="http://transportation.ky.gov/construction/forms/DBEcheck.xls">http://transportation.ky.gov/construction/forms/DBEcheck.xls</a>

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6<sup>th</sup> 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.

06/29/2009

Page	1 of 3	Kentucky Transportation Cabinet	inet			06/13/2005
Letting Date:		General DBE Participation Plan* Contract ID Number	an,	Project Number:		
,		Designated DBE Goal %				
Pr	Prime Contractor	DBE C	DBE Company Name			
			Address			
			City, State, Zip			
			Federal Tax ID			
Type of DBE	Type of DBE Work: (all applicable)	C. boostrooter Mesusotter			) † }	
Itamized work	orked to be performed	,		C		
Supplier 60% Y/N Ni	ltem Number	Description of Participation Item	Unit of Measure	Quantity to be Performed	DBE Unit Price **	Dollar Amount (based on DBE
]					Total other Page	
is * *	**Note: 60 percent of expen is a regular dealer in the produ business and in its own name, operate distribution equipment	**Note: 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	d the supplier scipal d own and	Total This DBE Total Bid % Credited towar	DBE  % Credited toward Goal, this DBE	
	Prime Contra	Prime Contractor's Signature:	Title:			Date:
<b>.</b>	DBE Partic	DBE Participant Signature:  *This form must be completed for each DBE participant	Title:			Date:
_*	his form must be	completed for each DBE participant				

Contract ID: 091300 Page 14 of 137

## KYTC DBE Payments

updated 2/28/08

Prime Co	ontractor	Con	t-ID
DBE Co	ntractor	CHE	CK #
PAYMEI	NT DATE	Amount o	f Payment
Use the se	ection below to show mult  Amount	iple payments using the sa	ame check Amount
Comments:			

attach copy of check here

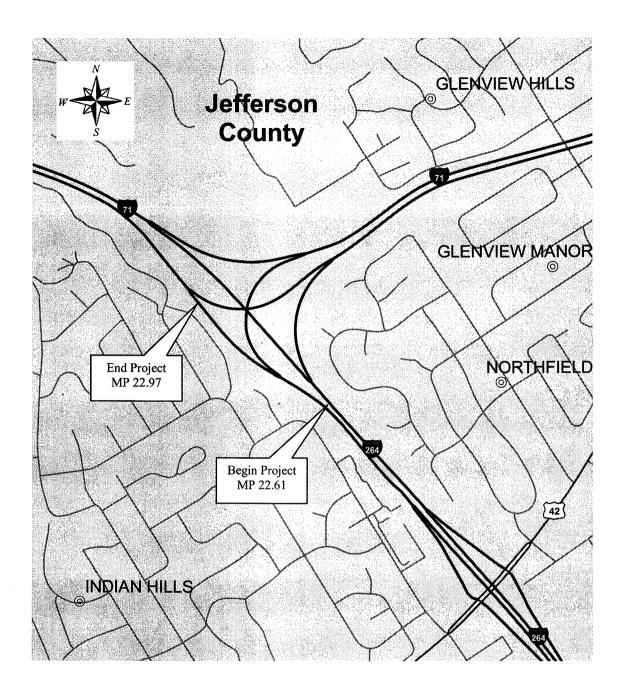
Mail to:
Office of Civil Rights and Small Business Development
200 Mero Street
6th Floor West TCOB
Frankfort, KY 40622

JEFFERSON COUNTY ARRA 264-1 (166)

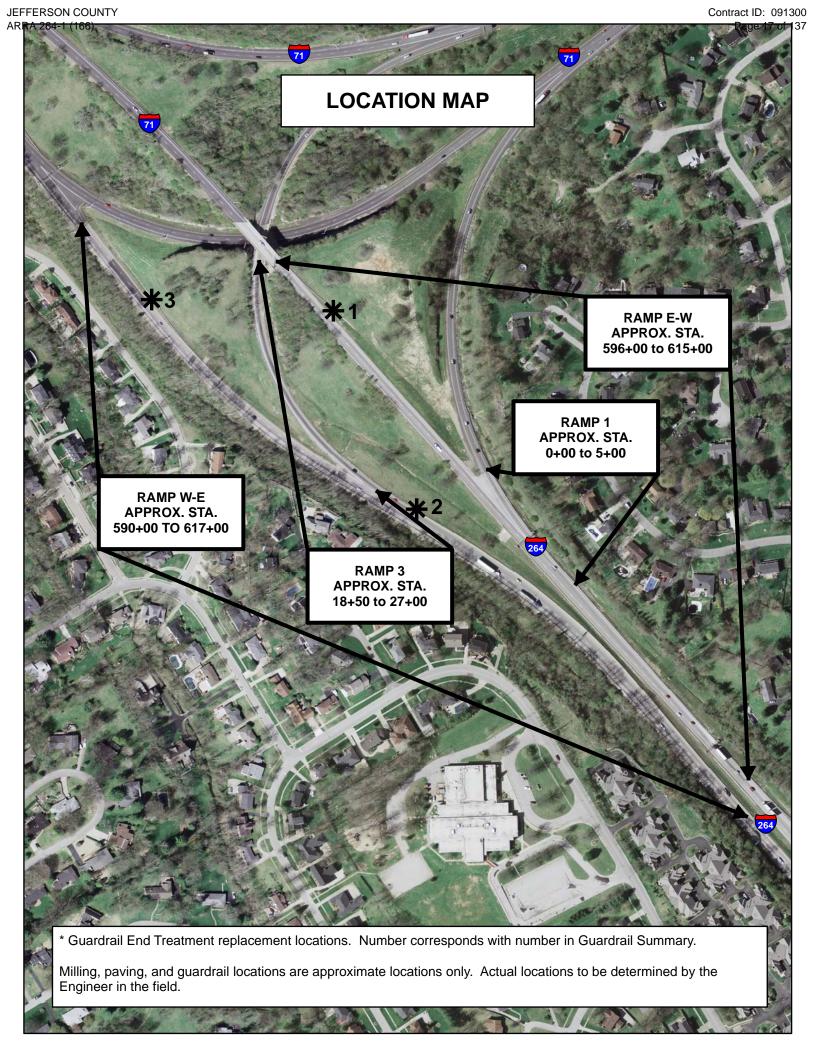
#### Contract ID: 091300 Page 15 of 137

#### OPTION A

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



Item No.:	5-2036.00	
Project Number:	FD 52 056 0264 022-023	· AMARAMATA
Construction Number:	ARRA 264-1(166)	·
Letting Date:		
Recommended By:	Project Manager	Date: <u>5-29-</u> 69
Plan Approved By:	State Highway Engineer	Date: 6/2/09
FHWA Approved By:_		Date:



## ASPHALT REHABILITATION NOTES JEFFERSON COUNTY I-264 ITEM NO. 5-2036.00

## THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

#### I. GENERAL

Perform all work in accordance with the Department's 2008 Standard Specifications, applicable Special Provisions, and Standard and Sepia Drawings except as specified in these notes or elsewhere in this proposal. Article references are to the Standard Specifications.

#### 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.

#### **III. CONSTRUCTION METHODS**

- A. PAVEMENT STRIPING. See Traffic Control Plan.
- **B. SITE PREPARATION.** Be responsible for all site preparation. This item shall include, but is not limited to, clearing and grubbing, excavation and backfilling, embankments, removal of obstructions or any other items, and disposal of materials. All site preparation shall be only as approved or directed by the Engineer. Except for the bid items listed, site preparation will not be measured for payment but shall be incidental to the other items of work.
- **C. MILLING AND PAVING.** Mill all mainlines and ramps in the project area to a depth of 1.00 inches. Depth may be adjusted by the Engineer to fit field conditions. Milling shall extend 2 feet into both the inside and the outside shoulders. After milling, correct settlement over pipes and culverts and remove de-bonded or flaking courses. Pave asphalt surface courses over milled areas to a depth of 1.25 inches.

Use a material transfer vehicle to place the asphalt surface. Construct sawed rumble strips on all shoulders.

Asphalt Pavement Rehabilitation I264
Page 2 of 3

- **D. FINAL DRESSING, CLEANUP, AND SEEDING.** After all work is completed, remove all waste and debris from construction job sites. Dispose of waste at sites off the right of way obtained by the contractor at no additional cost to the department. The Engineer will approve site for disposal of waste. Perform Final Dressing Class A on all disturbed areas. Sow all disturbed earthen areas with Seed Mixture No. I.
- **E. ON SITE INSPECTION.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting a bid and shall be thoroughly familiarized with 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. The Department will not honor any claims resulting from site conditions.
- **F. PROPERTY DAMAGE.** The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's work. Restore all disturbed features in like kind materials and design to the existing or proposed grades, as applicable, at no additional cost to the Department.
- **G. CAUTION.** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the conditions encountered are not in accordance with the information shown.
- **H. UTILITY CLEARANCE**. 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. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations at no additional cost to the Department.
- **I. DISPOSAL OF WASTE.** Dispose of all waste and debris at sites off the right-of-way obtained by the Contractor at no additional cost to the Department.
- J. MAINTAIN AND CONTROL TRAFFIC. See Traffic Control Plan.

JEFFERSON COUNTY ARRA 264-1 (166) Contract ID: 091300 Page 20 of 137

Asphalt Pavement Rehabilitation I264
Page 3 of 3

#### IV. METHOD OF MEASUREMENT

Except as specified in these notes, or elsewhere in the drawings or this proposal, the method of measurement will be in accordance with the Standard Specifications.

- 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 payment but shall be incidental to other items of work.

#### V. BASIS OF PAYMENT

Except as specified in these notes, or elsewhere in the drawings or this proposal, basis of payment will be in accordance with the Standard Specifications.

A. MAINTAIN AND CONTROL TRAFFIC. See Traffic Control Plan.

#### NOTES APPLICABLE TO PROJECT JEFFERSON COUNTY I - 264 ITEM NO. 5-2036.00

## THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

- 1. It is not intended that existing pavement or shoulders be widened or the cross slopes changed unless specified in the Proposal or directed by the Engineer.
- 2. Remove end treatments and install new guardrail end treatments as shown in the Guardrail Summary. Locations shown on summary are approximate only. Unless directed otherwise by the Engineer or by the Guardrail Summary, place new guardrail end treatment at the same location as the old guardrail end treatment. Exact placement to be approved by the Engineer on construction. Contrary to the Standard Drawing, guardrail posts shall be 7 feet in length.
- 3. Removed guardrail and guardrail components shall be delivered to the Bailey Bridge Yard in Frankfort and shall be coordinated with the Engineer. Guardrail Delivery Verification Sheet, included with the proposal shall be completely filled out by the Contractor and returned to the Engineer. Contact Bailey Bridge Lot supervisor at (502) 564-2946 to schedule the delivery of material 2 weeks in advance. Deliver the material between the hours of 8:00AM and 3:30PM, Monday through Friday.
- 4. The contractor will utilize some of the asphalt millings in order to build the guardrail pads for the end treatments in accordance with the standard drawings. This work will be paid under the "EMBANKMENT IN PLACE" bid item listed on the Guardrail Summary sheet. After work on the guardrail end treatment pads has been completed, the contractor shall retain the additional millings.
- 5. Contractor shall mill all mainline and ramp pavements in the project area to a depth of 1.00 inches. Depth may be adjusted by the Engineer to fit field conditions. Milling shall extend 2 feet into both the inside and the outside shoulders. Payment for milling shall be per ton and paid as "ASPH PAVE MILLING & TEXTURING".
- 6. Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications. Delineators shall be placed in accordance with Section 3D of the M.U.T.C.D.
- 7. Any delineator posts or roadway signs that are damaged during construction are to be replaced at the contractor's expense.
- 8. Pavement rideability requirements, in accordance with section 410 of the Standard Specifications, shall apply on this project.

JEFFERSON COUNTY ARRA 264-1 (166) Contract ID: 091300 Page 22 of 137

Notes Applicable to Project I 264 Page 2 of 2

- 9. Portable Changeable Message Boards furnished by the contractor shall be retained by the contractor upon completion of the project.
- 10. The speed limit on this project shall be reduced to 45 mph while lane closures are in place. Any time work is suspended the speed limit shall revert back to 55 mph. Also, double fine signs are set up in the project to be installed while workers are present in the work zone.
- 11. There will be a mowing contract through this project. The contractor will allow the mowing contractor to complete the mowing through this area. Any inconvenience or delay experienced due to accommodating the mowing contract will not be reason for compensation or time extension.
- 12. The specified completion date for this project is October 1, 2009. Contrary to section 108, liquidated damages will be charged during the months of December 2009 through March 2010.

### SPECIAL NOTE FOR RESEALING EXPANSION DAMS JEFFERSON COUNTY

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

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing joint seal; (3) Install joint seal as specified (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.

#### II. MATERIALS.

A. Neoprene Joint Sealers (Compression Seals). See Section 807.

#### III. CONSTRUCTION.

- **A. Remove Existing Materials.** Remove the existing seal and clean according to section 606.03.11 and as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "JOINT SEALING".
- **B. Place New Seal.** After all specified existing materials have been removed; place new seal in accordance with section 807.03.02 and 609.03.04 from gutter-line to gutter-line including extending through the barrier in one continuous, unbroken length.
- **C. Shop Plans.** Shop plans will <u>not</u> be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

#### IV MEASUREMENT.

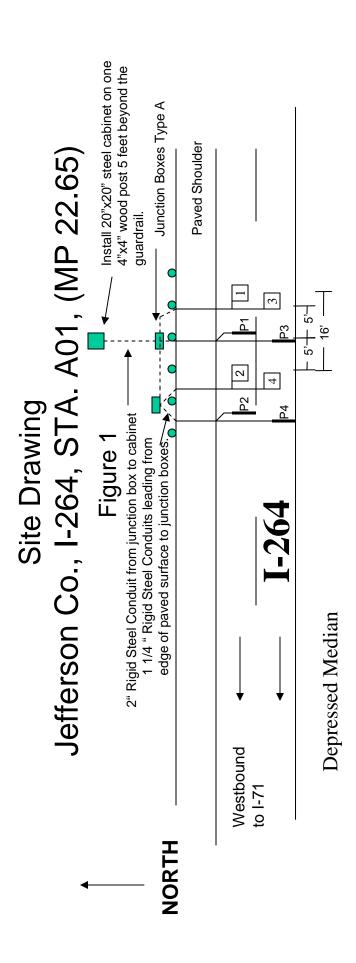
**A. JOINT SEALING** The Department will measure the quantity in linear feet from gutterline to gutter-line along the centerline of the joint. The Department will not measure the portion of the new seal extending through the barriers.

#### V. PAYMENT.

A. JOINT SEALING (08540) - Payment at the contract unit price per linear foot shall be full compensation for removing specified existing materials, furnishing and installing the new neoprene joint seal, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detail drawings. The portion of the joint seal extending through the barriers will be considered incidental.

Bailey Bridge Yard Representative

#### **Guardrail Delivery Verification Sheet** CID NO: Item No: FIELD VERIFIED **GUARDRAIL, END TREATMENT, DELIVERED** UNIT **AMOUNT** TERMINAL SECTION, OR POST TYPE **AMOUNT** GUARDRAIL-STEEL W BEAM LF LF TEMPORARY GUARDRAIL **GUARDRAIL TERMINAL SECTION EACH** CRASH CUSHION TYPE IX-A **EACH GUARDRAIL END TREATMENT TYPE 1 EACH GUARDRAIL END TREATMENT TYPE 2A EACH GUARDRAIL END TREATMENT TYPE 3 EACH GUARDRAIL END TREATMENT TYPE 4A EACH GUARDRAIL END TREATMENT TYPE 7 EACH GUARDRAIL CONNECTOR TO BRIDGE END EACH** GUARDRAIL CONNECTOR TO CONC MED BARR **EACH** GUARDRAIL CONNECT-SHLD BRIDGE PIER **EACH** TIMBER GUARDRAIL POST **EACH** STEEL GUARDRAIL POST **EACH** Removed guardrail, end treatments, terminal sections, and posts shall be delivered to the Bailey Bridge Yard in Frankfort, KY and shall be neatly stacked in accordance with section 719.03.07 of the standard specifications. Contractor, engineer, and Bailey Bridge Yard representative must all sign off on this sheet before payment may be made. PRINTED NAME SIGNATURE DATE Resident Engineer (or representative) Contractor (or Representative)



Eastbound to US 42 2" Rigid Steel Conduit from junction box to cabinet Paved Shoulder Install 20"x20" steel cabinet on one 4"x4" wood post 5 feet beyond the Ρ4 2 P2 4 Ы 3 In each junction box, label all wires and leave at Conduits leading from edge of paved surface 1 1/4 " Rigid Steel to junction boxes. Loops are 16' from leading edge to leading edge. Exact site location will be determined in the field. Run loop and piezo lead-in wires splice free to Locate cabinets 10 feet beyond the guardrail. P1, P2, P3, P4, are Type I piezo cables, 6' in east 2' of slack on each lead-in wire in the unction box on shoulder and to cabinet. Piezos are centered between loops. Install two Type A junction boxes. All loops are 6' x 6' square. unction box and cabinet. length.

DRAWING NOT TO SCALE

#### Special Note for Fixed Completion Date and Liquidated Damages Jefferson County Item No. 5-2036.0

Contrary to Section 108.09, Liquidated Damages of \$2,400 per calendar day will be assessed for each day work remains uncompleted beyond the Specified Completion Date. This project has a Fixed Completion Date of October 1, 2009.

In addition to the Liquidated Damages specified above, Liquidated Damages in the following amounts will be charged when a lane closure remains in place during the prohibited period outlined in the Traffic Control Plan, excluding delays caused by inclement weather:

\$1,000 for the first hour \$10,000 for the second hour \$25,000 any additional hour

If work is delayed by inclement weather, the minimum work required to allow removal of the lane closure, as directed by the Engineer, shall be resumed immediately as soon as weather permits or the Department will begin to assess Liquidated Damages as specified herein.

Contrary to Section 108.09 of the Standard Specifications, the disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation. This includes the months from December through March.

All liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

## SPECIAL NOTES FOR PROJECTS FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

## SPECIAL NOTE FOR DAVIS-BACON PREVAILING WAGE RATES FOR PROJECTS FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

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

Davis-Bacon Prevailing Wage Rates (Section 1606) - Prevailing wage rate requirements apply to <u>all</u> Recovery Act funded construction projects regardless of location (including projects on local roads or rural minor collectors, and Transportation Enhancement projects outside the highway right-of-way). Contracting agencies must include the appropriate wage rate information in the contract and also include a contract provision that overrides the general applicability provisions in form FHWA-1273, Section IV and V.

## SPECIAL NOTE FOR PROJECTS FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AS THEY RELATE TO THE GOVERNMENT ACCOUNTABILITY OFFICE AND THE OFFICE OF INSPECTOR GENERAL

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

## Requirement for Section 902 of the Recovery Act relating to Government Accountability Office (GOA) as follows:

<u>Required Contract Provision to Implement Recovery Act Section 902:</u>

Section 902 of the American Recovery and Reinvestment Act (Recovery Act) of 2009 requires that each contract awarded using Recovery Act funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

- "(1) to examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) To interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions."

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the Recovery Act with respect to this contract, which is funded with funds made available under the Recovery Act. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

## Requirement for Section 1515(a) of the Recovery Act relating to Office of Inspector General (OIG) as follows:

Section 1515(a) of the Recovery Act provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

#### SPECIAL NOTE FOR PERIODIC REPORTS REQUIRED BY THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

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

- **1.0 DESCRIPTION.** This work consists of collecting and reporting data as required by the American Recovery and Reinvestment Act of 2009 (Recovery Act).
- **2.0 REPORTING.** The Contractor shall complete the Monthly Employment Report form, FHWA-1589, for their employees and a separate form for each of their respective subcontractors as well. This form contains information about the number of employees, total hours for employees, total wages for employees, and other information as required by the Recovery Act. The Department will provide the necessary Excel file after the award of the contract. The initial submittal shall be before the Notice to Proceed. All remaining submittals shall be no later than the seventh Calendar Day of each month thereafter for the full life of the contract even if no work is performed during any month. See the following web link for filling out form FHWA-1589:

http://www.fhwa.dot.gov/economicrecovery/forms/arra\_reporting\_req\_2\_0.pdf"

The Contractor shall also need their Data Universal Numbering System or DUNS number as described in the Recovery Act Reporting Requirements. See the following web link for obtaining a DUNS number:

http://www.whitehouse.gov/omb/grants/duns\_num\_guide.pdf

**3.0 MEASUREMENT AND PAYMENT.** The Department will not measure this work for payment and will consider all collection and reporting of data to be incidental to the project. Failure by the Contractor to report the required data as outlined in Section 2.0 shall result in the holding of the Contractor's estimate for payment.

#### **Monthly Employment Report (Form: FHWA-1589)**

This form is a guide for the States in providing employment information on each Recovery Act project. Monthly employment information on each Recovery Act project is used by States for meeting the reporting requirements of Sections 1201 and 1512. In order for States to fulfill their reporting obligations, the States must collect and analyze certain employment data for each Recovery Act funded contract. The data requirement in Recovery Act extends beyond the number of workers at the work site and, therefore, FHWA has produced a form for guidance to the States. This data to be reported is identified below and will be used by the States in developing Form 1587, which is to be submitted to FHWA. Since States may not currently collect this data, the States should develop a new specification for each Recovery Act-funded contract in order to obtain this information from contractors and consultants. In doing so, the States should use the provided model form and require the reporting of this data from the prime contractor or consultant. The prime contractor or consultant shall complete a report for each month from the date of the Notice to Proceed until completion of the contract or September, 2012 whichever occurs sooner. This report is only required for contracts that use Recovery Act funds. States should require contractors and consultants to provide the required information for their own workforce as well as the workforce of all subcontractors that were active on their Recovery Act funded project(s) for the reporting month. It will be up to each State to determine when they obtain the necessary data from their contractors or consultants, keeping in mind that the summary form is due from the State to the FHWA Division no later than the 20th day of each month for the preceding month's data.

It is the State DOT's responsibility to report the number of jobs on projects managed by funding recipients, such as other state agencies or local governments. The State DOT must make arrangements with each Recovery Act funding recipient to assure each recipient reports the required data in a timely manner.

The States shall require the following data be provided by each contractor, consultant and funding recipient working on an Recovery Act project. The primary contractor or consultant for each project shall be responsible for reporting their firm as well as all subcontractors data.

Format: The State, contractors, or consultant may use the FHWA provided model

form, but the use of the model form is optional and at the discretion of the

State.

**Due date:** As determined by the State, until September 2012.

**Due to:** To be sent by each Recovery Act funded project prime contractor or

consultant to the designated office in each State DOT or Federal Lands

Division Office.

#### Coding Instructions

BOX 1. **Report Month:** The month and year covered by the report, as *mm/yyyy* (e.g. "May 2009" would be coded as "05/2009").

- BOX 2. **Contracting agency:** The name of the contracting agency. Enter "State" for State DOT projects. For non-State projects, enter the name of the contracting agency (other State agency, Federal agency, tribe, MPO, city, county, or other funding recipient).
- BOX 3. **Federal-aid project number:** The State assigned federal-aid project number, consistent with the seven digit format reported in FMIS. For example, the project STM-1222(12) should be reported as "1222012"
- BOX 4. **State project number or identification number:** The project number or ID, as assigned by the State or its funding recipient, consistent with the format reported in FMIS.
- BOX 5. **Project location:** The 2 digit State Federal Information Processing Standard (FIPS) code for the project. If the project is being performed for Federal Lands, provide the 4 digit FLH Division or Federal Land Managing Agency (FLMA) region code. See Appendix A for a list of the State FIPS and FLMA region codes.
- BOX 6. **Contractor name and address:** The name and address of the contracting or consulting firm shall include the name, street address, city, state, and zip code.
- BOX 7. **Contractor DUNS number:** The unique nine-digit number issued by Dun & Bradstreet. Followed by the optional 4 digit DUNS Plus number. Reported as "999999999.9999"
- **Employment data:** The prime contractor or consultant will report the direct, BOX 8. on-the-project jobs for their workforce and the workforce of their subcontractors active during the reporting month. These jobs data include employees actively engaged in projects who work on the jobsite, in the project office, in the home office or telework from a home or other alternative office location. This also includes any engineering personnel, inspectors, sampling and testing technicians, and lab technicians performing work directly in support of the Recovery Act funded project. This does not include material suppliers such as steel, culverts, guardrail, and tool suppliers. States should include in their reports all direct labor associated with the Recovery Act project such as design, construction, and inspection. The States reports should include their own project labor, including permanent, temporary, and contract project staff. States are asked not to include estimated indirect labor, such as material testing, material production or estimated macro-economic impacts. FHWA will be estimating all indirect labor based on the information provided in this form along with other FHWA data. The form requests specifically:
  - a. **Subcontractor name:** The name of each subcontractor or sub-consultant that was active on the project for the reporting month.
  - b. Employees: The number of project employees on the contractor's or consultant's workforce that month, and the number of project employees for each of the active subcontractors for the reporting month. Do not include material suppliers. Total field at bottom will be automatically calculated and reported as a whole number.

- c. Hours: The total hours on the specified project for all employees reported on the contractor's or consultant's project workforce that month, and the total hours for all project employees reported for each of the active subcontractors that month. Total field at bottom will be automatically calculated and reported as a whole number.
- d. Payroll: The total dollar amount of wages paid by the contractor or consultant that month for employees on the specified project, and the total dollar amount of wages paid by each of the active subcontractors that month. Payroll only includes wages and does not included overhead or indirect costs. Total field at bottom will be automatically calculated and will be rounded to the nearest whole dollar and reported as a whole number.

#### BOX 9. Prepared by:

- a. Name: Indicate the person responsible for preparation of the form. By completing the form the person certifies that they are knowledgeable of the hours worked and employment status for all the employees. Contractors, consultants, and their subs are responsible to maintain data to support the employment form and make it available to the State should they request supporting materials.
- b. **Date:** The date that the contractor completed the employment form. Reported as "*mm/dd/yyyy*." (e.g. "May 1, 2009" would be coded as "05/01/2009").

MONTHLY EMPLOYMENT REPORT AMERICAN RECOVERY AND REINVESTMENT AC1				
1. Report Month: (mm/yyyy)	2. Contracting Agency			
3. Federal-Aid Project Number	4. State Project Number or	ID Number	5. Project Location: Region	State, County or Federal
6. CONTRACTOR NAME AND ADDRE	SS			
Address: City:		State	:	
Zip: 7. Contractor/Subcontractor DUNS Nur	nber:			
	8. Employment	Data		
		EMPLOYEES	HOURS	PAYROLL
Prime Contractor Direct, On-Project Job	s (see guidance for definitions)			
Subcontractor Direct, On-Project Jobs				
Subcontractor Name				
	Prime and Subcontractor Total	s C	0	0.0
	Finite and Subcontractor Total	<b>3</b>   0	<u>'I</u>	0.00
9. PREPARED BY CEO or Payroll Offic	cial:			DATE:
Name: Title:				
Form FHWA-1589				

### SPECIAL NOTE FOR SIGNS ON PROJECTS BEING FUNDED BY THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

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

**1.0 Description.** Furnish, install, and maintain Recovery Act signs as shown in the proposal or designated by the Engineer. Two Recovery Act signs will be required for each project. See the sign detail sheet for exact dimensions for the sign.

Speed Limit (MPH)	"A" Dimension	"B" Dimension
65 or Greater	120 inches	84 inches
55 or Less	84 inches	60 inches

- **2.0 Materials.** Recovery Act signs shall be constructed and installed in accordance with signing details included with this note. Conform to Sections 830, 832 and 833.
- **3.0 Construction.** Recovery Act signs should be placed where they can be easily identified with the corresponding projects and in a location that does not conflict with higher priority signs (temporary or permanent), traffic signals or any temporary traffic control device. In no case shall these signs be installed such that it obscures the view of other traffic control devices.

Recovery Act signs shall not be installed at the following locations: Near any traffic control device, roadway structure, exit and entrance ramps, intersections, highway-rail grade crossings, and areas of limited sight distance.

The signs installed on roadways with a speed limit of 65 mph or greater shall be installed using traffic notes for temporary signs on wood posts. All other signs should be installed using two Type II channel posts as shown in the attached detail. Sign bracing will be required as shown in the attached details.

- **4.0 Measurement.** The Department will measure the quantity in square feet. The Department will not measure sign maintenance, posts, mounting, installation or any required bracing for payment and will consider them incidental to this item of work.
- **5.0 Payment.** The Department will make payment for the completed and accepted under the following:

CodePay ItemPay Unit02562SignsSquare Foot

3/23/2009

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



PROJECT FUNDING SOURCE SIGN ASSEMBLY

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



PROJECT FUNDING SOURCE SIGN

NOTE: SIGN SHALL NOT BE INSTALLED WITHOUT PROJECT FUNDING SOURCE PLAQUE (SEE SHEET 3).

#### Dimensions in inches

А	В	С	D	Е	F	G	Н	J	K	L	М	N	Р
120	84	1.5	6	5 D	4.5	8 D*	3.75	6 D* (4.5 L.C.)	14.5	10	27.917	5	10.831
84	60	1	5	4 C	3.5	6 C*	3	4 D* (3 L.C.)	9.25	7	19.047	4	7.362
Q	R	S	Т	U	V	W	Χ	Υ	Z	AA	BB	CC	DD
14.087	8.106	11.556	49.42	2.742	5.258	46.904	6.812	46.76	22.472	8	16.288	5	30
9.484	5.162	7.763	31.722	2.415	3.585	30.552	4.542	30.911	14.737	6	10.175	4	21

EE	FF	GG
11	4.5	3
7.5	2.25	2.25

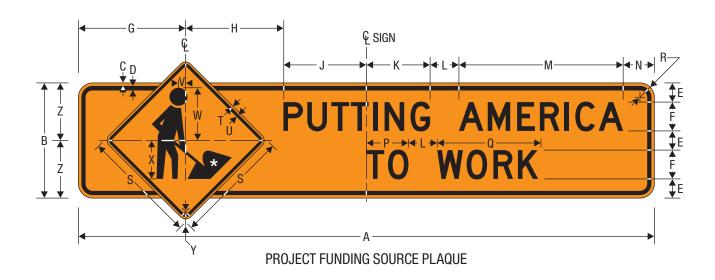
★ Increase character spacing 50%

\*\* See Pictograph page 4

\*\*\* See Pictograph page 5

COLORS: LEGEND, BORDER — WHITE (RETROREFLECTIVE)
BACKGROUND — GREEN (RETROREFLECTIVE)

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



NOTE: PLAQUE SHALL NOT BE INSTALLED WITHOUT SIGN (SEE SHEET 2).

★ See Standard Highway Signs Page 6-59 for symbol design.

#### Dimensions in inches

	А	В	С	D	Е	F	G	Н	J	K	L	М	N	Р
1	120	24	0.625	0.875	4	6 D	22.349	20.370	17.281	13.28	6	34.22	6.5	8.765
	84	18	0.375	0.625	3.5	4 D	16.607	15.686	9.707	10.667	4	22.813	5	5.843

Q	R	S	Т	U	V	W	Х	Υ	Z
21.013	3	24	0.375	0.625	1.5	11	8	1.5	12
14.009	2.25	18	0.375	0.625	1	7	6	1.5	9

COLORS: LEGEND, BORDER — BLACK

BACKGROUND - ORANGE (RETROREFLECTIVE)

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



RECOVERY Vector-Based, Vinyl-Ready Pictograph

 ${\tt COLORS: \ LEGEND, OUTLINE} \qquad \qquad - \ \ {\tt WHITE} \ ({\tt RETROREFLECTIVE})$ 

BORDER - BLUE (RETROREFLECTIVE)
BACKGROUND (UPPER) - BLUE (RETROREFLECTIVE)
BACKGROUND (LOWER RIGHT) - RED (RETROREFLECTIVE)
BACKGROUND (LOWER LEFT) - GREEN (RETROREFLECTIVE)

# PROJECT FUNDING SOURCE SIGN ASSEMBLY AMERICAN RECOVERY AND REINVESTMENT ACT SIGN LAYOUT DETAILS



USDOT TIGER Vector-Based, Vinyl-Ready Pictograph

COLORS: OUTLINE — WHITE (RETROREFLECTIVE)

USDOT LEGEND — BLACK TIGER DIAGONALS — BLACK.

ORANGE (RETROREFLECTIVE)

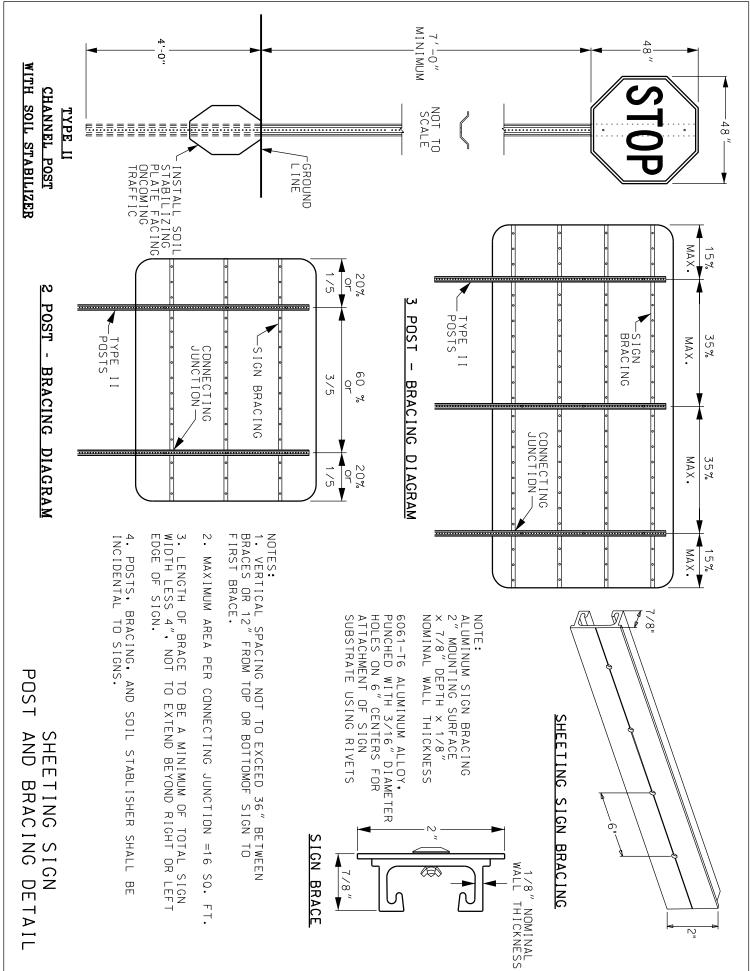
#### **Traffic Notes For Temporary Signs**

The Contractor shall use 6 inch x 8 inch (nominal) pressure treated southern pine wood posts to mount the large temporary signs. The posts that are exposed to traffic shall have two (2) holes, three (3") inches in diameter drilled through each post in a vertical arrangement perpendicular to traffic. The first hole should be four inches (4") from the ground and the second hole, eighteen inches (18") from the ground.

A seven-foot (7') or more clear path should exist between the supporting posts. The bottom edge of the sign panel should have at least seven foot (7') clearance above the ground. Posts shall be embedded a minimum of 48 inches.

Bolt signs to the wood posts using three 5 inch galvanized lag bolts in each post, with galvanized washers on both sides. The top and bottom bolts shall be placed a minimum of 12 inches from the top and bottom edges respectively, with the third bolt centered on the sign.

For additional details see the Federal Highway Administration memorandum HNG-14/SS-25 dated 6/4/91, HNG-14/SS-36 dated 9/3/93 and HNG-14/SS-27 dated 5/15/92.



Rev.12/08

#### **DIVISION OF PLANNING**

### SPECIAL NOTES FOR INSTALLATION OF TRAFFIC COUNTING INDUCTANCE LOOPS AND AXLE SENSORS

#### I. DESCRIPTION

Except as specified in these notes, perform all work according to the Department's Current Edition Standard Specifications, applicable Special Provisions and Special Notes, Sepia and Standard Drawings, and the drawings elsewhere in this proposal. Article references are to the Standard Specifications.

Furnish all materials, labor, equipment, and incidentals for the following work: (1) Maintain and control traffic; (2) install inductive loops; and (3) all other work required by the Specifications, Standard Drawings, Special Notes and the drawings in the proposal. The details of the project will be supplied in addition to these Special Notes.

#### II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual. Have all 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. All materials shall be approved prior to being utilized. The Contractor shall submit for approval five (5) copies of descriptive literature, drawings, and any requested design data for the materials he proposes to use. No substitutions for approved materials will be made without the written approval of the Engineer.

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

- **B. Junction Box Type 6 in. x 6 in. x 4 in.** The junction box shall have minimum inside dimensions of at least 6 inches high by 6 inches wide by 4 inches deep, made of a UV stabilized nonmetallic material (plastic) or non-rusting metal, and be weatherproof (NEMA 4X enclosure). It shall have a removable replaceable door with a continuous durable weatherproof gasket between the body and overhanging door to ensure a watertight seal. The door shall be hinged with stainless steel screws, hinge(s) and pin(s). The door shall also have a stainless steel padlockable latch on the side opposite the hinge(s). An approved enclosure is the Hubbell-Wiegmann model VJ606HWPL1.
- **C.** Junction Box Type 10 in. x 8 in. x 4 in. The junction box shall have minimum inside dimensions of at least 10 inches high by 8 inches wide by 4.6 inches deep, made of a UV stabilized nonmetallic material (plastic) or non-rusting metal, and be weatherproof (NEMA 4X enclosure). It shall have a removable replaceable door with a continuous durable weatherproof gasket between the body and overhanging door to ensure a watertight seal. The door shall be hinged with stainless steel screws, hinge(s) and pin(s). The door shall also

Inductance Loop and Piezoelectric Axle Sensor Installation Page 2 of 17

have a stainless steel padlockable latch on the side opposite the hinge(s). An approved enclosure is the Hubbell-Wiegmann model VJ1008HWPL1.

- **D.** Junction Box Type A. The junction box Type A shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 13 inches wide by 24 inches long by 18 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.
- **E. Junction Box Type B.** The junction box Type B shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 11 inches wide by 18 inches long by 12 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.
- **F. Junction Box Type C.** The junction box Type C shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 24 inches wide by 36 inches long by 30 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.
- G. Cabinet Type G. A controller cabinet Type G shall be constructed of type 5052-H32 sheet aluminum with a minimum thickness of 0.125 inches. The cabinet shall meet or exceed the industry standards set forth by the UL 50 and the National Electrical Manufacturer's Association (NEMA) 3R. The cabinet shall have a dimension of 41 inches high by 25 inches wide by 16 inches deep. The cabinet shall include kits for a back panel and two shelves. The cabinet shall be designed with a sloped top to prevent the accumulation of water on its top surface. The single door opening shall be double flanged on all four sides, hinged on the right side, equipped with a three-point latching mechanism, and include a door restraint. The door shall be equipped with a Corbin tumbler #2 lock. The cabinet shall be equipped with two adjustable "C" mounting channels on both side and back walls to allow for versatile positioning of shelves. Manufacturer's shop drawings shall be submitted demonstrating details of equipment housing and installation. If electrical service is specified, a 120-volt GFCI AC duplex receptacle shall be provided in the cabinet.

An approved source is provided below. Other approved equal cabinets may be furnished if approved by a representative of the Central Office, Division of Planning. To be considered approved equal, the cabinet shall meet the above requirements and match the specified detailed dimensions.

Econolite Control Products. P.O. Box 6150 3360 E. La Palma Anaheim, California 92806-2856 Inductance Loop and Piezoelectric Axle Sensor Installation Page 3 of 17

- **H. Galvanized Steel Cabinet.** The cabinet shall be a hinged cover NEMA Type 3R medium enclosure, constructed of 16 or 14 gauge galvanized steel, and have inside dimensions of 20 inches high by 20 inches wide by 8 inches deep. This shall be the standard size that contractors shall place their bids on. The cabinet shall meet the industry standards set forth by the Underwriters Laboratories Inc. (UL) 50 and the National Electrical Manufacturers Association (NEMA). The finish shall consist of an American National Standards Institute (ANSI) 61 gray polyester powder finish inside and out over the galvanized steel. The cabinet shall have the following features:
  - Drip shield top and seam-free sides, front, and back, to provide protection in outdoor installations against rain, sleet, and snow.
  - 16 gauge galvanized steel continuous stainless steel pin.
  - Cover fastened securely with captive plated steel screws.
  - Hasp and staple provided for padlocking.
  - No gaskets or knockouts.
  - Back plate mounted inside the cabinet for terminal strip installation.

An approved source is provided below. Other approved equal cabinets may be furnished if approved by a representative of the Central Office, Division of Planning. To be considered approved equal, the cabinet shall meet the above requirements and match the specified detailed dimensions.

Hoffman Engineering Co. World Headquarters 900 Ehlen Drive Anoka, Minnesota 55303-7504

- **I.** Wood Post. The wood post shall be 4 inches by 4 inches by 8 feet long, and is pretreated to conform to the American Wood Preservers' Association (AWPA) C-14. All wood posts shall be sawed on all four sides, having both ends square, and conform to the dimensions specified. The wood post is described in detail in Section 820.01 of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current Edition.
- **J. Conduit.** Conduit shall be rigid steel waterproofed conduit unless otherwise specified. All conduits shall be galvanized inside and out and shall conform to the Underwriters' Laboratories (UL) requirements for rigid metallic conduit. IMC will not be accepted. Furnish all conduit fittings, bodies, boxes, joints, couplings and mounting hardware.
- **K. Loop Wire**. All loop wire shall be plainly marked in accordance with the provisions of the current editions of the National Electric Code (NEC). The wire shall be 14-gauge single conductor, insulated in polyethylene (PE) with a 0.004-inch thick nylon coating, and enclosed in a 0.030-inch thick PE tube jacket. The wire shall meet the requirements of the International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition. Any other wire shall be of appropriate size and type per the NEC and Section

Inductance Loop and Piezoelectric Axle Sensor Installation Page 4 of 17

- 834.01 Wiring of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current Edition.
- **L. Cable No. 14/1 Pair.** Cable No. 14/1 pair or loop lead-in cable shall be 14 AWG, stranded, paired conductors, electrically shielded and shall conform to IMSA 19-2. All cable shall be plainly marked in accordance with the provisions of the National Electric Code.
- **M. Traffic Loop Encapsulant**. The traffic loop encapsulant shall consist of a one-part polyurethane as described in Section 835.06 of the Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, Current Edition.
- **N. Seeding and Protection.** Use seed mixture No. I per Section 212-Erosion Control of the Department's Current Edition Standard Specifications for Road and Bridge Construction book.
- O. Electrical Service. The contractor shall initiate a work order for the installation of electrical service to the power site. A representative from the Division of Planning and the local utility company shall be consulted prior to choosing an exact location for the pole. The contractor shall be responsible for clearing the right-of-way for the electrical service drop. The electrical service shall be a minimum 60-ampere, which is capable of supplying 120 volts or 240 volts to the electronics. The installation and materials specified in the construction notes below, shall be made incidental to the bid item established for electrical service. A 120-volt GFCI AC duplex receptacle shall be provided in the cabinet. Contractor is responsible for correct size and type of wire. Contractor is responsible for obtaining any and all electrical inspections, memberships, meter base and any other requirements by the utilities serving the installation and pays all fees required.
- **P. Piezoelectric Sensors.** The sensor shall consist of a metal strip 0.260" wide x 0.063" thick;  $\pm 0.005$ " and be furnished in the specified lengths. The sensor shall include a 100-foot electrical coax-cable connected to one end. The coax-cable shall be RG 58 type with an underground/direct burial rated outer jacket. The OD of the cable is 0.187". The nominal capacitance of the cable is 27 pF/ft. Piezo lead-in cables are to be run splice free to their cabinets. Many installations exceed the 100-foot length so the piezo should be ordered with a lead-in of appropriate length. Standard lead-ins can be ordered from 100 to 500 feet in 50-foot increments. The manufacturer should be contacted regarding longer distances.
  - 1. Piezoelectric Sensor: Roadtrax BL Class I or Approved Equal. Furnish Class I Piezoelectric Sensor to be used to collect truck weigh-in-motion data. Class I sensors are typically furnished in 6- or 11-foot lengths. See Notes and Estimate of Quantities for sensor type and length. One installation bracket for every 6 inches of sensor length shall also be supplied.

Contract ID: 091300 Page 47 of 137

Inductance Loop and Piezoelectric Axle Sensor Installation Page 5 of 17

The vendors listed below are known distributors of the Roadtrax BL Class I sensors. Other approved equal sensors may be furnished if approved by a representative of the Central Office, Division of Planning. To be considered approved equal, the sensors shall meet the above requirements and match the specified detailed dimensions.

DIA-L Associates P. 3302 Aquia Drive Stafford, VA 22554 Measurement Specialties, Inc.

80 Little Falls Road Fairfield, NJ 07004

International Road Dynamics, Inc. 702 43rd Street East Saskatoon, Saskatchewan Canada, S7K3T9

Grout material shall display fast cure times; tack free in 10 minutes and open to traffic in 40 minutes with full cure within an hour. Material shall have excellent adhesion to concrete and asphalt. It should display excellent chemical resistance, water insensitivity, and thermal stability at high and low temperatures. Ample encapsulation material shall be supplied for each sensor for its proper installation. Approved encapsulation material by the piezo manufacturer includes AS475 Axle Sensor Grout or approved equal. This is a durable two-part resin-based grout suitable for asphalt and concrete applications having the following typical physical properties:

Compressive Strength (psi)
Water Absorbtion

ASTM D638 ASTM D570 5000 min. 0.3% max

Wear Resistance

**ASTM D4060** 

CS10 wheel, 1000 gm load

1000 cycles, 186 mg loss

The vendors listed below are known distributors of the approved grout.

DIA-L Associates P. 3302 Aquia Drive Stafford, VA 22554 (540) 659-2264 Measurement Specialties, Inc.

80 Little Falls Road Fairfield, NJ 07004

PAT Traffic Control Corporation

1665 Orchard Drive Chambersburg, PA 17201 International Road Dynamics, Inc.

702 43rd Street East Saskatoon, Saskatchewan

Canada, S7K3T9

#### III. CONSTRUCTION METHODS

The plans indicate the extent and general arrangement of the installation and are for general guidance. When the contractor deems any modifications of the plans or specifications necessary, details of such changes and the reasons shall be submitted in writing to the Resident Engineer for written approval prior to begin the modified work.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 6 of 17

Once the project has been let and awarded, the Division of Construction shall notify the Division of Planning of the scheduled date for a Pre-Construction meeting so that prior arrangements can be made to attend. This will allow the Division of Planning an opportunity to address their concerns and answer any questions that the contractor may have before beginning the work. Planning shall also be notified two weeks before work pertaining to these specifications begins to ensure their personnel are present during sensor installation and once the work has been completed so that their representative can perform a final inspection. The Division of Construction then reviews Planning's final inspection report and determine whether the work is in compliance with the specifications before awarding payment to the contractor.

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

- **B.** Junction Box Type 6" x 6" x 4" or 10" x 8" x 4" (as noted). The contractor shall stub the rigid steel conduit to the junction box so the bottom of the box is approximately 18" above the ground. The junction box shall be located at or beyond the shoulder and mounted on the side of a post approximately 3 feet beyond the guardrail post using banding material or other appropriate mounting hardware with the hinge side up. See Figures 2a and 2b for additional details. Leave approximately 18" of slack lead-in wire coiled inside the junction box. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.
- C. Junction Box Type A (or B or C). Install the Junction Box Type A near the edge of pavement and flush with the ground level (see Figure 3). Place roughly 18 inches of No. 57 aggregate underneath the junction box Type B to allow drainage. Extend the loop lead-in wires splice-free to the cabinet. Run the wire from the junction box Type A through the conduit at a minimum depth of 6 inches. Stub the conduit up into the junction box Type A from its base to accommodate the lead-in wires. Leave at least 2 feet of slack lead-in wire coiled inside the junction box Type A. The conduit fittings, backfilling, and aggregate shall be incidental to the junction box Type A. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.
- **D.** Cabinet Type G. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". Place a concrete foundation of appropriate size for mounting the cabinet. The cabinet shall be mounted on the concrete base such that the bottom of the cabinet is 27" above the ground. The door of the cabinet shall open away from traffic. Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 ¼" conduit to be stubbed out in the bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. A ¾" rigid steel

Inductance Loop and Piezoelectric Axle Sensor Installation Page 7 of 17

conduit shall be stubbed up into the cabinet and run 2 feet up the electrical service pole and terminated to a <sup>3</sup>/<sub>4</sub>" weatherhead. This conduit shall be run in the same ditch as the electrical service. If electrical service is not provided as an item in the contract, the <sup>3</sup>/<sub>4</sub>" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "<sup>3</sup>/<sub>4</sub> in. conduit end" (see Figure 8). A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

Leave at least 5 feet of slack lead-in wire in the cabinet. Include the following major items as incidental to the cost of the cabinet: concrete foundation, anchor rods, ground rod, #4 solid copper wire, bonding clamps, and caulking. The Division of Planning will supply additional harnesses and do final connections inside the cabinet. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

E. Install Base Mount Enclosure. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". For this project, a base mount Model 170 Controller Cabinet, without anchor bolts, will be State-furnished. The contractor shall construct each cabinet foundation as shown on the plans per the attached Figures 9a and 9b, "Base Mounted 170 Cabinet Detail", (including furnishing and installing anchor bolts). Contractor shall install the cabinet on the concrete base such that the doors of the cabinet open away from traffic (hinges are away from traffic), and shall make all field wiring connections to the sensors, electrical and telephone services (as applicable). Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 1/4" conduit to be stubbed out in the bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. Two 1" rigid steel conduits shall be stubbed up into the cabinet, one for electrical service and one for telephone service (whether installed at this time or in the future). They shall be run a minimum of 2 feet up the electrical service pole and/or telephone source and terminated to 1" weatherheads. These conduits shall be run in the same ditch if possible. If electrical service is not provided as an item in the contract, the 1" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "1 in. conduit end". A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

Leave at least 6 feet of slack sensor lead-in wire in the cabinet. Include the following major items as incidental to the cost of this bid item: concrete foundation, anchor rods and associated hardware, ground rod, #4 solid copper wire, bonding clamps, caulking, electrical material and connections (if applicable). The Division of Planning will supply the cabinet, additional harnesses and do final sensor connections inside the cabinet.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 8 of 17

Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or other sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

**F.** Galvanized Steel Cabinet. The contractor shall determine the amount of clearance required from the road to the cabinet for each specific station location. The "Roadside Design Guide", developed by the American Association of State Highway Officials (AASHTO), shall be used as a tool to determine roadside safety based on design and speed limit. The contractor and Planning shall discuss and resolve any conflicts in the Pre-Construction meeting that might arise from following the station descriptions of the Location Table.

Use terminal strips on the back plate with a minimum of eight terminals each and 7/16-inch spacing (center to center) to mount inside the cabinet in order to connect the lead-in wires to the cable assemblies. Use screw type terminal strips to accommodate wire with spade-tongue ends. Allow for at least 20 inches of slack lead-in wire in the cabinet before connecting them to the terminal strip. Wires connected to the terminal strips shall have insulated, solderless, spade tongue terminals of correct wire and stud size. Wires shall be labeled correctly. See Location Drawing and Wiring Table.

Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

- **G. Wood Post.** Set the treated-wood post 3 feet below the ground and place the backfill material in the hole, compacting until flush with the existing earth. Mount the cabinet to the post using ½" x 2 ½" galvanized lag bolts at the top and bottom of the cabinet. The base of the cabinet shall be 4 feet above ground level. Stub the rigid steel conduit up into the base of the cabinet. Affix the conduit to the post using two conduit straps, a maximum of 18" on-center, and ½" x 2 ½" galvanized lag bolts. Cabinet door shall open facing away from traffic (see Figure 7).
- **H. Conduit.** Rigid steel waterproofed conduit encasement shall be provided for all conductors where conductors run to a junction box or cabinet. All conduit installations shall conform to the provisions of the NEC, except where directed otherwise. Bonded slip joints will be permitted for joining rigid conduit to the junction box or cabinet. Where a standard coupling cannot be used, an approved threaded union coupling shall be used.

All conduit ends shall be reamed to remove burrs and sharp edges. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted with a rust inhibitive paint. Conduit bends shall have a radius of no less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans.

Conduit that will be subject to regular pressure from traffic shall be laid to a minimum depth of 24 inches below grade. Conduit that will not be subject to regular pressure from

Inductance Loop and Piezoelectric Axle Sensor Installation Page 9 of 17

traffic shall be laid to a minimum depth of 6 inches below grade. All conduit openings shall be waterproofed with a flexible, removable sealant, including those ending in junction boxes and cabinets. This shall be accomplished using duct seal, or plumber's putty, by working it around the wires and then extending it 1 inch into the end of the conduit. After the conduit has been installed and before the backfilling is started, the conduit installation shall be inspected and approved by the Engineer. In backfilling trenches, the backfill material shall be placed and compacted in lifts of 9 inches or less. Any area disturbed as a result of the contractor's operations shall be restored to the satisfaction of the Engineer.

- **I. Wiring.** All wiring shall conform to the provisions of the NEC unless otherwise shown on the plans. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing Figure 1 for sensor numbers to be placed on all lead-ins. All wiring shall be taken to a cabinet or junction box. Leave at least 2 feet of "slack" lead-in wire inside each Type B junction box and steel cabinet, a minimum of 4 feet of wire inside the Type G cabinet and a minimum of 6 feet of wire inside the base mounted Type 170 cabinet.
- **J. Splicing.** Sensor lead-in cable lengths for each sensor shall allow sufficient but not excessive slack for splicing connections. All splices shall conform to the provisions of the NEC unless otherwise shown on the plans. Loop lead-in wire splices to shielded pair cables shall be twisted and soldered. Other splices shall be twisted and soldered or made with mechanical connectors of a type approved by the Engineer. Splices for loop wire shall be protected by either heat shrink tubing or a double spiral wrapping of vinyl electrical tape. For splicing home-run coax cable to the sensor's lead-in cable, the same coax cable, supplied by the manufacturer, shall be used. For coax-cable splices, the contractor shall provide kits (3M Scotchcast 3832 Buried Service Wire Encapsulation Kit or equal) to protect them. All splices are to be made in junction boxes unless approved by a representative of the Division of Planning.
- **K. Loops.** A location table is furnished in the Supplemental Notes, along with an estimate of quantities, to display the approximate location for loop installation in the existing pavement. The contractor and a representative of Planning will verify the precise location on site. The contractor shall be careful to avoid expansion joints and pavement sections where potholes, cracks, or any other roadway flaws exist. This will not only facilitate installation of the equipment, but also will increase the accuracy and service life span of the sensors.

There shall be a minimum of 6 feet between loops in adjacent lanes for 12-foot wide lanes. Unless indicated otherwise, loops in the same lane shall be spaced 16 feet from leading edge to leading edge (see Figure 6). All loop dimensions shall be 6 feet by 6 feet square unless otherwise indicated by the Location Drawing. Center and mark each loop in the lane such that its sides are parallel and perpendicular to the direction of traffic. Make the saw-cut for the loop 1/4-inch wide and at a depth such that the top loop wire is

Inductance Loop and Piezoelectric Axle Sensor Installation Page 10 of 17

a minimum of 1 inch below the surface of rigid (PCC/Concrete) pavement or 3 inches below the surface of asphalt pavement. Drill a 1.5" hole at all four corners of the loop to prevent sharp bends in the wire (see Figure 4).

Make the saw-cut for the home run slot 1/4 inch wide. Since it may contain several leadin wires, the depth should be such that the top lead-in wire is a minimum of 1 inch below the surface of rigid (concrete) pavement or 3 inches below the surface of bituminous (asphalt) pavement. Depending on the number of road sensors at a particular site, the home run slot will gradually need to be cut deeper as you approach the shoulder in order to maintain the minimum depth for the top lead-in wire and directly enter the buried conduit (6 inch depth).

Clean the mud, debris, water, and loose particles from the slot, roadway and surrounding areas. A high-pressure washer shall be used to wash the area followed by clean (oil free) compressed air.

Measure out the appropriate length of loop lead-in wire to allow slack in the final cabinet or junction box. Insert the loop wire into the loop slot for four rotations (see Figure 5). Push the wire in with a wooden stick, such as a paint stir stick or other blunt wooden object. If the wire insulation is broken, apply heat shrink tubing or a double wrapping of vinyl electrical tape to protect from corrosion. Extend the loop lead-in wire splice-free to the junction box or cabinet. Exceptions to this shall be considered on a case-by-case basis and must be approved by the Engineer. If splices cannot be avoided, every effort shall be made to locate them in a junction box. If loop lead-in cable (Cable No. 14/1 Pair) is specified, loop wires shall be twisted and run to the nearest type Junction Box and the wires twisted and soldered to the lead-in cable. The lead-in cable shall then be run splice free to the cabinet ensuring that extra cable is left in each subsequent junction box that it may be run through as well as the cabinet. All wires and cables shall be labeled in each junction box and cabinet.

Twist each pair of loop lead-in wires, exclusive of shielded coax-cable, with three to five turns per foot before placement into the conduit, junction box, and cabinet. Do not twist different pairs of loop wire together. Once the loop wire is installed in the roadway, apply loop encapsulant by allowing the material to flow slowly into the saw-cut and settle until level with the road surface. Every attempt should be made to alleviate air pockets and low spaces should be refilled. Any excess loop encapsulant shall be cleaned from the roadway via squeegee, etc. to help alleviate tracking. The loop encapsulant shall be incidental to the bid item "Loop Saw Slot and Fill".

Loops shall be cut in the surface asphalt course. They shall not be installed between the intermediate and surface courses, unless approved by the Central Office, Division of Planning Equipment Branch.

All loop inductance readings shall be between 100 and 300 microhenries. The loop inductance between two loops in the same lane shall be within 20 microhenries of each other. Inductance loop conductors shall test free of shorts and unauthorized grounds.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 11 of 17

Upon completion of the project, all loops must pass an insulation resistance test of at least 100 million ohms to ground when tested with a 500 Volt direct current potential in a reasonably dry atmosphere between conductors and ground.

**L. Electrical Service.** A treated-wood service pole, per Section 820 of the Department's Current Edition Standard Specifications, with a 20-foot minimum length and a 6- to 12-inch diameter, or approved equal, is to be furnished by the Contractor. Install the electrical service pole adjacent to the cabinet at a depth of at least 4 feet while maintaining a 12-foot minimum clearance for the electrical service drop. Compact the backfill material to support the electrical service drop without leaning. Install an appropriate pole support guy wire and anchor if necessary. Install rigid conduit up the length of the pole with three separate insulated conductors (No. 4 copper wire) in the conduit and a weatherhead at the top.

Space the conduit straps 30 inches apart and leave 24 inches of cable for the drip loop. Install a meter-base and a disconnect panel with a 20-ampere circuit breaker inside. A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet. A manufactured weatherproof hub connector is required to connect the meter-base to the disconnect panel. Do not use service entrance cable inside the conduit. The conduit from the disconnect panel is required to be at a depth of 6 inches below grade. Install a 5/8-inch by 8-foot ground rod below the finished grade. Extend the ground wire through a separate hole in the disconnect panel and clamp to the ground rod. Install a 1" rigid conduit to 2 feet above ground level and install a weatherhead at the top opening. This conduit shall be run to and stubbed up into the Cabinet. The conduit shall be attached to the pole at a minimum of 2" from ground level and 2" from the weatherhead.

- M. Piezoelectric Sensor, Roadtrax BL Class I or Approved Equal. Determine where on the roadway the piezoelectric sensor will be installed. Roadway ruts shall not be in excess of 1/2 inch under a 4-foot straight edge. Install the piezoelectric sensor perpendicular to traffic. Locate the sensor in the lane as shown on the site detail sheet. Eleven-feet length sensors should be centered in the lane. The following is a typical step by step procedure for the installation of a piezoelectric sensor. Refer specifically to the manufacturer's current instructions provided with the sensor prior to installation.
- 1. Carefully mark the slot to be cut, perpendicular to the flow of traffic. Ensure that the sensors are properly positioned in the lane.
- 2. It is strongly recommended that a ¾" wide diamond blade be used for cutting the slot, or that blades be ganged together to get a single ¾ inch wide cut. The slot shall be wet cut to minimize damage to the road.
- 3. Cut a slot  $\frac{3}{4}$  inch wide  $(\pm 1/16")$  by 1" minimum deep. The slot should be 8" longer than the sensor (including the lead attachment). Drop the saw blade an extra  $\frac{1}{2}$ " down on both ends of the sensor. The lead out should be centered on the slot.
- 4. Cut the home-run slot for the coax-cable ¼-inch wide and at a depth so that the cable is a minimum of 1 inch below the road surface in rigid pavement (concrete) or 3 inches below the road surface in bituminous (asphalt) pavement.
- 5. Sweep and wash out all debris left in the slot and ensure it is clean and dry.

#### Inductance Loop and Piezoelectric Axle Sensor Installation Page 12 of 17

- 6. Use high pressure water, or water and oil-free compressed air to clean <u>ALL</u> foreign and loose matter out of the slot and within 1 foot on all sides of the slot.
- 7. Totally remove excess water and debris from roadway and shoulder area. Debris should be disposed of properly.
- 8. Carefully dry the slot, and within 1 foot on all sides of the slot, using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
- 9. Place a strip of duct tape on the pavement along the length of both sides of the sensor slot. Place the 2-4" wide duct tape 1/8" away from the slot.
- 10. Remove BL sensor from the box. Visually inspect each sensor to ensure it is straight without any twists or curls. Check lead attachment and passive cable for cuts, gaps, cracks and/or bare wire. Verify the correct sensor (type and length) is being installed by checking the data sheet. Verify there is sufficient cable to reach the cabinet.
- 11. Test the sensor for Capacitance, Dissipation Factor and Resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within ±20% of the enclosed data sheet. Resistance (using the 20M setting) should be infinite. Record the sensor serial number and the test results. This information should be stored in the counter cabinet and/or returned to KYTC Planning personnel.
- 12. Lay the sensor on the tape next to the slot. Ensure that the sensor is straight and flat. Ensure that you are wearing clean protective latex (or equivalent) gloves at all times when handling sensors.
- 13. Clean sensor with steel wool or emery pad. Wipe down with alcohol and clean lint-free cloth.
- 14. Place the installation bracket clips on the sensor, about every 6" for the length of the sensor.
- 15. Bend the end of the sensor downward at a 30° angle. Bend the lead attachment end down at a 15° angle and then 15° back up until level (forming a lazy Z)
- 16. Place the sensor in the slot, with the brass element 3/8" below the road surface along the entire length. The end of the sensor should be at least 2" from the end of the slot and the tip should not touch the bottom of the slot. The top of the plastic installation bracket clips should be 1/8" below the surface of the road. The lead attachment should also not touch the bottom or sides of the slot. Ensure the ends of the sensors are pushed down sufficiently per the manufacturer's instructions.
- 17. Visually inspect the length of the sensor to ensure it is at uniform depth along its length and it is level (not twisted, canted or bent).
- 18. Block off the ends of the slot using plumbers putty. Ensure that there are adequate "dams" at both ends so that the encapsulation material does not flow out. On the passive cable end, the dam should be about 3-5" past the end of the lead attachment area.
- 19. The encapsulation material should be placed full depth, overfilled, and allowed to cure 10 minutes before shaving level with the surface. Ensure it fills around and underneath the sensor completely and there is not a trough on top.
- 20. Remove the tape on the sides of the sensor as soon as the adhesive starts to cure.
- 21. Carefully remove all the plumbers putty from ends of the sensor.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 13 of 17

- 22. Route the lead in cable through the slot cut for it, and cover with approved loop sealant.
- 23. After the encapsulant has hardened, grind the top of the installation using an angle grinder. The profile should be flush with the road surface or with a slight, 1/16" mound. There shall be no concave portion to the mound.
- 24. Clean up the site. Sealant curing time varies with temperature and humidity. Contractor shall ensure that the complete curing of the encapsulation material has taken place prior to subjecting the sensors to traffic.

After the installation is complete, the minimum output voltages of each piezoelectric sensor shall meet the following: 1.5 Volts (peak) for a 10,000 pound axle and 200 millivolts (peak) for a car axle. The piezoelectric sensor lead-in cable is part of the sensor and can be ordered in different lengths (100' standard). Piezoelectric sensor lead-in cable shall not be spliced.

- **N. Cleanup and Restoration.** The contractor will be responsible for all damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. This includes any filling of ruts and leveling ground appropriately. Clean the site and dispose of all waste and debris off the right-of-way at sites obtained by the contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mixture No. I per Section 212.03.03 Permanent Seeding and Protection of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current Edition.
- **O. 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 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. The Department will not honor any claims resulting from site conditions.
- **P. Property Damage.** The contractor will be responsible for all damage to public and/or private property resulting from his work.
- **Q. Caution.** Information shown on the plans and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.
- **R.** Utility Clearance. It is not anticipated that 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.

Contract ID: 091300 Page 56 of 137

Inductance Loop and Piezoelectric Axle Sensor Installation Page 14 of 17

**S. Site Inspections**. All sensors are to be tested by a member of the Central Office Division of Planning equipment staff after the installation is complete to verify that the station is operating properly. Tests shall demonstrate that the system operates in accordance with the plans and specifications. Inductance loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megaohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground. If the sensors do not meet the specifications and/or KYTC's traffic recording equipment does not perform properly because of an improperly functioning sensor, the contractor shall be responsible for the replacement of the faulty sensor(s), as soon as practicable at their total cost.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 15 of 17

#### IV. BID NOTES AND METHOD OF MEASUREMENT FOR PAYMENT

Only the bid items listed will be measured for payment. All other items required to complete the vehicle detection installation shall be incidental to the other items of work. Payment at the contract unit price shall be full compensation for all materials, labor, equipment and incidentals to furnish and install these items.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Junction Box Type 6" x 6" x 4" (or Type 10" x 8" x 4" if noted). Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes connectors, splice sleeves, conduit fittings, mounting materials and any other items required to complete this part of the installation. Incidental to this item is furnishing and installing any specified post (wood, channel, metal, etc.) as required for the installation.
- **C. Junction Box Type A (B or C).** Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes concrete (if required), #57 aggregate, conduit fittings and backfilling around the unit.
- **D.** Cabinet Type G (NEMA-3R). Cabinet (each) shall include furnishing and installing a Type G cabinet as specified. This item shall include constructing the concrete base or mounting cabinet to pole, installation of duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, all internal shelving, brackets, any necessary pole mounting hardware and electrical inspection fees.
- **E. Install Base Mount Enclosure.** Install base mount enclosure (each) shall include installing a State-furnished cabinet or enclosure as specified. This item shall include all materials and labor for constructing the concrete base (or, if specified, mounting cabinet to pole), installation of the cabinet, duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, telephone service conduits from the cabinet to the telephone company disconnect box, all internal shelving, brackets, anchor bolts, any necessary pole mounting hardware and electrical inspection fees if applicable.
- **F.** Galvanized Steel Cabinet. Cabinet (each) shall include furnishing and installing a galvanized steel cabinet and post(s) as specified on the drawing. This item shall include mounting the cabinet to post and the connection of all detectors. Incidental to this item shall be furnishing and installing conductors, conduit, ground rods, any necessary pole mounting hardware and any electrical inspection fees.
- **G. Wood Post.** Wood post (each) shall include furnishing and installing a wood post as specified. This item includes excavation, concrete (if required), and backfilling around the unit.

Inductance Loop and Piezoelectric Axle Sensor Installation Page 16 of 17

- **H. Conduit.** Conduit shall include furnishing and installing specified conduit in accordance with specifications. This item includes conduit fittings, bodies, boxes, expansion joints, couplings, duct seal, bonding straps and any other necessary hardware. Conduit will be measured in linear feet.
- **I.** Wire (or Cable). Wire or cable shall include furnishing and installing specified wire or cable within conduit, saw slot, or overhead as indicated on the detail sheets. This can include, but is not limited to: loop wire, Cable No. 14/1 Pair, etc. Incidental to this item shall be the labeling of all wires and cables in each junction box, cabinet and splice box; furnishing and installing of splice boots, cable rings or other hardware required for installing cable. Loop wire and cable will be measured in linear feet.
- **J.** Loop Saw Slot and Fill. Loop saw slot and fill shall include sawing, cleaning and filling saw slots for induction loops, lead-in wires, etc. with loop sealant or specified approved material. Sawing and filling slot for wire will be measured in linear feet.
- **K.** Trenching and Backfilling. Trenching and backfilling shall include excavation, backfilling, temporary erosion control, seeding, protection and restoration of disturbed areas to original condition. This item includes concrete, asphalt or approved replacement material for sidewalks, curbs, roadways, etc. (if required). Trenching and backfilling will be measured in linear feet.
- **L. Electrical Service.** Electrical services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing an electrical service, which has passed all required inspections. This will be measured in individual units each.
- **M. Telephone Service.** Telephone services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing a telephone service, which has passed all required inspections. This will be measured in individual units each.
- **N. Piezoelectric Sensor** or Approved Equal. Piezoelectric sensor (each) shall include furnishing and installing a Class I Piezoelectric Sensor in accordance with the specifications. Lead-in wire, splice kits, encapsulation material, grout, testing, and accessories shall be incidental to this bid item.

#### REFERENCES

- 1. Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, Current Edition, and Supplemental Specifications.
- 2. National Electrical Code (NEC), latest edition.
- 3. International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition.
- 4. FHWA Manual of Uniform Traffic Control Devices, latest edition.
- 5. "Roadside Design Guide", developed in 1996 by the American Association of State Highway and Transportation Officials (AASHTO).
- 6. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

TTC-115	Lane Closure Case I
TTC-135	Shoulder Closure
TTD-100	Miscellaneous Traffic Control Devices (sheet 1)
TTD-105	Miscellaneous Traffic Control Devices (sheet 2)
TTD-110	Post Splicing Detail
TTD-115	Flashing Arrow

7. Kentucky Department of Highways Sepia Drawings:

Silt Fence

<u>Updated: April 11, 2006</u>

## GENERAL NOTES JEFFERSON COUNTY – I-264 TRAFFIC DATA COLLECTION STATION A01 – MP 22.65

The Division of Planning needs to re-establish a Traffic Data Collection Station within a section of a construction project in Jefferson County on I-264. Planning is requesting to have service replaced at a site with an approximate mile-point of 22.65, with the installation of traffic loop and piezo sensors in the newly paved roadway surface. Exact location will be determined in the field.

Contractor shall install two (2) loop sensors and two (2) piezo in each lane. All wires shall be run splice free through Type-A junction boxes and directly into the 20"x20" cabinets as shown in Figure 1. All new materials shall be used in this reconstruction.

Therefore, the contractor will install a total of eight (8) loop sensors and eight (8) piezos in the roadway. Installation shall be coordinated with and approved by appropriate Division of Planning staff. Reference "Special Notes for Installation of Traffic Counting Inductance Loops and Axle Sensors" for materials, construction and installation details and "Standard Details for Installation of Traffic Counting Inductance Loops and Sensors". Also see the Standard Details for Installation of Traffic Counting Inductance Loops and Axle Sensors, Location Drawings, Location Table and Estimate of Quantities, in regard to this specific project.

#### NOTE:

The Special Notes for Traffic Counting Inductance Loops and Axle Sensors are generic.

Only the sections that pertain to the specified location and the bid items listed in this summary are applicable.

#### SPECIAL NOTES:

The location listed in the proposal is approximate only. Contractor will need to contact the utility companies to verify locations to underground service prior to beginning work. The Engineer, in coordination with the Central Office Division of Planning, will designate the exact location at the time of construction.

Notify the Central Office Division of Planning (502-564-7183, Equipment Management Team) a minimum of 14 days prior to beginning work in order for them to have the option to be present during sensor installation. The Engineer will contact and maintain liaison with the District Planning Engineer and the Central Office Division of Planning in order to coordinate the work.

#### LOCATION TABLE JEFFERSON COUNTY – I-264

#### TRAFFIC DATA COLLECTION STATION A01 MP 22.65

STATION	DESCRIPTION	MP BEGIN	LOCATION	MP END	LANES	PIEZOS	LOOPS	PROJECT MP LIMITS
A01	2 loops, 2 piezo/lane	22.282	22.65	22.927	4	8	8	22.61 – 22.97

**TRAFFIC DATA COLLECTION STATION A01** is located on I-264 at approximately the 22.65 mile-point (MP) with the final location confirmed by appropriate Division of Planning staff. This station has four (4) lanes of traffic, two (2) Eastbound lanes (loops#1-4) and (piezos 1-4) and two (2) Westbound lanes (loops #1-4) and (piezos 1-4). Each lane will have a loop-piezo-loop-piezo combination of sensors installed as depicted in Figure 1. The contractor shall install the sensors in each lane and run their lead-ins splice-free through the Type-A junction boxes and into the 20"x20" cabinets as depicted in Figure 1. All new materials shall be utilized in the construction of this project.

\*Piezoelectric Sensor includes eight Class I (6') sensors. Note that the sensors should be ordered with 100-foot lead-ins unless the site requires longer lead-in lengths. (up to 500' available).

#### **ESTIMATE OF QUANTITIES**

CODE	DESCRIPTION	UNIT	QUANTITY
4793	Conduit 1-1/4 inch Rigid	LINEAR FEET	58
4795	Conduit 2 inch Rigid	LINEAR FEET	20
4820	Trenching And Backfilling	LINEAR FEET	68
4829	Piezoelectric Sensor	EACH	8
4830	Loop Wire	LINEAR FEET	1336
4895	Loop Saw Slot And Fill	LINEAR FEET	434
20359EC	20"x20" Galv. Steel Cabinet	EACH	2
20360ES818	4"x4" Wood Post	EACH	2
20391ES835	Junction Box Type-A	EACH	4

Contractor is responsible for the above materials listing. Specifications on materials and installation instructions for loops are found in the Special Notes for Installation of Traffic Counting Inductance Loops and Axle Sensors.

#### TRAFFIC CONTROL PLAN JEFFERSON COUNTY I-264 ITEM NO. 5-2036.00

### THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

#### TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2008 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic including lane closures will be paid at the lump sum bid price "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings. Do NOT use Cones for lane closures or shoulder closures.

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.

Reduce the speed limit in work areas to 45 miles per hour and establish double fines for work zone speeding violations. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs shall be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs shall be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for "SIGNS". Any relocation or covering of the signs will be incidental to "Maintain and Control Traffic."

**This project has been classified as Significant.** A Transportation Management Plan (TMP) is available for review.

If the Contractor desires to deviate from the traffic control scheme outlined here or elsewhere in the proposal, he shall prepare an alternate plan and present it in writing to the Engineer. This alternate plan can be used only after the review and approval of the Divisions of Traffic, Highway Design, and Construction. Any major change or alternate Temporary Traffic Control Plan must submit to the same level of traffic impact analysis as was required for the initial TMP. The Contractor will not be permitted to implement any part of his alternate plan or revision until he has received written approval from the Cabinet. All major revisions to the Temporary Traffic Control Plan shall be reviewed by the initial signers to the subject Plan before any revision is implemented.

Traffic Control Plan I 264 Page 2 of 6

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

Maintain 2 lanes of traffic in each direction of traffic during the following days or as directed by the engineer:

The following hours are defined as High Volume Hours. Maintain all lanes of traffic in each direction of travel during these hours throughout the project:

Traffic may be reduced to one lane all other times.

Damage rates for failure to maintain the required number of lanes during the time periods listed are specified in Special Note for Fixed Completion Date and Liquidated Damages.

Use only one lane closure in each direction of travel at the same time during the daylight hours specified. The clear lane width will be 12 feet; however, make provisions for the passage of wide loads up to 16' in width. Use a lane closure all times when work is performed in the lane or adjacent shoulder.

#### PHASE I

Close one lane of two-lane ramps and half of one-lane ramps. Mill 1 inch off the lane and 1 inch off the shoulder for two feet from the lane edge. Pave the lane and milled portion of shoulder with 1.25 inches of asphalt surface. In areas requiring guardrail, remove and replace the rail throughout the project. Saw the shoulder rumble strips throughout the project.

#### PHASE II

Switch traffic to other lane or other half of ramps. Mill 1 inch off the lane and 1 inch off the shoulder for two feet from the lane edge. Pave the lane and milled portion of shoulder with 1.25 inches of asphalt surface. In areas requiring guardrail, remove and replace the rail throughout the project. Saw the shoulder rumble strips throughout the project.

#### LANE CLOSURES

Limit the lengths of lane closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Contrary to section 112, lane closures will not be measured for payment. Lane closures shall be incidental to Maintain and Control Traffic.

#### **RAMPS**

Maintain at least one lane of traffic open at all ramps in the project limits at all times. Partial

Contract ID: 091300 Page 64 of 137

Traffic Control Plan I 264 Page 3 of 6

width work can be done on the ramps with traffic. Maintain at least a clear lane width of 12 feet; however, make provisions for the passage of wide loads up to 16' in width.

#### **SIGNS**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted LEFT/RIGHT LANE CLOSED 1 MILE, LEFT/RIGHT LANE CLOSED 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE, and SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

A quantity of signs has been included for "Roadwork Ahead" signs on entrance ramps, and extra Double Fine signs and Speed Limit signs between interchanges to be paid only once no matter how many times they are moved or relocated.

The Contractor shall be responsible for removing and storing the existing sheet signs, which may interfere with the progression of work throughout the limits of the project. Any signs damaged shall be replaced at the Contractor's expense. Payment for this is incidental to the bid item "MAINTAIN AND CONTROL TRAFFIC."

#### **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 excavated areas 4" or greater in depth within 5' of traffic will be measured and paid as each. according to Section 112.04.00 except: the Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract and individual barricades will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged barricades directed by the Engineer to be replaced due to poor condition or reflectivity will not be measured for payment.

#### PORTABLE CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs in advance of or within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions, or if more than one lane closure is in place in the same direction of travel, provide additional

Contract ID: 091300 Page 65 of 137

Traffic Control Plan I 264 Page 4 of 6

portable changeable message signs. Place portable changeable message signs one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional portable changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The portable changeable message signs will be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the Portable Changeable Message Sign immediately. The Department WILL NOT take possession of the signs upon completion of the work.

#### TRUCK MOUNTED ATTENUATORS

Furnish and install Truck Mounted Attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits in accordance with the MUTCD. All details of the TMA installations will be approved by the Engineer. TMA will be considered incidental to "MAINTAIN AND CONTROL TRAFFIC". The Department **WILL NOT** take possession of the TMAs upon completion of the work.

#### CONTRACTOR'S AND CONTRACTOR'S EMPLOYEE'S VEHICLES

The contractor will be allowed to access the project and cross the median provided proper lane closures and flagmen are utilized at the entry and exit locations.

#### **PAVEMENT MARKINGS**

If lane closures are in place during nighttime hours, remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses for traffic control purposes, but his work will be incidental to "Maintain and Control Traffic".

Place temporary and permanent striping in accordance with Section 112 and 713, except that:

- 1. Temporary and permanent striping will be 6" in width;
- 2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used; however removable tape will be measured and paid as Pavement Striping-Temporary Paint 6";
- 3. Edge lines will be required for temporary striping:
- 4. Existing, temporary, or permanent striping will be in place before a lane is

Contract ID: 091300 Page 66 of 137

Traffic Control Plan I 264 Page 5 of 6

opened to traffic;

- 5. Place permanent striping on bridge decks and pavement within the project limits; and
- 6. Permanent striping will be Paint.

#### 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". Warning signs (MUTCD W8-11 or W8-9A) shall be placed in advance of and at 1500' intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. All transverse transitions between resurfaced and unresurfaced areas which traffic may cross shall be wedged with asphalt mixture for leveling and wedging. The wedges shall be removed 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" – During construction, no protection required. After resurfacing wedge drop-offs greater than 1 inch on inside (median) mainline shoulder and ramp shoulder with compacted cuttings from milling operations as shown on typical sections

2" to 4" –Place plastic drums, vertical panels, or barricades every 50 feet. Cones will not be allowed in place of plastic drums, panels, and barricades. Place Type III barricade in front of open milling trench facing oncoming traffic. Inlay milled areas with asphalt base and surface the same day it as milled. Wedge with cuttings from trench 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.

4" or Greater – Protect excavated areas 4" or greater within 10' of traffic by placing Type III Barricades facing oncoming traffic. Place plastic drums, vertical panels, or barricades at 50' spacing throughout the drop-off area. Wedge with DGA or cuttings from excavation or milling with a 1:1 slope or flatter in daylight hours or 3:1 slope or flatter during nighttime hours when work is not active in the drop-off area.

#### TRAFFIC COORDINATOR

Contractor shall designate an employee to as Traffic Coordinator. The Traffic Coordinator will inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

Contract ID: 091300 Page 67 of 137

Traffic Control Plan I 264 Page 6 of 6

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate variable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

#### **COORDINATION OF WORK**

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

#### Right-of-Way Certification Form

X Federal Funded

X Original

□ State Funded

□ Re-Certification

This form must be completed and submitted to FHWA with the PS&E package for federal-aid funded Interstate, Appalachia, and Mega projects. This form shall also be submitted to FHWA for all federal-aid projects that fall under conditions No. 2 & 3 outlined elsewhere in this form. For all other federal-aid projects, this form shall be completed and retained in the KYTC project file.

Date: April 27, 2009

Project #:

Item #: 05-2036.00

County: Jefferson Federal#: IM

Description of Project: Mill 1" thin overlay on I-264

EB and WB from MP 22.61 to I-71 (MP 22.97)

Letting Date: 12-Jun-2009

#### Projects that require NO new or additional right-of-way acquisitions and/or relocations

X The proposed transportation improvement will be built within the existing rights-of-way and there are no properties to be acquired, individuals and families ("relocatees") to be relocated, or improvements to be removed as part of this project.

#### Projects that require new or additional right-of-way acquisitions and/or relocations

- Per 23 CFR 635.309, the KYTC hereby certify that all relocates have been relocated decent, safe, and sanitary housing or that KYTC has made available to relocates adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administration of the Highway Relocation Assistance Program and that at least one of the following three conditions has been met. (Check those that apply)
- 1. All necessary rights-of-way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish these improvements and enter all land. Fair market value has been paid or deposited with the court.
- 2. Although all necessary rights-of—way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Trial or appeal of some parcels may be pending in court and on other parcels full legal possession has not been obtained, but an interlocutory judgment has been granted, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish these improvements. Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to start of construction. (See note.)

#### Right - of - Way Certification Form

Project #: Item #: 05-2036.00

County: Jefferson Federal#: IM

Description of Project: Mill 1" thin overlay on I-264 EB and WB from

MP 22.61 to I-71 (MP 22.97)

Letting Date: 12-Jun-2009

Note: The KYTC shall re-submit a right-of-way re-certification form for this project prior to the start of construction (Notice to proceed), verifying that fair market value for all parcels has been paid or deposited with the court.

3. The acquisition or right of company and use of 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 physical construction 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 at the start of construction. KYTC will fully meet requirements outline in 23 CFR 309(c) (3) and 49 CFR 102(j) and will expedite completion of all acquisitions, relocations, and full payments after construction starts. 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 consideration and approval. (see note.)

Note: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to construction of projects on this basis shall be the exception and never become rule. In all FHWA-approved cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition, payment for all affected parcels, and the relocation of all relocates promptly 30 days after start of construction.

Approved:	BRIAN MEADE Printed Name	Brian Meade, PEApproved	District ROW Supervisor
Approved:	Ralph Divine		Director of ROW & Utilities or Designee

Approved: Gilberto De Lew

5/4/09 FHWA, Right-of-Way Officer

#### Right-of-Way Certification Form

Project #: Item #: 0  Letting D		5.00 <b>2-Jun-2009</b>		County: Jefferson Federal#: IM Description of Project: Mill 1" thin overlay on I-164 EB and WB From MP 22.61 to I-71 (MP 22.97)					
This proje relocated,	ect has as wel		otal number of parcels to be otal number of businesses to b		_ total number of individu	al of families to be			
Pa th Pa (I	rcels la courte courte la	nave been acquirt (Type 1 Certi have not been and below for each have been acquirt, and they can FHWA approva	by a signed fee simple deed an red through condemnation and fication) acquired at this time but can a parcel) (Type 2 Certification red or have a "right of entry" not be re-certified prior to cont. (Type 3 only) been relocated from all parcels	d IOJ granted by the cour be re-certified as acquir n) but the fair market value astruction. (These parcels	ed prior to notice to proce has not been paid or has not require and explanation be	ed for construction. not been posted with			
Pare	cel#	Name/Station	Explanation for delayed acq Relocation, or delayed paym value		Proposed date of Payment or of relocation				
				·					
					·				
			-			·			
		There are0_ There are0_	billboards and/or 0 o water or monitoring wells	cemeteries involved on th on parcels and	is project. All	,			

Contract ID: 091300 Page 71 of 137

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

JEFFERSON COUNTY Mill 1" Thin Overlay on I-264 EB & WB from MP 22.61 to I-71 at MP 22.97 Item No. 5-2036.00

#### <u>SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES</u>

Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities. If conflicts do arise, it is the responsibility of the contractor to verify the location of the existing utilities and to arrive at appropriate resolutions with the Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The Kentucky Transportation Cabinet makes no guarantees regarding: the existence of utilities, the location of utilities, the utility companies in the project scope, or the potential for conflicts encountered during construction. The location of utilities provided herein has been furnished by the facility owners and/or by reviewing record drawings and may not be accurate. It will be the roadway contractor's responsibility to locate utilities before excavating by calling the various utility owners and by examining any supplemental information supplied by the Cabinet. If necessary, the roadway contractor shall determine the exact location and elevation of utilities by hand digging to expose utilities before excavating in the area of a utility. The cost for repair and any other associated costs for any damage to utilities caused by the roadway contractor's operations shall be borne by the roadway contractor.

The contractor is advised to contact the "BUD" one-call system; 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.

## KENTUCKY TRANSPORTATION CABINET COMMUNICATING ALL PROMISES (CAP)

### JEFFERSON COUNTY 5-2036.00

(NO CAPS INVOLVED IN PROJECT)

#### I-264 Item No. 5-2036.00

#### JEFFERSON COUNTY PAVING SUMMARY

Ramp	Begin Station	End Station	Total Length	Lane Width	ASPH PAVE MILLING & TEXTURING (Driving Lanes + 2 feet into Shoulders)  2677		PG76-22 (D + 2 feet into	SURF 0.38A riving lanes shoulders)
					Inches	Tons	Inches	Ton
W-E	590+00	617+00	2,700	24	1.00	462	1.25	578
3	18+50	27+00	850	16	1.00	104	1.25	130
1	0+00	5+00	500	16	1.00	61	1.25	76
E-W	596+00	615+00	1,900	24	1.00	325	1.25	406
Project Totals					952		1190	

#### I-264 ITEM NO. 5-2036.00

#### JEFFERSON COUNTY GUARDRAIL SUMMARY

NUMBER FROM LOCATION							INSIDE/	INSIDE/	INSIDE/	BEGIN		STEEL "W" BEAM GUARDRAIL	GUARDRAIL END TREATMENT	BRIDGE END CONN. TY. A	EMB IN	Remove	Remarks
	RAMP		STA	END STA	SF	1	1										
MAP *					21802EN**	2367	2363	2230	2381								
					LINEAR FEET	EAC	Н	CY YD	LIN FT								
1	E-W	OUTSIDE	596+00	599+00	250.0	1	1	5	250.0	Replace rail. Add 50 ft of length. Replace existing end treatment with TY 1.							
2	3	INSIDE	28+00	28+50		1		5	50.0	Replace in End Treatment in Existing Location. Replace existing end treatment with TY 1.							
3	W-E	INSIDE	593+50	594+00	50.0	1		5	100.0	Replace in Existing Location. Replace existing end treatment with TY 1.							
	Tot	als			300.0	3.0	1.0	15.0	400.0								

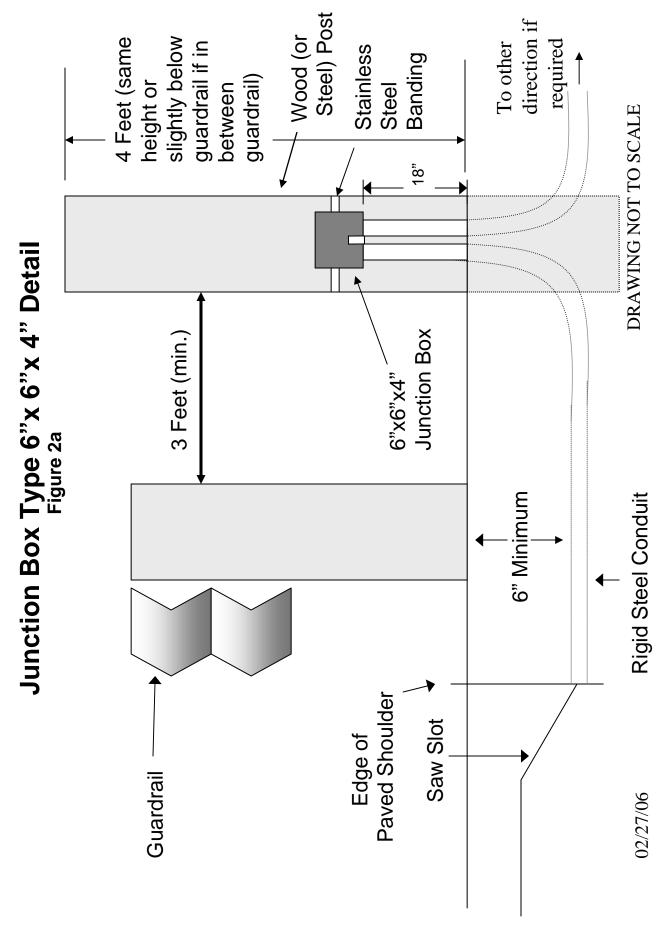
 $<sup>^{\</sup>star}$  Number corresponds with location marked with  $^{\star}$  and a number on the Location Map.

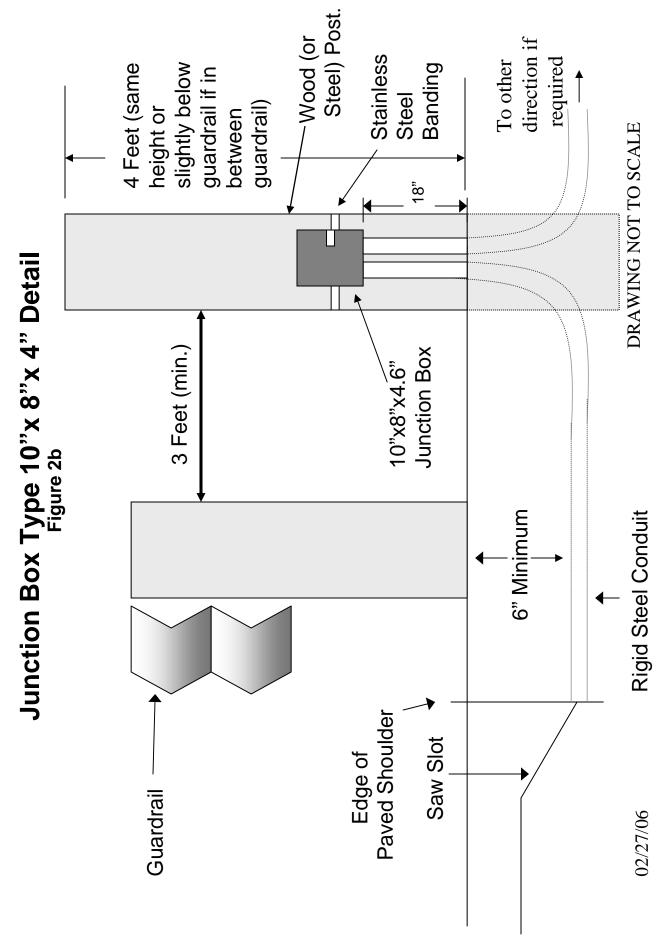
 $<sup>^{\</sup>star\star}$  Contrary to the Standard Drawing, guardrail posts shall be 7 feet in length.

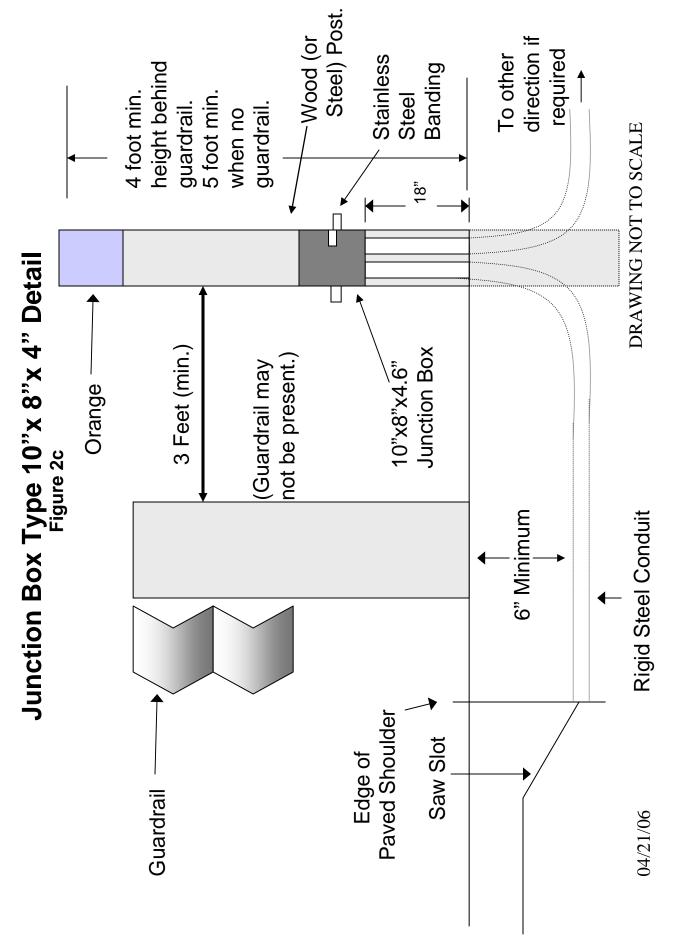
# DIVISION OF PLANNING

# STANDARD DETAILS FOR INSTALLATION OF TRAFFIC COUNTING INDUCTANCE **LOOPS AND AXLE SENSORS**

# DRAWINGS ARE NOT TO SCALE

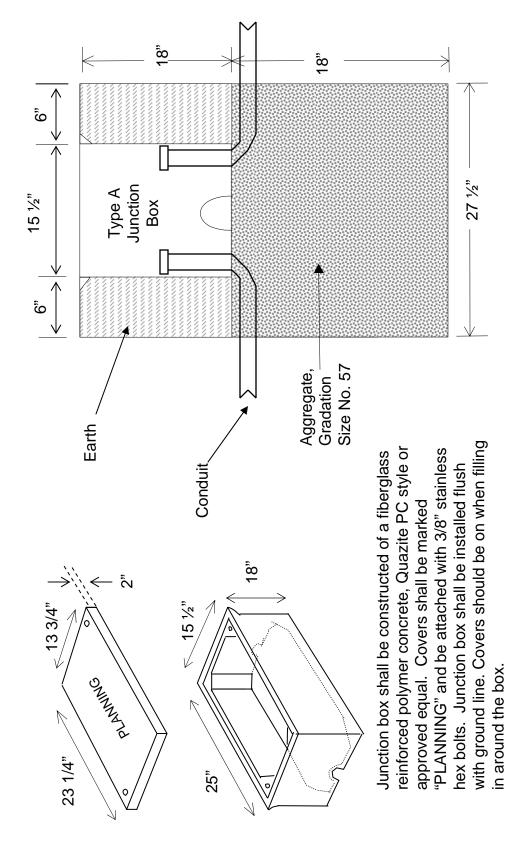






# Junction Box Type A Installation

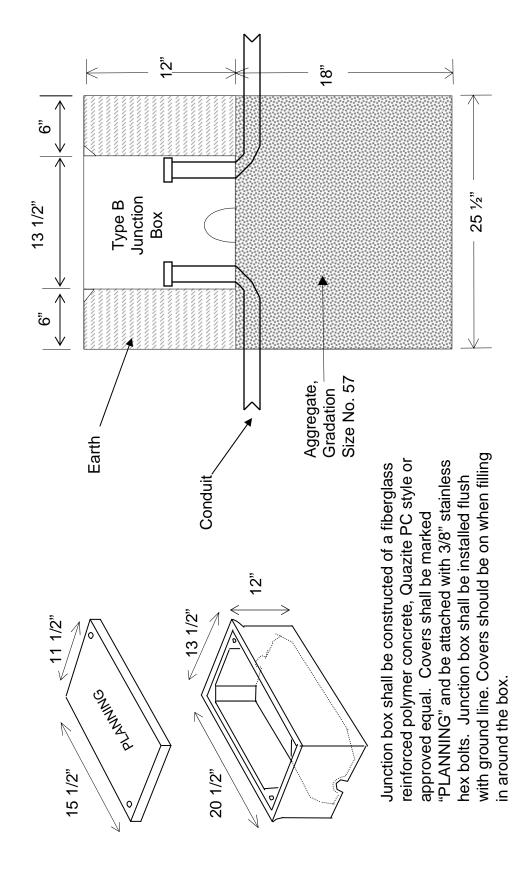
Figure 3a



DRAWING NOT TO SCALE

# Junction Box Type B Installation

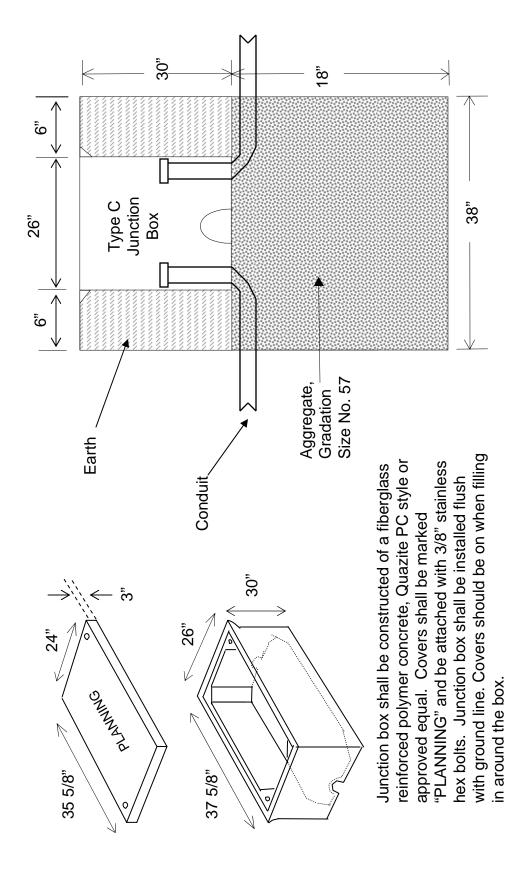
Figure 3b



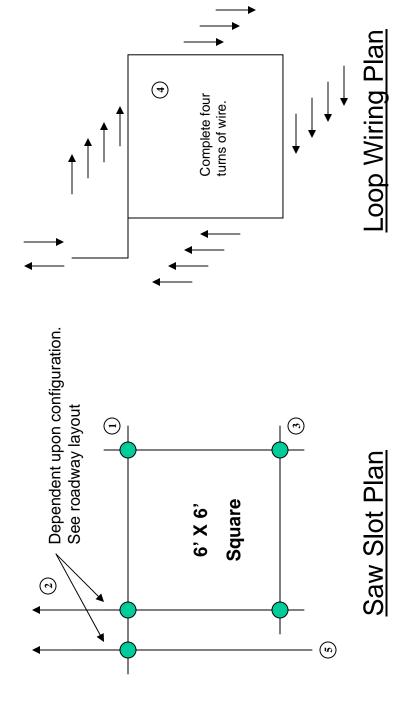
7/23/06

DRAWING NOT TO SCALE

# Junction Box Type C Installation Figure 3c



# Loop Installation Instructions Loop Installation in Existing Roadways Figure 4



Notes:

(1) Overlap cuts so that slots are full depth at corners.

② Configuration is dependent upon loop layout.

(3) Drill 1.5" hole in each corner to prevent sharp bends in the wire.

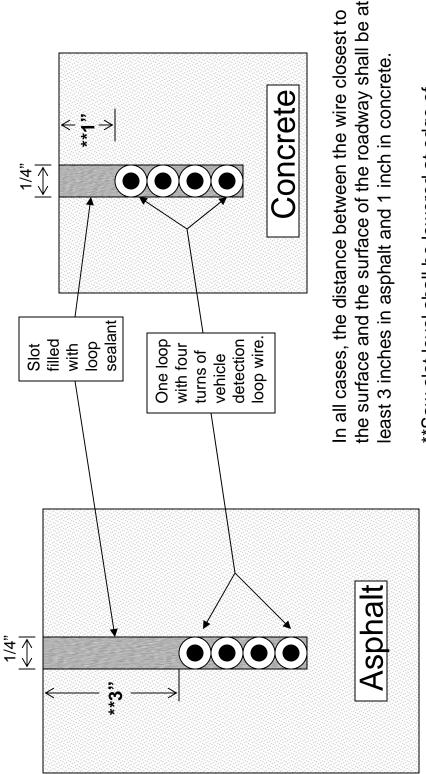
Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire. 4

The distance between adjacent loops is 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide. (v)

04/12/05

# Loop Installation in Existing Roadway

Figure 5

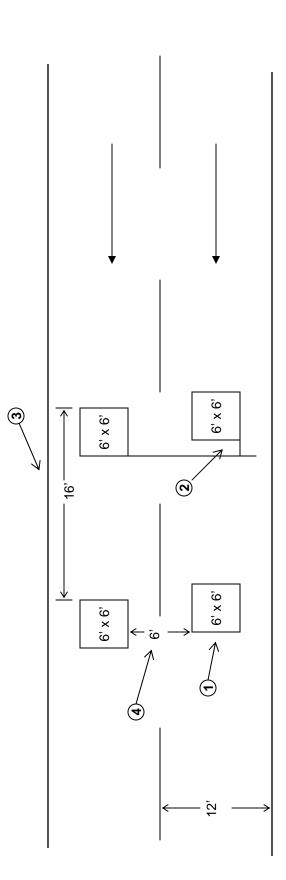


\*\*Saw slot level shall be lowered at edge of

roadway to meet the conduit level.

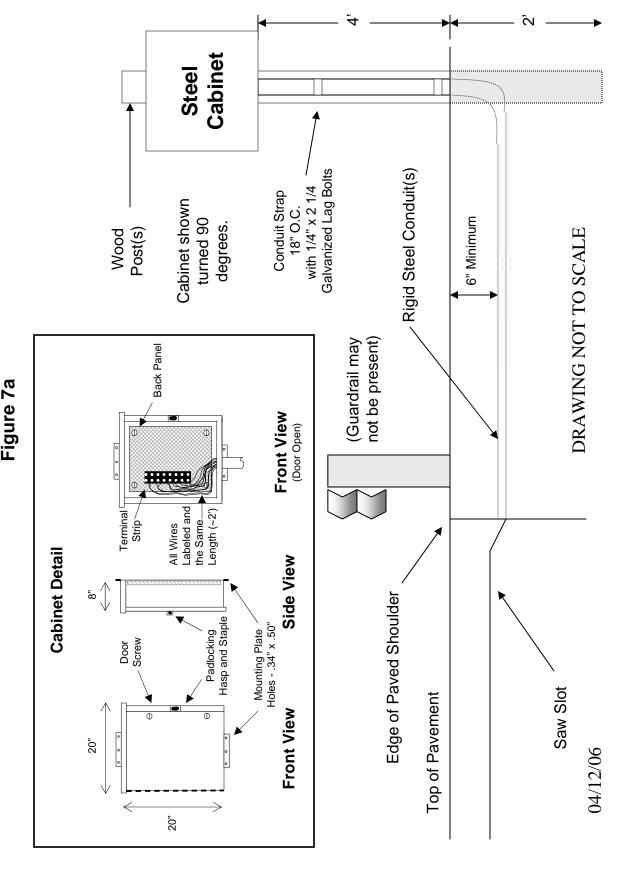
# **Loop Characteristics**

Figure 6

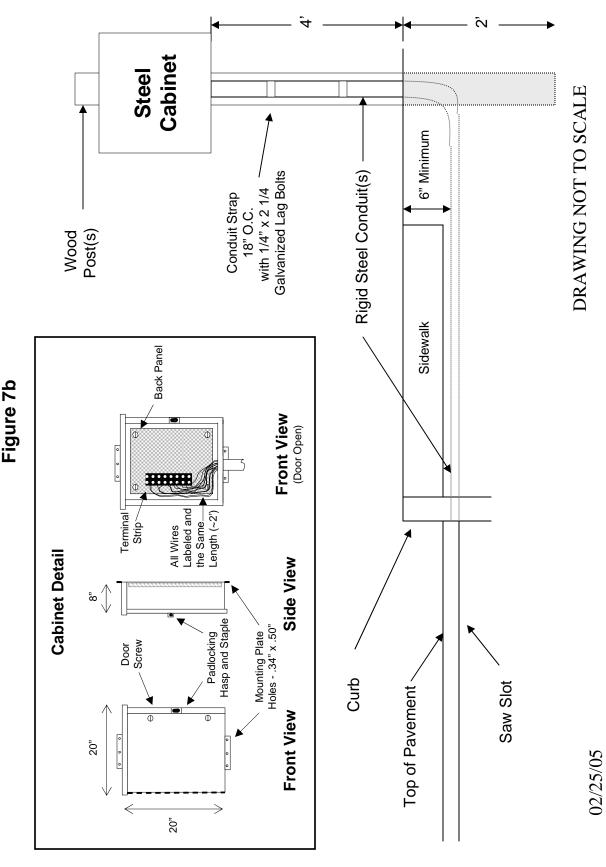


- Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire. Minimum 12" between loop and lead-ins. Lead-ins should be on the trailing edge of the loop. **⊘** 
  - If two loops are installed in a lane, space loops 16' from leading edge to leading edge unless denoted otherwise. (e)
    - This distance is typically 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide.

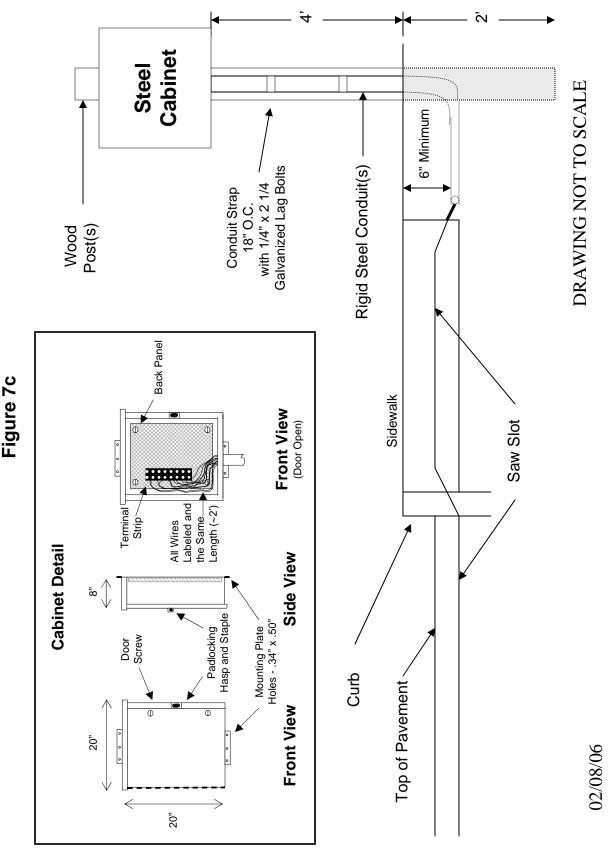
**Galvanized Steel Cabinet and Post Installation** 



**Galvanized Steel Cabinet and Post Installation** 



**Galvanized Steel Cabinet and Post Installation** 



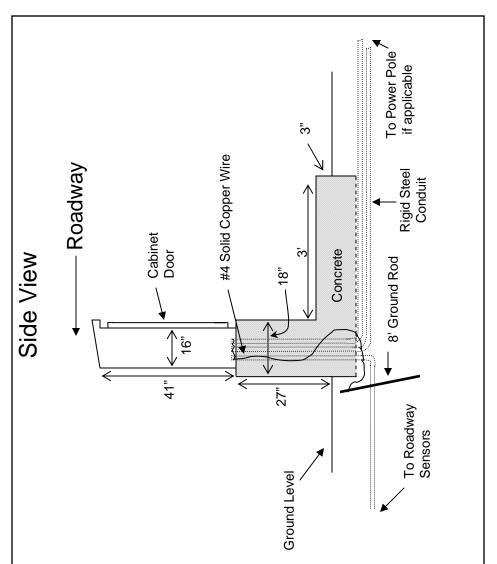
## Cabinet Type G Figure 8

**Front View** 

25"

Cabinet

11,



Ground Level

Concrete

27"

30,,,

DRAWING NOT TO SCALE

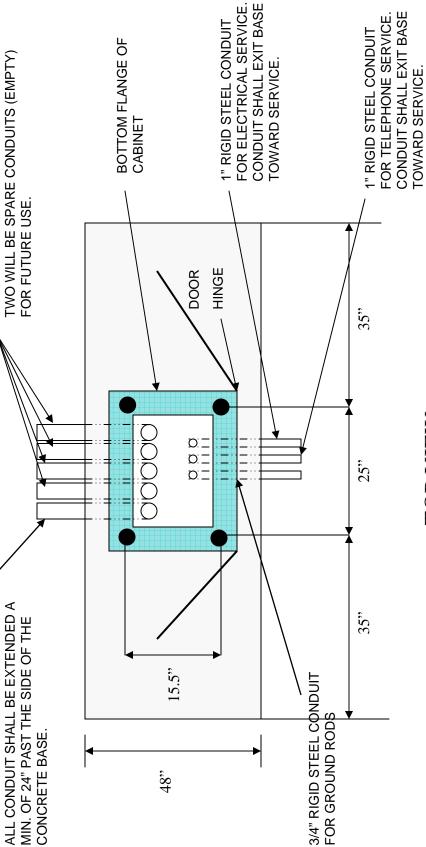
02/15/05

# DRAWING NOT TO SCALE

# **Base Mounted 170 Cabinet Detail** Figure 9a

MIN. 4 - 2" RIGID STEEL CONDUITS TO STUBBED, THREADED AND CAPPED AŢ SPARE 1 1/4" RIGID STEEL CONDUIT

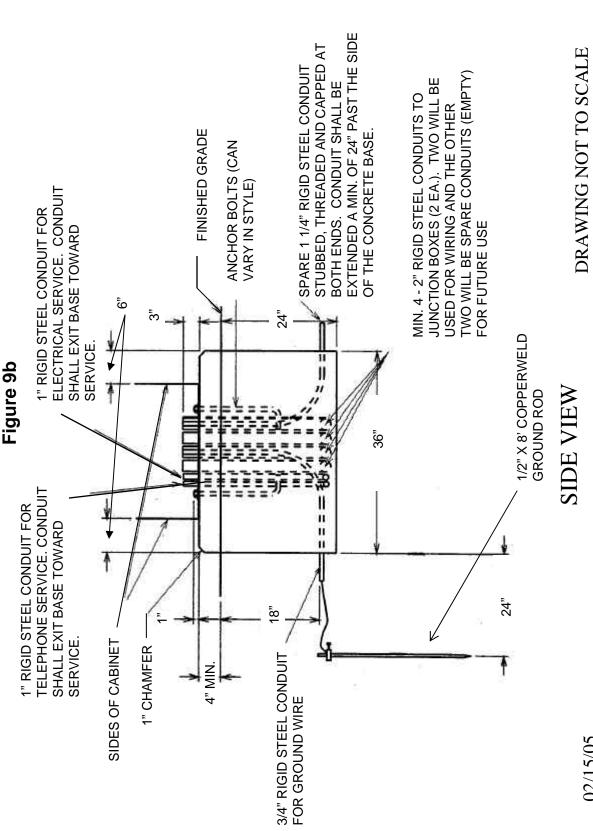
JUNCTION BOXES (2 EA.). TWO WILL BE USED FOR WIRING AND THE OTHER ALL CONDUIT SHALL BE EXTENDED A MIN. OF 24" PAST THE SIDE OF THE CONCRETE BASE. BOTH ENDS.



TOP VIEW

02/15/05

# **Base Mounted 170 Cabinet Detail**



#### PART II

#### SPECIFICATIONS AND STANDARD DRAWINGS

#### **SPECIFICATIONS REFERENCE**

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

GLIDGEGETON	101.02.411
SUBSECTION: REVISION:	101.02 Abbreviations.  Insert the following abbreviation and text into the section:
	KEPSC Kentucky Erosion Prevention and Sediment Control
SUBSECTION: REVISION:	101.03 Definitions.  Replace the definition for Specifications – <i>Special Provisions</i> with the following:
	Additions and revisions to the Standard and Supplemental Specifications covering conditions peculiar to and individual project.
SUBSECTION: REVISION:	102.07.01 General. Replace the first sentence with the following:
	Submit the Bid Proposal on forms furnished on the Department internet website ( <a href="http://transportation.ky.gov/contract/">http://transportation.ky.gov/contract/</a> ), including the Bid Packet and disk created from the Expedite Bidding Program.
SUBSECTION: REVISION:	102.07.02 Computer Bidding. Replace the first paragraph with the following:
	Subsequent to ordering a Bid Proposal for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement ( <a href="http://transportation.ky.gov/contract/">http://transportation.ky.gov/contract/</a> ). Download the bid file from the Department's website to prepare a Bid Proposal for submission to the Department. Include the completed Bid Packet produced by the Expedite Bidding Program and submit it along with the disk created by said program.
	Replace the second paragraph with the following:
	In case of a dispute, the printed Bid Proposal and bid item sheets created by the Expedite Bidding Program take precedence over any bid submittal.
SUBSECTION:	102.08 IRREGULAR BID PROPOSALS.
REVISION:	Replace point four of the first paragraph with the following:
	4) fails to submit a disk created from the Expedite Bidding Program.
	Replace point one of the second paragraph with the following:
	<ol> <li>when the Bid Proposal is on a form other than that furnished by the Department or printed from other than the Expedite Bidding Program, or when the form is altered or any part is detached; or</li> </ol>
SUBSECTION: REVISION:	103.02 AWARD OF CONTRACT. Replace the first sentence of the third paragraph with the following:
	The Department will normally award the Contract within 10 working days after the date of receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all bidders for a period not to exceed 60 calendar days for final disposition of award.

Contract ID: 091300 Page 94 of 137

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

(Effective with the July 24, 2009 Letting)

#### SUBSECTION: **REVISION:**

105.12 FINAL INSPECTION AND ACCEPTANCE OF WORK.

Insert the following paragraphs after the first paragraph:

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

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

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

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

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

Delete the fifth paragraph from the section.

#### SUBSECTION:

105.13 CLAIM RESOLUTION PROCESS.

**REVISION:** 

Delete the last paragraph from the section.

**SUBSECTION:** 

106.10 FIELD WELDER CERTIFICATION REQUIREMENTS.

**REVISION:** 

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

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

#### SUBSECTION:

**PART:** 

112.03.11 Temporary Pavement Markings.

**REVISION:** 

B) Placement and Removal of Temporary Striping.

Replace the 2<sup>nd</sup> sentence of the fist paragraph with the following:

On interstates and parkways, and other roadways approved by the State Highway Engineer, install pavement striping that is 6 inches in width.

#### **SUBSECTION:**

**REVISION:** 

112.03.12 Project Traffic Coordinator (PTC). Add the following at the end of the subsection:

After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task.

Contract ID: 091300 Page 95 of 137

REVISION: Replace the When roc 204.03.09  SUBSECTION: 213.03.03 Insert the When the compliance verification event. The provide consequence of inspection with the Key the work of the work	Inspection and Maintenance. following paragraph after the second paragraph:  Contractor is required to obtain the KPDES permit, it is their responsibility to ensure e with the inspection and maintenance requirements of the permit. The Engineer will perform n inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall the Engineer will document these inspections using Form TC 63-61 A. The Engineer will upies of the inspection only when improvements to the BMP's are required. Verification
When roc 204.03.09  SUBSECTION: 213.03.03 Insert the When the compliance verification event. The provide of inspection with the Key the work of the wo	roadbed is specified, construct the upper 2 feet of the embankment according to Subsection A).  Inspection and Maintenance. following paragraph after the second paragraph:  Contractor is required to obtain the KPDES permit, it is their responsibility to ensure e with the inspection and maintenance requirements of the permit. The Engineer will perform n inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall the Engineer will document these inspections using Form TC 63-61 A. The Engineer will epies of the inspection only when improvements to the BMP's are required. Verification
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REVISION: Replace the by mechal Regardles or perman subsection: 303.05 PA Replace the The Depa Adjustme subsection: 401.02.04 PART: REVISION: Replace the Stop mixi system of SUBSECTION: Add the form REVISION: REVISION: Part G) Was 402.01.01 asphalt bin Ensure 1) 1 (2) 1 (3) 1 (3) 1 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	
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SUBSECTION: Replace the The Depa Adjustme.  SUBSECTION: 401.02.04 PART: REVISION: Replace the Stop mixing system of SUBSECTION: 401.02.04 REVISION: 401.02.04 REVISION: 401.02.04 REVISION: 401.02.04 Add the form the Part G) We appear to the Part G) We appear T) We appea	nically crimping it into the soil surface or applying tackifier to provide a protective cover.
SUBSECTION: Replace the Adjustme SUBSECTION: Adjustme F) Production REVISION: Stop mixing system of SUBSECTION: Add the form of the Adjustme REVISION: Add the form of the Adjustme Revision Add the form of the Adjustme Revision Add the form of the Adjustme Revision Revision Revision Add the form of the Adjustment Revision Revision Add the form of the Adjustment Revision Revision Add the form of the Adjustment Revision Revis	s of the anchoring method used, ensure the protective cover holds until disturbance is required ent controls are in installed.
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The Depa Adjustmer  SUBSECTION: 401.02.04  PART: REVISION: Replace the Stop mixing system of SUBSECTION: 401.02.04  REVISION: Add the for 402.01.01 asphalt bing Ensure 1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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SUBSECTION: 401.02.04 PART: F) Product Revision: Replace the Stop mixing system of 401.02.04 REVISION: 401.02.04 REVISION: Add the for 402.01.01 asphalt bin Ensure 1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tment will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay at Schedule for Specialty Mixtures in Section 402.
REVISION: Replace the Stop mixing system of SUBSECTION: Add the form Part G) W 402.01.01 asphalt bin Ensurable 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Special Requirements for Dryer Drum Plants.
Stop mixi system of 401.02.04 Add the for 402.01.01 asphalt bit Ensu 1) 1 (2) 1 (3) 1 (3) 1 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	tion Quality Control.
SUBSECTION:   401.02.04     REVISION:   Add the form     Part G) W     402.01.01     asphalt bin     Ensu     1)   1     6     2)   1     6     3)   1	e first sentence with the following:
SUBSECTION:   401.02.04   Add the form	ng operations immediately if, at any time, a failure of the automatic electronic weighing
SUBSECTION: 401.02.04 REVISION: 401.02.04 Add the form 402.01.01 asphalt bin Ensu 1) 1 2) 1 3) 1	the aggregate feed, asphalt binder feed, or water injection system control occurs.
Part G) W 402.01.01 asphalt bin Ensu 1) 1 2) 1	Special Requirements for Dryer Drum Plants.
402.01.01 asphalt bit Ensu 1) 1 2) 1	llowing:
	ater Injection System. Provided each system has prior approval as specified in Subsection, the Department will allow the use of water injection systems for purposes of foaming the order and lowering the mixture temperature for production of Warm Mix Asphalt (WMA). The tente equipment for water injection meets the following requirements: Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted); Injection equipment has variable controls that introduce water ratios based on production rates of mixtures; Injects water into the flow of asphalt binder prior to contacting the aggregate; Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate.
GLID GENERAL AND ASSOCIATION OF THE COURT OF	
KEVISION:   Replace tr	Preparation of Mixtures.
Do not use	Preparation of Mixtures.  le last sentence of the second paragraph with the following:
SUBSECTION: 401.03.01 REVISION: Replace the	

Contract ID: 091300 Page 96 of 137

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

(Effective with the July 24, 2009 Letting)

SUBSECTION: REVISION:

401.03.01 Preparation of Mixtures.

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

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

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

SUBSECTION: REVISION:

402.01 Description.

Replace the paragraph with the following:

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

SUBSECTION REVISION:

402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.

Add the following subsection:

402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.

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

SUBSECTION: REVISION:

402.05.02 Asphalt Mixtures and Mixtures With RAP.

Replace Subsection Title as below:

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

SUBSECTION: REVISION:

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

Replace the paragraph with the following:

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

SUBSECTION: PART: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. C) Conventional and RAP Mixtures Placed on Shoulders. Replace title with the following: HMA, WMA, and RAP Mixtures Placed on Shoulders.					
SUBSECTION: PART: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge. Replace the title with the following: HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.					
SUBSECTION: PART: TABLES: REVISION:	402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP. Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures VMA Replace the VMA table with the following:					
SUBSECTION:	VMA           Pay Value         Deviation From Minimum           1.00         ≥ min. VMA           0.95         0.1-0.5 below min.           0.90         0.6-1.0 below min.           (I)         > 1.0 below min.   402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.					
PART: TABLES: REVISION:	Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures VMA					
		V	<b>MA</b>			
		Pay Value	Deviation From Minimum			
		1.00	≥ min. VMA			
		0.95	0.1-0.5 below min.			
		0.90	0.6-1.0 below min.			
		(1)	> 1.0 below min.			

Contract ID: 091300 Page 98 of 137

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

(Effective with the July 24, 2009 Letting)

**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.

**PART:** Lot Pay Adjustment Schedule, Compaction Option B Mixtures

TABLE: VMA

**REVISION:** Replace the VMA table with the following:

VMA					
Pay Value	Deviation				
	From Minimum				
1.00	≥min. VMA				
0.95	0.1-0.5 below min.				
0.90	0.6-1.0 below min.				
(2)	> 1.0 below min.				

**SUBSECTION:** 403.03.03 Preparation of Mixture.

PART: C) Mix Design Criteria.

NUMBER: 1) Preliminary Mix Design.

**REVISION:** Replace the last two sentences of the paragraph and table with the following:

Complete the volumetric mix design at the appropriate number of gyrations as given in the table below for the number of 20-year ESAL's. The Department will define the relationship between ESAL classes, as given in the bid items for Superpave mixtures, and 20-year ESAL ranges as follows:

	Number of Gyrations			
Class	ESAL's (millions)	$N_{ m initial}$	$N_{ m design}$	$N_{\rm max}$
2	< 3.0	6	50	75
3	3.0  to < 30.0	7	75	115
4	≥ 30.0	8	100	160

**SUBSECTION:** 403.03.09 Leveling and Wedging, and Scratch Course.

**PART:** A) Leveling and Wedging.

**REVISION:** Replace the first sentence of the first paragraph with the following:

Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.

**SUBSECTION:** 403.03.09 Leveling and Wedging, and Scratch Course.

**PART:** B) Scratch Course.

**REVISION:** Replace the second sentence of the first paragraph with the following:

Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.

SUBSECTION: 407.01 DESCRIPTION.

**REVISION:** Replace the first sentence of the paragraph with the following:

Construct a pavement wedge composed of a hot-mixed or warm-mixed asphalt mixture.

**SUBSECTION:** 409.01 DESCRIPTION.

**REVISION:** Replace the first sentence of the paragraph with the following:

Use reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) provided mixture requirements are satisfied.

**SUBSECTION:** 410.01 DESCRIPTION.

**REVISION:** Delete the second sentence of the paragraph.

SUBSECTION: REVISION: REVISION: REPLACE Least sentence of the paragraph with the following: Provide a final surface comparable to the adjacent pavement that does not require corrective work in respect to texture, appearance, and skid resistance.  SUBSECTION: PART: NUMBER: REVISION: At the Department discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be applied in licu of corrective work.  SUBSECTION: PART: NUMBER: REVISION: Replace the last sentence of the first paragraph with the following: At the Department's discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be applied in licu of corrective work.  SUBSECTION: PART: NUMBER: REVISION: Requirements. NUMBER: REVISION: Requirements. NUMBER: REVISION: REVISION: REVISION: REVISION: REVISION: Add the following sentence to the end of the first paragraph with the following: REVISION: The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.  SUBSECTION: Add the following sentence to the end of the first paragraph: The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.  SUBSECTION: Add the following sentence between the first and second sentence of the first paragraph: The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.  SUBSECTION: LANE DENSITY Pay Value Test Result (%) 1.05 95.0-96.5 1.00 93.0-94.9 0.95 92.0-92.9 or 96.6-97.0 0.90 91.0-91.9 or 97.1-97.5 170 < 91.0 or 97.5-97.5 180   18								
SUBSECTION: PART: NUMBER: REVISION:  By Requirements. 1) Category A. Replace the last sentence of the first paragraph with the following: At the Department's discretion, a pay deduction of \$1200 per 0.1-lane-mile section may be applied in lieu of corrective work.  SUBSECTION: PART: NUMBER: REVISION:  By Requirements. 2) Category B. Replace the last sentence of the first paragraph with the following:  When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and replace the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of \$750 per 0.1-lane-mile section may be applied in lieu of corrective work.  SUBSECTION: REVISION:  Add the following sentence to the end of the first paragraph: The sum of the pay value adjustments for ride quality shall not exceed \$0 for the project as a whole.  SUBSECTION: REVISION:  Ad3.05.02 CL3 SMA BASE 1.00D PG76-22. Insert the following sentence between the first and second sentence of the first paragraph: The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.  SUBSECTION: TABLE: REVISION:  Al3.05.02 CL3 SMA BASE 1.00D PG 76-22. JOINT DENSITY TABLE Replace the joint density table with the following:  LANE DENSITY Pay Value Test Result (%) 1.05 95.0-96.5 1.00 93.0-94.9 0.99 91.0-91.9 or 97.1-97.5 0.99 91.0-91.9 or 97.5	SUBSECTION: REVISION:	410.03.01 Corrective Work. Replace the last sentence of the paragraph with the following:						
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505.03.04 Detectable Warnings.							
Replace the first sentence with the following:							
Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the							
Standard Drawings.							
The Department will measure the quantity in square feet. All retrofit applications for maintenance							
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Replace the first sentence with the following:  Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the Standard Drawings.  505.04.04 Detectable Warnings.  Replace the paragraph with the following:							

#### Contract ID: 091300 Page 101 of 137

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SUBSECTION:	606.02.11 Coarse Aggregate.
<b>REVISION:</b>	Replace with the following:
	Conform to Section 805, size No. 8 or 9-M.
SUBSECTION:	609.04.06 Joint Sealing.
REVISION:	Replace Subsection 601.04 with the following:
KE VISION.	Replace Subsection 601.64 with the following.
	Subsection 606.04.08.
SUBSECTION:	609.05 Payment.
REVISION:	Replace the Pay Unit for Joint Sealing with the following:
	See Subsection 606.05.
SUBSECTION:	701.03.06 Initial Backfill.
<b>REVISION:</b>	Replace the first sentence of the last paragraph with the following:
	When the Contract specifies, perform quality control testing to verify compaction according to KM 64-
	512.
SUBSECTION:	701.03.08 Testing of Pipe.
<b>REVISION:</b>	Replace and rename the subsection with the following:
	701.03.08 Inspection of Pipe. The engineer will visually inspect all pipe. The Department will require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining pipe structures on the project to provide for the minimum inspection requirement. The pipe will be selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be inspected is at least 50 percent of the total linear feet of all installed pipe on the project.  Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete inspection is possible.  Notify the Engineer immediately if distresses or locations of improper installation are discovered. When camera testing shows distresses or improper installation in the installed pipe, the Engineer may require additional sections to be tested. Provide the video and report to the Engineer when testing is complete in accordance with KM 64-114.  Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation, sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and installation thresholds indicated in the table below, provide the Department with an evaluation of each location conducted by a Professional Enginee

#### Contract ID: 091300 Page 102 of 137

SUBSECTION:	701.04.07 Testing.							
REVISION:	Replace and rename the subsection	with the following:						
	<b>701.04.07 Pipeline Video Inspection.</b> The Department will measure the quantity in linear feet							
	along the pipe invert of the structur	<b>nspection.</b> The Depa re inspected. When it	rtment will m	neasure the quantity in line	ear teet			
	performed due to a disagreement of							
	error, the Department will measure							
	However, if additional distresses or non-conformance is found, the Department will not measure the							
	additional inspection for payment.							
SUBSECTION:	701.05 PAYMENT.							
REVISION:	Add the following pay item to the	list of pay items:						
	Code Pay Ite	em		Pay Unit				
	23131ER701 Pipelin	ne Video Inspection		Linear Fo	ot			
SUBSECTION:	701.05 PAYMENT							
TABLE:	PIPE DEFLECTION DETERMIN		ESTING					
REVISION:	Replace this table with the following	ng table and note:						
		PIPE DEFLE	CTION		1			
	Amount of Deflection (9		Payment					
	0.0 to 5.0 100% of the Unit Bid Price 5.1 to 9.9 50% of the Unit Bid Price (1)							
	10 or greater Remove and Replace							
	(1) Provide Structural Analysis as indicated above Rased on the structural analysis nine may be							
	(1) Provide Structural Analysis as indicated above. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price.							
SUBSECTION:	701.05 PAYMENT	reancea unii price.						
TABLE:	PIPE DEFLECTION DETERMIN	ED BY MANDREL	ΓESTING					
REVISION:	Delete this table.							
SUBSECTION:	713.02.01 Paint.							
REVISION:	Replace with the following:							
	Conform to Section 842 and Section	n 846						
SUBSECTION:	713.03 CONSTRUCTION.	M 0 10.						
REVISION:	Replace the first sentence of the se	cond paragraph with	the following	· ·				
		ai .	1 4 6					
	On interstates and parkways, and o	ther routes approved	by the State I	lighway Engineer, install	pavement			
SUBSECTION:	striping that is 6 inches in width. 713.03.03 Paint Application.							
REVISION:	Replace the second paragraph with	the following table:						
	1							
				1				
	Material	Paint Application		Glass Beads Application				
	4 inch waterborne paint	Min. of 16.5 gallon		Min. of 6 pounds/gallon				
	6 inch waterborne paint 6 inch durable waterborne paint	Min. of 24.8 gallons/min. of 36 gallons/min.		Min. of 6 pounds/gallon Min. of 6 pounds/gallon				
	o men durable waterborne paint	will. Of 30 gallolls/1	11110	ivini. Of a pounds/ganon	1			
1	1							

SUBSECTION:	713.03.04 Marking Removal.				
REVISION:	Replace the last sentence of the paragraph wit the following:				
REVISION.	Replace the last sentence of the paragraph wit the following.				
	Vacuum all marking material and removal debris concurrently with the marking removal operation.				
SUBSECTION:	713.05 PAYMENT.				
REVISION:	Insert the following codes and pay items below the Pavement Striping – Permanent Paint:				
	Code Pay Item Pay Unit				
	23159EN Durable Waterborne Marking – 6 IN W Linear Foot				
GLIDGE GENONI	23160EN Durable Waterborne Marking – 6 IN Y Linear Foot				
SUBSECTION: REVISION:	714.03 CONSTRUCTION.				
REVISION:	Insert the following paragraph at the end of the third paragraph:				
	Use Type I Tape for markings on bridge decks, JPC pavement and JPC intersections. Thermoplastic				
	should only be used for markings on asphalt pavement				
SUBSECTION:	714.03.07 Marking Removal.				
REVISION:	Replace the third sentence of the paragraph with the following:				
	Vacuum all marking material and removal debris concurrently with the marking removal operation.				
SUBSECTION:	716.01 DESCRIPTION.				
REVISION:	Insert the following after the first sentence:				
KE VISION.	insert the following after the first sentence.				
	Energize lighting as soon as it is fully functional and ready for inspection. Ensure that lighting remains				
	operational until the Division of Traffic Operations has provided written acceptance of the electrical				
	work.				
~~~~					
SUBSECTION:	716.02.01 Roadway Lighting Materials.				
REVISION:	Replace the third sentence of the paragraph with the following:				
	Submit for material approval an electronic file of descriptive literature, drawings, and any requested				
	design data.				
SECTION:	717 – THERMOPLASTIC INTERSECTION MARKINGS.				
REVISION:	Replace the section name with the following:				
	DITED OF CTION MADIZINGS				
	INTERSECTION MARKINGS.				
SUBSECTION:	717.01 DESCRIPTION:				
REVISION:	Replace the paragraph with the following:				
	Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn				
	Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion				
	process or by applying preformed thermoplastic intersection marking material.				
SUBSECTION:	717.02 MATERIALS AND EQUIRMENT				
REVISION:	717.02 MATERIALS AND EQUIPMENT. Insert the following subsection:				
ME VIDIOIN.	insert the following subsection.				
	717.02.06 Type I Tape. Conform to Section 836.				
SUBSECTION:	717.03.03 Application.				
REVISION:	Insert the following part to the subsection:				
	D) Tyme I Tane Intersection Monkings Annidirect them. C. (2)				
	B) Type I Tape Intersection Markings. Apply according to the manufacturer's recommendations. Cut all tape at pavement joints when applied to concrete surfaces.				
	an tape at pavement joints when applied to concrete surfaces.				
	L				

#### Contract ID: 091300 Page 104 of 137

SUBSECTION:	717.03.05 Proving Period.					
PART:	A) Requirements.					
REVISION:	Insert the following to this section:					
KE VISIOIV.	insert the following to this section.					
	2) Type I Tape During the pro-	ving period, ensure that the pavement marking materi	ial shows no signs			
		ssive cracking, bleeding, staining, discoloration, oil co				
		hipping, spalling, poor adhesion to the pavement, los				
		ge, and normal wear. Type I Tape is manufactured o				
		o meet certain retroreflective requirements. As long a				
		e and shows no signs of failure due to the other items				
	Subsection 714.03.06 A) 1), retra	oreflectivity readings will not be required. In the abs	ence of readings,			
	the Department will accept tape based on a nighttime visual observation.					
SUBSECTION:	717.03.06 Marking Removal.					
<b>REVISION:</b>	Replace the third sentence of the	paragraph with the following:				
	-					
	Vacuum all marking material and removal debris concurrently with the marking removal operation.					
SUBSECTION:	717.05 PAYMENT.					
REVISION:	Insert the following bid item codes:					
		D. II.	D. I.			
	Code 06563	Pay Unit	<u>Pay Item</u> Linear Foot			
	20782NS714	Pave Marking – R/R X Bucks 16 IN Pave Marking Thermo – Bike	Each			
		Pave Mark TY I Tape X-Walk, Size	Linear Foot			
	23251ES717, 23264ES717		Linear Foot			
	23252ES717, 23265ES717	Pave Mark TY I Tape Stop Bar, Size	Square Foot			
	23253ES717	Pave Mark TY I Tape Dotted Lane Extension Linea				
	23254ES717					
	23255ES717 Pave Mark TY I Tape Arrow, Type Each 23268ES717-23270ES717					
	23256ES717	Pave Mark TY I Tape- ONLY Each				
	23257ES717	Pave Mark TY I Tape- SCHOOL	Each Linear Foot			
	23266ES717	r				
CIDCECTION	23267ES717	Pave Mark TY 1 Tape-Bike	Each			
SUBSECTION: REVISION:	805.01 GENERAL. Replace the second paragraph w	ith the fellowing:				
REVISION:	Replace the second paragraph w	ith the following.				
	The Department's List of Appro	ved Materials includes the Aggregate Source List, the	e list of Class A and			
		gate Sources, and the Concrete Restriction List.	That of Class A allu			
SUBSECTION:	805.04 CONCRETE.	and sources, and the control resultation list.				
REVISION:		reference in first sentence of the third paragraph with	"KM 64-629"			
	1					
SUBSECTION:	805.15 GRADATION ACCEPT	805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.				
TABLE:	AGGREGATE SIZE USE					
PART:	Cement Concrete Structures and Incidental Construction					
REVISION:	Replace "9-M for Waterproofing Overlays" with "8 or 9-M for Waterproofing Overlays"					

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

(Effective with the July 24, 2009 Letting)

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

No. 200 4-13 8-0 No. 100 10-30 0-5 No. 30 1040 5-20 No. 16 0-5 0-5 0-5 AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT No. 8 1040 0-10 0-10 0-10 0-5 0-5 0-5 No. 4 40-90 85-100 10-30 30-65 15-55 0-10 15-40 0-10 5-25 0-30 0-25 5-25 0-5 0-5 75-100 1 inch 3/4 inch 1/2 inch 3/8 inch 85-100 30-65 30-70 10-30 20-55 30-75 40-75 100 50-80 100 0-5 0-5 25-60 40-75 90-100 SIZES OF COARSE AGGREGATES 10-30 0-10 100 0-5 0-5 100 80-100 20-55 90-100 90-100 70-100 35-70 60-95 0-5 0-5 0-15 100 20-55 85-100 35-70 90-100 95-100 0-15 100 100 0-15 100 100 1 1/2 inch 90-100 35-70 95-100 90-100 0-15 100 0-15 100 100 2 1/2 inch 2 inch 90-100 35-70 40-90 95-100 100 100 90-100 25-60 100 100 100 3 inch 100 100 3 1/2 inch 90-100 4 inch 100 ggregate Size Nominal (3) Maximum 2 1/2 inch 1 ½ inch 3/4 inch 3/8 inch 3/4 inch 3 1/2 inch 1 1/2 inch 3/4 inch 3/4 inch 3/8 inch 1 ½ inch 2 inch 2 inch 2 inch 1 inch 1 inch 1 inch 1/2 inch No. 4 No. 4 DENSE GRADED AGGREGATE  $^{(I)}$ CRUSHED STONE BASE (7) Aggregate Size  $11^{(2)}$ M-6  $10^{(2)}$ 467 610 710 357 57 29 78 23 89 7 co 4 ×

Gradation performed by wet sieve KM 64-620 or AASHTO T 11/T 27.

Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained. Sizes shown for convenience and are not to be considered as coarse aggregates. 3

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

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

(Effective with the July 24, 2009 Letting)

SUBSECTION:	805.16 SAMPLING AND TESTING.				
REVISION:	Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion				
REVISION.	Test.				
	Replace the "ASTM D 3042" method with the "KM	64-625" method for Insoluble Residue.			
SUBSECTION:	810.04.01 Coating Requirements.				
REVISION:	Replace the "Subsection 806.07" references with "Subsection 806.06"				
SUBSECTION:	810.06.01 Polyvinyl Chloride (PVC) Pipe.				
PART:	B) Culvert and Entrance Pipe.				
REVISION:	Replace the title with the following:				
	B) Culvert Pipe, Storm Sewer, and Entrance Pipe.				
CURCECTION.	927 02 ADDD OVA I				
SUBSECTION: REVISION:	837.03 APPROVAL.				
REVISION:	Replace the last sentence with the following:				
	The Department will sample and evaluate for approx	val each lot of thermonlastic material delivered for			
	The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of				
	thermoplastic material until it has been approved by				
	minimum of 10 working days to evaluate and approv				
SUBSECTION:	837.03.01 Composition.				
REVISION:	COMPOSITION Table:				
	Replace	0.0			
	Lead Chromate with	0.0 max. 4.0 min.			
	Heavy Metals Content	Comply with 40 CFR 261			
SECTION:	DIVISION 800 MATERIAL DETAILS	Compry with 40 Cl R 201			
REVISION:	Add the following section in Division 800				
THE VISION	Trad the folio wing section in 21 vision occ				
	SECTION 846 – DURABLE WATERBO	ORNE PAINT			
	<b>846.01 DESCRIPTION.</b> This section covers quick	k-drying durable waterborne pavement striping paint			
	for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne				
	striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete,				
	bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.				
	<b>846.02 Approval.</b> Select materials that conform to the composition requirements below. Provide				
	independent analysis data and certification for each formulation stating the total concentration of each				
	heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for				
	leachable heavy metals content. Submit initial samp				
	operations. The initial sample may be sent from the				
	randomly sample and evaluate the paint each week t	nat the striping operations are in progress.			
	The non-volatile nortion of the vehicle cho	ll be composed of a 100% acrylic polymer as			
	determined by infrared spectral analysis. The acrylic				
	evidenced by infrared peaks at wavelengths 1568, 16				
	produced by an acrylic resin known to be 100% cros				
		Č			
	<u>l</u>				

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

(Effective with the July 24, 2009 Letting)

DAINT COMPOCITION					
PAINT COMPOSITION					
Property and Test Method	Yellow	White			
Daytime Color (CIELAB)	L* 81.76	L* 93.51			
Spectrophotometer using	a* 19.79	a* -1.01			
illuminant D65 at 45°	b* 89.89	b* 0.70			
illumination and 0° viewing with	Maximum allowable variation	Maximum allowable variation			
a 2° observer	2.0ΔE*	2.0ΔE*			
Nighttime Color (CIELAB)	L* 86.90	L* 93.45			
Spectrophotometer using	a* 24.80	a* -0.79			
illuminant A at 45° illumination	b* 95.45	b* 0.43			
and 0° viewing with a 2° observer	Maximum allowable variation	Maximum allowable variation			
	2.0ΔE*	2.0ΔE*			
Heavy Metals Content	Comply with 40 CFR 261	Comply with 40 CFR 261			
Titanium Dioxide	NA	10% by weight of pigment			
ASTM D 4764		min.			
VOC	1.25 lb/gal max.	1.25 lb/gal max.			
ASTM D 2369 and D 4017					
Contrast Ratio	0.97	0.99			
(at 15 mils wft)					

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

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

DURABLE V	VATERBOR	NE PAVEM	ENT STRIPIN	G PAINT R	EDUCTION	SCHEDULE
Non- conforming Property	Resin	Color	Contrast	TiO <sub>2</sub>	VOC	Heavy Metals Content
Reduction Rate	60%	10%	10%	10%	60%	60%

#### **PART III**

#### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

Contract ID: 091300

Page 109 of 137

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

	P	ag	је
١.	General	-	1
II.	Nondiscrimination	-	1
III.	Nonsegregated Facilities	-	3
IV.	Payment of Predetermined Minimum Wage	-	3
٧.	Statements and Payrolls	-	6
VI.	Record of Materials, Supplies, and Labor	-	6
VII.	Subletting or Assigning the Contract	-	7
VIII.	Safety: Accident Prevention	-	7
IX.	False Statements Concerning Highway Projects	-	7
Χ.	Implementation of Clean Air Act and Federal		
	Water Pollution Control Act	-	8
XI.	Certification Regarding Debarment, Suspension,		
	Ineligibility, and Voluntary Exclusion	-	8
XII.	Certification Regarding Use of Contract Funds for		
	Lobbying	-	9

#### **ATTACHMENTS**

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

#### I. GENERAL

- 1. 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.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

- 5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.
- 6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

#### II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 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 and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO 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 minority group employees.
- 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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
- c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 takecorrective 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 his 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 his avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- 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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- 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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. The contractor will use best 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 SHA 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 minority and women referrals within thetime 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,

Page 111 of 137

age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.

- 8. 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.
- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
- c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. **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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number of minority and non-minority 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;
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. The contractors will submit an annual report to the SHA 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 Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

### III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

Contract ID: 091300

- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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

Contract ID: 091300 Page 112 of 137

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 paragraphs 4 and 5 of this Section IV.

- b. 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.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

#### 2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

#### 3. Payment of Fringe Benefits:

- a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

# 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

#### a. Apprentices:

- (1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level ofprogress, expressed as a percentage of the journeyman-level 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

Contract ID: 091300 Page 113 of 137

classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

#### b. Trainees:

- (1) 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 DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wagedetermination for the classification of work actually performed.

### 5. 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.

#### 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as 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 SHA contracting officer 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.

#### 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

#### 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

#### 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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

Contract ID: 091300 Page 114 of 137

liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

#### V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

#### 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

#### 2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such 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 the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. 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 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

### VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

### Contract ID: 091300 Page 115 of 137

#### VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 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 State. 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).
- a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.
- 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 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 VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### **VIII. SAFETY: ACCIDENT PREVENTION**

- 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 provideall safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA 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. 333).

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. 333).

# IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

# NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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 not more that \$10,000 or imprisoned not more than 5 years or both."

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

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

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

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities
- 4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary 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 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowinglyrendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which

this proposal is submitted for assistance in obtaining a copy of those regulations.

- f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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.
- 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.

\* \* \* \* \*

# 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.

Contract ID: 091300

Page 117 of 137

# Voluntary Exclusion--Primary Covered Transactions 1. The prospective primary participant certifies to the best of its

Certification Regarding Debarment, Suspension, Ineligibility and

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement 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;
- c. 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 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- 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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

- 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.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 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 Covered Transactions:

- 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 participation in this transaction 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.

\* \* \* \* \*

# XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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 his or her bid or proposal that he or she 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.

JEFFERSON COUNTY ARRA 264-1 (166)

#### Contract ID: 091300 Page 119 of 137

## 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

JEFFERSON COUNTY ARRA 264-1 (166)

#### Contract ID: 091300 Page 120 of 137

#### **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.

# HIGHWAY BASIC HOURLY RATES

# FRINGE BENEFIT PAYMENTS COMBINED

<u>CRAFTS:</u>			
Breckinridge County:			
Bricklayers	26.97	11.78	
Bullitt, Carroll, Grayson, Hardin, Henry	, Jefferson, Larue, Marion, Meade, Ne	elson, Oldham, Shelby,	
Spencer and Trimble Counties:			
Bricklayers	23.68	9.25	
Bracken, Gallatin, Grant, Mason and R			
Bricklayers	26.11	9.49	
Boyd, Carter, Elliott, Fleming, Greenup	o, Lewis and Rowan Counties:		
Bricklayers	25.80	14.88	
Anderson, Bath, Bourbon, Boyle, Clark	k, Fayette, Franklin, Harrison, Jessam	ine, Madison, Mercer,	
Montgomery, Nicholas, Owen, Scott, V	Vashington and Woodford Counties:		
Bricklayers	23.93	9.25	
Bricklayers (Layout Men)	23.68	9.25	
Refractory/Acid Brick/Glass	24.18	9.25	
All Counties			
Carpenters:	24.84	10.23	
Divers	37.64	10.23	
Piledrivermen	25.09	10.23	
Bracken and Grant Counties:			
Millwrights	21.90	7.92	
Anderson, Bath, Bourbon, Boyle, Clark	, Fayette, Franklin, Harrison, Jessam	ine, Madison, Mercer,	
Montgomery, Nicholas, Owen, Scott ar	nd Woodford Counties:		
Millwrights	22.77	12.73	
Boyd, Carter, Elliott, Fleming, Greenup	o, Lewis, Mason, Robertson, and Rov	wan Counties:	
Millwrights	30.25	12.62	
Breckinridge, Bullitt, Carroll, Gallatin, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade,			
Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:			
Millwrights	24.10	14.87	
Bracken, Gallatin and Grant Counties:			
Electricians	26.11	13.32	
Sound Communications:			
Technician	20.45	6.95	

Three/Federal-State Sheet 1 of 11

# HIGHWAY BASIC HOURLY RATES

# FRINGE BENEFIT PAYMENTS COMBINED

**CRAFTS**: (continued)

Boyd, Carter, Elliott and Rowan Counties:

Electricians:

 Cable Splicers
 32.68
 18.13

 Electricians
 31.12
 18.08

Anderson, Bath, Bourbon, Boyle, Breckinridge, Bullitt, Carroll, Clark, Fayette, Franklin, Grayson, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Madison, Marion, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties:

Fleming, Greenup, Lewis and Mason Counties:

<u>Bourbon</u> (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); <u>Carroll</u> (Eastern third, including the Township of Ghent); <u>Fleming</u> (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); <u>Mason</u> (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);

<u>Nicholas</u> (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); <u>Owen</u> (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) & Bracken, Gallatin, Grant, Harrison & Robertson Counties: Ironworkers:

 Fence Erector
 23.55
 16.72

 Structural
 26.17
 16.72

<u>Bourbon</u> (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris); <u>Carroll</u> (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville); <u>Clark</u> (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte); <u>Owen</u> (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill); <u>Scott</u> (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stamping Ground & Woodlake); <u>Anderson, Boyle, Breckinridge, Bullitt, Fayette, Franklin, Grayson, Hardin, Henry, Jefferson,</u>

Three/Federal-State Sheet 2 of 11

# **HIGHWAY BASIC HOURLY** RATES

# **FRINGE BENEFIT PAYMENTS COMBINED**

**CRAFTS**: (continued)

Jessamine, Larue, Madison, Marion, Meade, Mercer, Nelson, Oldham, Shelby, Spencer, Trimble, Washington & Woodford Counties:

Ironworkers 24.78 17.04

Bourbon (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); Carroll (Eastern third, including the Townships 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); Bracken, Gallatin, Grant, Harrison & Robertson Counties:

### Ironworkers:

Up to and including 30- mile radius of Hamilton County, Ohio Courthouse...... 26.20.......16.70 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); Bath, Boyd, Carter, Elliott, Greenup, Lewis, Montgomery & Rowan Counties:

### Ironworkers:

Zone 1	28.38	17.37
Zone 2	28.78	17.37
	30.38	

- Zone 1 Up to 10 mi. radius of union hall, Ashland, KY, 1643 Greenup Avenue;
- Zone 2 10 to 50 mi. radius of union hall;
- Zone 3 50 mi. radius and beyond.

Three/Federal-State Sheet 3 of 11

# HIGHWAY BASIC HOURLY RATES

# FRINGE BENEFIT PAYMENTS COMBINED

<u>CRAFTS</u> : (continued) Anderson, Breckinridge, Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:	·,
Painters:	
Brush & Roller	
Spray, Sand Blast, Power Tools,	
Water Blast & Steam Cleaning	
Bracken, Gallatin, Grant, Mason, and Owen Counties:	
Painters:	
(Heavy and Highway Bridges-	
Guardrails-Lightpoles-Striping):	
Bridge/Equipment Tender and	
Containment Builder	
Brush and Roller	
Elevated Tanks;	
Steeplejack Work; Bridge &	
Lead Abatement	
Sand Blasting & Water	
Blasting	
Spray	
Bath, Bourbon, Boyle, Clark, Fayette, Fleming, Franklin, Harrison, Jessamine, Madison, Mercer	.,
Montgomery, Nicholas, Robertson, Scott and Woodford Counties	
Painters:	
Brush & Roller	
Elevated Tanks;	
Steeplejack Work; Bridge &	
Lead Abatement	
Sandblasting & Waterblasting	
Spray	
Bridge/Equipment Tender and/or	
Containment Builder	
Boyd, Carter, Elliott, Greenup, Lewis and Rowan Counties	
Painters:	
Bridges	
All Other Work24.83	

Three/Federal-State Sheet 4 of 11

## HIGHWAY BASIC HOURLY RATES

# FRINGE BENEFIT PAYMENTS COMBINED

## **CRAFTS:** (continued)

Breckinridge, Bullitt, Carroll (Western Half), Franklin (Western three-fourths), Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:

Boyd, Carter, Elliott, Greenup, Lewis and Rowan Counties:

Plumbers and Steamfitters 29.20 14.29

Bracken, Carroll (Eastern Half), Gallatin, Grant, Mason, Owen and Robertson Counties:

Pipefitters and Plumbers 28.39 14.30

# **LABORERS:**

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, & Woodford Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guard rail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE	19.86
FRINGE BENEFITS	9.55

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

BASE RATE	20.11
FRINGE BENEFITS	9.55

Three/Federal-State Sheet 5 of 11

## **LABORERS:** (continued)

GROUP 3 - Asphalt Luteman and Raker, Gunnite Nozzleman, Gunnite Operator and Mixer, Grout Pump Operator, Side Rail Setter, Rail Paved Ditch, Screw Operator, Tunnel (Free Air) and Water Blaster.

BASE RATE	20.16
FRINGE BENEFITS	9.55

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

BASE RATE	20.76
FRINGE BENEFITS	9.55

### **LABORERS**:

Anderson, Bullitt, Carroll, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble & Washington Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guardrail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE	20.01
FRINGE BENEFITS	9.40

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

BASE RATE	20.26
FRINGE BENEFITS	9.40

Three/Federal-State Sheet 6 of 11

## **LABORERS:** (continued)

GROUP 3 - Asphalt Luteman and Raker, Gunnite Nozzleman, Gunnite Operator and Mixer, Grout Pump Operator, Side Rail Setter, Rail Paved Ditch, Screw Operator, Tunnel (Free Air) and Water Blaster.

BASE RATE	20.31
FRINGE BENEFITS	9.40

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

BASE RATE	20.91
FRINGE BENEFITS	9.40

### **LABORERS:**

Breckinridge & Grayson Counties:

GROUP 1 - Aging and 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 and Hazardous Waste - Level D, Flagperson, Grade Checker, Hand Digging and Hand Back Filling, Highway Marker Placer, Landscaping Mesh Handler and Placer, Puddler, Railroad, Rip-Rap and Grouter, Right-of-Way Sign, Guard rail and Fence Installer, Signal Person, Sound Barrier Installer, Storm and Sanitary Sewer, Swamper, Truck Spotter and Dumper, and Wrecking of Concrete Forms, General Cleanup.

BASE RATE	20.46
FRINGE BENEFITS	8.95

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

BASE RATE	20.71
FRINGE BENEFITS	8.95

Three/Federal-State Sheet 7 of 11

# **LABORERS:** (continued)

GROUP 3 - Asphalt Luteman and Raker, Gunnite Nozzleman, Gunnite Operator and Mixer, Grout Pump Operator, Side Rail Setter, Rail Paved Ditch, Screw Operator, Tunnel (Free Air) and Water Blaster.

BASE RATE	20.76
FRINGE BENEFITS	8.95

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

BASE RATE	21.36
FRINGE BENEFITS	8.95

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RINGE BENEFITS	′	7.	.3	4	
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## **OPERATING ENGINEERS:**

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, Clamshell, Concrete Mixer (21 Cu. Ft. or Over), Concrete Paver, Truck-Mounted Concrete Pump, Core Drill, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Operator, Dredge Engineer, Elevating Grader and 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,

Three/Federal-State Sheet 8 of 11

## **OPERATING ENGINEERS:** (continued)

Mechanically Operated Laser Screed, Mechanic Welder, Mucking Machine, Motor Scraper, Orangepeel Bucket, Piledriver, Power Blade, Pumpcrete, Push Dozer, Rock Spreader Attached to Equipment, Rotary Drill, Roller (Bituminous), Scarifier, Scoopmobile, Shovel, Side Boom, Subgrader, Tailboom, Telescoping Type Forklift, Tow or Push Boat, Tower Crane (French, German and other types), Tractor Shovel and Truck Crane, Tunnel Mining Machines, Including Moles, Shields or similar types of Tunnel Mining Equipment.

BASE RATE	23.60
FRINGE BENEFITS	12.65

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, Fireman & Hoist (one drum), Flexplane, Forklift (reguardless of lift height), Form Grader, Joint Sealing Machine, Outboard Motor Boat, Power Sweeper (riding type), Roller (rock), Ross Carrier, Skid Mounted Or Trailer Mounted Concrete Pump, Skid Steer Machine with all attachments, Switchman or Brakeman, Throttle Valve Person, Tractair and Road Widening Trencher, Tractor (50 H.P. or over), Truck Crane Oiler, Tugger, Welding Machine, Well Points and Whirley Oiler.

BASE RATE	21.18
FRINGE BENEFITS	12.65

All off road material handling equipment, including Articulating Dump Trucks, Greaser on Grease facilities servicing heavy equipment.

BASE RATE	21.56
FRINGE BENEFITS	12.65

Bituminous Distributor, Burlap and 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.) and Vibrator.

BASE RATE	20.92
FRINGE BENEFITS	12.65

Cranes - with Booms 150 ft. and 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.

Three/Federal-State Sheet 9 of 11

#### Contract ID: 091300 Page 130 of 137

# TRANSPORTATION CABINET DIVISION OF CONSTRUCTION PROCUREMENT COMPLIANCE SECTION PROJECT WAGE RATES

Employees assigned to work below ground level are to be paid 10% above basic wage rate. This does not apply to open cut work.

WELDERS - Receive rate for craft in which welding is incidental.

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

These rates are listed pursuant to Kentucky Determination No. CR-06-III HWY dated July 10, 2007 and/or Federal Decision Number KY20080027 dated February 8, 2008 modification #0 dated February 8, 2008, modification #1 dated March 7, 2008, modification #2 dated April 4, 2008, modification #3 dated May 2, 2008, modification #4 dated June 6, 2008, modification #5 dated July 4, 2008, modification #6 dated August 1, 2008, modification #7 dated August 15, 2008, modification #8 dated September 5, 2008, modification #9 dated October 3, 2008, modification #10 dated December 5, 2008, modification #11 dated January 2, 2009, modification #12 dated February 6, 2009, modification #13 dated March 6, 2009, modification #14 dated April 3, 2009, modification #15 dated June 5, 2009 and modification #16 dated July 3, 2009.

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.

Three/Federal-State Sheet 10 of 11

#### Contract ID: 091300 Page 131 of 137

# TRANSPORTATION CABINET DIVISION OF CONSTRUCTION PROCUREMENT COMPLIANCE SECTION PROJECT WAGE RATES

TO: EMPLOYERS/EMPLOYEES

## **PREVAILING WAGE SCHEDULE:**

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

## **OVERTIME:**

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

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

Three/Federal-State Sheet 11 of 11

JEFFERSON COUNTY ARRA 264-1 (166)

# 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
11.2%	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 Jefferson County.

# **PART IV**

# **INSURANCE**

#### Contract ID: 091300 Page 134 of 137

#### INSURANCE

The Contractor shall carry the following insurance in addition to the insurance required by law:

- 1. Contractor's Public Liability Insurance not less than \$100,000.00 for damages arising out of bodily injuries to or death to one person. Not less than \$300,000.00 for damages arising out of bodily injuries to or death to two or more persons.
- 2. Contractor's Property Damages Liability Insurance. Not less than \$100,000.00 for all damages arising out of injury or destruction of property in any one accident. Not less than \$300,000.00 for all damages during the policy period.
- 3. Contractor's Protective Public Liability and Property Damage Insurance. The contractor shall furnish evidence with respect to operations performed for him by subcontractors that he carries in his own behalf for the above stipulated amounts.
- 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. 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.

# **PART V**

# **BID ITEMS**

JEFFERSON COUNTY ARRA 264-1 (166)

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

Contract ID: 091300 Page 136 of 137

CONTRACT ID: 091300

COUNTY: JEFFERSON

PROPOSAL: ARRA 264-1 (166)

PAGE: 1 LETTING: 07/24/09 CALL NO: 100

SECTION 0001 ROADWAY	LINE NO	   ITEM 	DESCRIPTION	APPROXIMATE (	 JNIT   	UNIT PRICE	AMOUNT
0020		SECTION 0001	ROADWAY				
	0010	00342	CL4 ASPH SURF 0.38A PG76-22	1,190.000	TON		   
	0020	02230	EMBANKMENT IN PLACE	15.000	CUYD		   
	0030	02363 	GUARDRAIL CONNECTOR TO BRIDGE END TY A	1.000	EACH		   
	0040	02367 	GUARDRAIL END TREATMENT TYPE 1	3.000	EACH		   
	0050	02381 	REMOVE GUARDRAIL	400.000	LF		   
	0060	02562 	SIGNS	2,000.000	SQFT		   
	0070	02650 	MAINTAIN & CONTROL TRAFFIC	( 1.00)	LS		   
0100   02677   ASPHALT PAVE MILLING & TEXTURING   952.000 TON	0080	02671 	PORTABLE CHANGEABLE MESSAGE SIGN	3.000	EACH		   
0110   02696   SHOULDER RUMBLE STRIPS-SAWED   5,920.000 LF	0090	02676 	MOBILIZATION FOR MILL & TEXT	( 1.00)	LS		   
0120   02726   STAKING   ( 1.00) LS	0100	02677 	ASPHALT PAVE MILLING & TEXTURING	952.000	TON		   
0130   02775   ARROW PANEL   4.000 EACH	0110	02696 	SHOULDER RUMBLE STRIPS-SAWED	5,920.000	LF		   
0140   06417   FLEXIBLE DELINEATOR POST-W   10.000 EACH	0120	02726 	STAKING	( 1.00)	LS		   
0150   06418   FLEXIBLE DELINEATOR POST-Y   10.000 EACH	0130	02775 	ARROW PANEL	4.000	EACH		   
0160   06511   PAVE STRIPING-TEMP PAINT-6 IN   26,100.000 LF	0140	06417 	FLEXIBLE DELINEATOR POST-W	10.000	EACH		   
0170   06515	0150	06418 	FLEXIBLE DELINEATOR POST-Y	10.000	EACH		   
0180   06517	0160	06511 	PAVE STRIPING-TEMP PAINT-6 IN	26,100.000	LF		   
0180   06517	0170	06515 	PAVE STRIPING-PERM PAINT-6 IN		į		   
	0180	06517 	PAVE STRIPING-PERM PAINT-12 IN				   
0200   06550 PAVE STRIPING-TEMP REM TAPE-W   500.000 LF	0190	06549 	PAVE STRIPING-TEMP REM TAPE-B	100.000	LF		   
	0200	06550 	PAVE STRIPING-TEMP REM TAPE-W	500.000	LF		   

# KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS FRANKFORT, KY 40622

Contract ID: 091300 Page 137 of 137

CONTRACT ID: 091300

COUNTY: JEFFERSON

PROPOSAL: ARRA 264-1 (166)

PAGE: 2 LETTING: 07/24/09

CALL NO: 100

LINE NO	ITEM 	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	06551	PAVE STRIPING-TEMP REM TAPE-Y	400.000 LF		
0220	06592 	PAVEMENT MARKER TYPE V-B W/R	74.000 EACH	   	   
0230	06600 	REMOVE PAVEMENT MARKER TYPE V	74.000 EACH		
0240	08540	JOINT SEALING	76.000 LF		
0250	21802EN 	G/R STEEL W BEAM-S FACE (7 FT POST)	300.000 LF	   	   
	SECTION 0002	TRAFFIC LOOPS			
0260	04793 	CONDUIT-1 1/4 IN	58.000 LF		   
0270	04795 	CONDUIT-2 IN	20.000 LF		
0280	04820 	TRENCHING AND BACKFILLING	68.000 LF	   	   
0290	04829 	PIEZOELECTRIC SENSOR	8.000 EACH	   	   
0300	04830	LOOP WIRE	1,336.000 LF	   	
0310	04895 	LOOP SAW SLOT AND FILL	434.000 LF	   	   
0320	20359NN 	GALVANIZED STEEL CABINET 20" X 20"	2.000 EACH	   	   
0330	20360ES818 	WOOD POST 4" X 4"	2.000 EACH	   	
0340	20391NS835 	JUNCTION BOX TYPE A	4.000 EACH	   	   
	SECTION 0003	DEMOBILIZATION			
0350	02569 	DEMOBILIZATION (AT LEAST 1.5%)	LUMP	   	   
		TOTAL BID			