CALL NO. 308

CONTRACT ID. 122328

BARREN COUNTY

FED/STATE PROJECT NUMBER FE01 005 068X 002-004

DESCRIPTION COLUMBIA AVENUE (US 68X)

WORK TYPE JPC PAVEMENT REPAIRS - DIAMOND GRINDING

PRIMARY COMPLETION DATE 9/30/2012

LETTING DATE: May 18, 2012

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 18, 2012. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

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

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SCOPE OF WORK

CONTRACT ID - 122328 ADMINISTRATIVE DISTRICT - 03

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - BARREN PCN - MP005006812W1
FE01 005 068X 002-004
COLUMBIA AVENUE (US 68X) FROM EAST FRONT STREET (MP 2.751) EXTENDING EAST TO DAVIS STREET (MP 3.177), A DISTANCE OF 0.43 MILES. JPC PAVEMENT REPAIRS - DIAMOND GRINDING.
GEOGRAPHIC COORDINATES LATITUDE 36^59'53" LONGITUDE 85^54'19"
AVERAGE DAILY TRAFFIC - 11500 AVERAGE MAINLINE WIDTH - 36.0 FEET

COMPLETION DATE(S):
COMPLETION DATE - September 30, 2012
APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

ACCESS TO RECORDS

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

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

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

10/18/2011

Commonwealth of Kentucky
Finance and Administration Cabinet
OFFICE OF THE SECRETARY
Room 383, Capitol Annex
702 Capital Avenue
Frankfort, KY 40601-3462
(502) 564-4240
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Steven L. Beshear
Governor

Lori H. Flanery
Secretary

SECRETARY'S ORDER 11-004

FINANCE AND ADMINISTRATION CABINET

Vendor Document Disclosure

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

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

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

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

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

II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to

conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.

III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.

IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.

V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

Reciprocal preference to be given by public agencies to resident bidders

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

DGA BASE

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

JPC RIDE QUALITY

JPC Pavement Smoothness requirements shall apply on this project in accordance with Section 501 for Category B projects of the current Standard Specifications.

FUEL AND ASPHALT PAY ADJUSTMENT

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

SPECIAL NOTES FOR PCC PATCHING & DIAMOND GRINDING

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2008 Standard Specifications, and applicable interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Take note that Special Provision 76 is not applicable to this project. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Remove and replace PCC Pavement at the locations listed and/or as directed by the Engineer; (2) Maintain and Control Traffic; (3) Diamond Grinding and (4) All other work specified as part of this contract.

II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

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

B. Dense Graded Aggregate. Contrary to Special Note for Full Depth Concrete Pavement Repair, use DGA; do not use Crushed Stone Base in lieu of DGA.

C. Portland Cement Concrete Pavement. Use non-reinforced JPC Pavement/24 for full depth replacement of concrete pavement meeting the requirements of the Special Note for Full Depth Concrete Pavement Repair. At the Contractor’s option, with no additional cost to the Department, use other high early strength rapid setting concrete; however, obtain the Engineer’s approval prior to use. Do not use chloride accelerators. Furnish all other materials according to the Standard Specifications or Special Note for Full Depth Concrete Pavement Repair, as applicable..

D. Pavement Markings. See Traffic Control Plan.

E. Joint and Crack Sealing. See Special Note for Full Depth Concrete Pavement Repair. Use hot poured elastic, no alternates.

III. CONSTRUCTION METHODS

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

B. Site Preparation. Be responsible for all site preparation, including but not limited to, incidental excavation and backfilling; removal of all obstructions or any other items;

disposal of waste materials, sweeping and removal of debris; temporary and permanent erosion and water pollution control; restoration; and any other incidentals. Perform all site preparation operations only as approved or directed by the Engineer.

C. Concrete Pavement Removal and Replacement. Except as specified in these notes, remove and replace full depth concrete pavement in accordance with Special Note for Full Depth Concrete Pavement Repair. Removal locations and dimensions listed in the summaries are approximate only; the Engineer will determine actual locations and dimensions at the time of construction. The Engineer may add additional locations within the project limits at any time prior to completion. Contrary to the Special Note for Full Depth Concrete Pavement Repair, the Engineer may designate non-standard distances from the joint to be used. Remove pavement according to Special Note for Full Depth Concrete Pavement Repair by a saw cut and lift method without unnecessarily disturbing the underlying base. Double sawing of large slab removal limits will be allowed to facilitate removal. Place PCC Pavement with nominal depth of 9 inches; however, transition the finished grade of the PCC Pavement to match the adjacent pavement that is to remain in place; therefore, the actual thickness of the pavement may be greater than existing in some areas. Install tie and dowel bars according to Special Note for Full Depth Concrete Pavement Repair using gang drills, capable of drilling a minimum of four holes at a time.

Perform concrete pavement removal and replacement in such a manner that removal and replacement are accomplished on the same day at each location. Once the removal of pavement has begun, work continuously until the new PCC Pavement is placed to eliminate the hole. The Engineer will allow hand finishing; however, perform initial strike-off with a rotary drum screed. Contrary to Section 501.03.13, do not texture by the formation of transverse grooves. All other applicable sections of Special Note for Full Depth Concrete Pavement Repair shall apply except as specified herein.

D. PCC Pavement Diamond Grinding. Diamond grind the entire length of the project both eastbound and westbound and at repair locations in the center turn lane or as directed by the Engineer. Begin Diamond Grinding within seven (7) calendar days after the placement of the last full depth patch. Grind the mainline lanes and the repair areas in the center turn lane. Complete diamond grinding according to Section 503 of the Standard Specifications. Ride quality will be according to Section 501 for Category B projects.

E. Joint and Crack Sealing. Seal joints in the new PCC pavement according to Special Note for Full Depth Concrete Pavement Repair. For other joints saw-cut, clean, and seal all transverse and longitudinal joints and the pavement shoulder joints according to Section 501.03.17.

F. Disposal of Waste. Dispose of all removed concrete, asphalt materials, debris, excess excavation, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.

G. Final Dressing, Clean Up, and Seeding and Protection. See Special Note for Erosion Control.

H. Restoration. Restore any roadway features or private property disturbed by the work or the Contractor's operations in like kind materials and design as directed by the Engineer at no additional cost to the Department or the owner.

I. Pavement Striping and Pavement Markers. See Traffic Control Plan.

J. On-Site Inspection. Make a thorough inspection of the site prior to submitting a bid and become thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not consider any claims for money or grant time extension resulting from site conditions.

IV. METHOD OF MEASUREMENT

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

B. Site Preparation. Other than the bid items listed, the Department will not measure site preparation will for direct payment, but shall be incidental to the other items of the work.

C. Erosion Control. See Special Note for Erosion Control.

D. Remove PCC Pavement. See Special Note for Full Depth Concrete Pavement Repair.

E. JPC Pavement/24. See Special Note for Full Depth Concrete Pavement Repair.

F. Smooth Dowels and Deformed Tie Bars. See Special Note for Full Depth Concrete Pavement Repair.

G. Joint Sealing and Saw-Clean-Seal Joints. For joints in new pavement joint sealing payment will be incidental, see Special Note for Full Depth Concrete Pavement Repair. For other longitudinal and transverse joints, the Department will measure saw-clean-seal joints in existing pavement in linear feet.

H. PCC Pavement Diamond Grinding. See Special Note For Diamond Grinding Ride Quality.

I. Pavement Striping and Pavement markings. See Traffic Control Plan.

V. BASIS OF PAYMENT

The Department will not make direct payment, other than for the bid items listed. The Department will consider all other items required to complete the construction as incidental to the bid items listed.

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

B. Remove Cement Concrete Pavement. See Special Note for Full Depth Concrete Pavement Repair.

C. JPC Pavement/24. See Special Note for Full Depth Concrete Pavement Repair.

D. PCC Pavement Diamond Grinding. See Special Note For Diamond Grinding Ride Quality.

SPECIAL NOTE FOR FULL DEPTH CONCRETE PAVEMENT REPAIR

This Special Note applies to full depth repairs of existing PCC pavement on US 68 in Barren County and supersedes Special Provision 76 in the 2008 Standard Specifications. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Remove and replace concrete pavement. Except as specifically superseded herein, comply with the applicable Standard Specifications, and interim Supplemental Specifications and Standard and Sepia Drawings, current editions.

2.0 MATERIALS AND EQUIPMENT.

2.1 JPC Pavement. Conform to Sections 501, 502, and 601 except that concrete compressive must achieve 3000 pounds per square inch (psi) in accordance with Section 4.4 of this note. Test concrete materials according to Section 601.03.03. The Engineer may allow pavement to be opened to traffic at less than 3,000 psi subject to the deductions described in Section 4.4 of this note.

2.2 Dowel Bars and Sleeves. Conform to Sections 501 and 811

2.3 Tie Bars. Conform to Sections 501and 811.

2.4 Joint Materials. Conform to Subsections 501.02.02 and 807.03.01 or 807.03.05.

2.5 Grout Adhesives and Epoxy Resin Systems. Conform to Section 826.

2.6 Dense Graded Aggregate (DGA) and Crushed Stone Base (CSB). Conform to Section 805.

2.7 Geotextile Fabric. Conform to Section 843.

2.8 Drills. Drill holes using a gang drill, capable of drilling a minimum of four holes simultaneously. Do not allow misalignment of holes to exceed 1/4 inch in the vertical, horizontal, or oblique plane.

2.9 Hammers. Only use chisel point hammers weighing less than 40 pounds to remove deteriorated concrete.

3.0 CONSTRUCTION.

3.1 Removal of Existing Pavement. Remove existing pavement to the extent the Contract specifies or as the Engineer directs. See details of configurations of pavement and joints for various situations are depicted in the drawings herein.

When small areas of removal and replacement are performed at bridge ends, maintain or reconstruct existing expansion joints at their existing location. When the Engineer determines extensive full width removal and replacement is required, construct new expansion joints at the locations shown on Standard Drawing No. RPN-010.

In the removal operation, make a full depth saw cut longitudinally along the designated centerline joint and or corresponding edge joint and transversely along the area marked for removal. To prevent damage to the subbase, do not allow the saw to penetrate more than ½" into the subbase. The Engineer may direct or approve additional cuts within the removal area for ease of removal of the damaged slab and to prevent damage to adjacent pavement to remain in place.

Previously replaced slabs will contain dowel bars which extend into old slabs. These dowel bars shall be saw cut at the joint to enable the replacement of the adjoining old slabs: therefore the contractor's equipment must be able to saw concrete and steel. Contractor shall take this into consideration when bidding.

Keep overcutting beyond the limits of the removal area to a **minimum**. Prevent saw slurry from entering existing joints and cracks. Clean all saw slurry and other contaminants from overcutting area. Repair overcut area with a low viscosity epoxy compound. To avoid pumping and erosion beneath the slab, do not allow traffic on sawed pavement for more than 48 hours before beginning removal procedures, unless directed by the Engineer.

Lift out the deteriorated concrete vertically with lift pins if at all possible. If approved by the Engineer, use other methods that do not damage the base, shoulder, or sides of pavement that is to be left in place. If any damage does occur, repair as the Engineer directs and use an acceptable alternative method for the removal process. Do not damage the pavement base during these operations.

A longitudinal construction joint shall be sawed for specified slabs listed in project. Slabs requiring this construction joint will consist of those adjacent to the yellow line or as directed by the engineer. The summary sheet should reflect appropriate dimensions for slabs affected.

3.2 Pavement Replacement. Perform base preparation and JPC Pavement replacement in such a manner that pavement is replaced on the same day as removed (see Traffic Control Plan).

3.2.1 Preparation of Base. Do not damage the pavement base during these operations. Compact the new and existing aggregate base to the Engineer's satisfaction. The Engineer will accept compaction by either visual inspection or by nuclear gauge. When the Engineer deems it necessary to stabilize the existing base or replace unsuitable materials, excluding bridge ends, use 12 inches of Crushed Limestone Size No. 2 aggregate wrapped in geotextile fabric topped with 4 inches of DGA or CSB. Use either Type III or Type IV geotextile fabric. The engineer may permit use of Flowable Fill and cement stabilization as an alternative to stabilize the existing base or to replace unsuitable materials when a plan for such is presented to and approved by the Engineer prior to use. The Engineer may also direct using only DGA or CSB to correct base deficiencies. At bridge ends, treat existing base and subgrade as the Contract specifies. During compaction, wet the base as the Engineer directs. Compact areas not accessible to mechanical compaction equipment by hand tamping as directed by the engineer.

3.2.2 Underdrains. Repair damage to existing pavement edge drains or other underdrains, if existing and exposed by the work according to Section 704.

3.2.3 Pavement Replacement. Using load transfer assemblies with dowel joints as a template, drill into the existing slab according to the details shown herein and on the Standard Drawings. Use plain epoxy coated dowels of the size specified on the standard drawings based on the pavement thickness for contraction and expansion joints. Drill holes for dowel bars and tie bars into the face of the existing slab, at diameters as specified below. Drill the dowel bar holes and tie bar holes to a depth equal to 1/2 the length of the bars. Anchor tie bars into the existing pavement using an epoxy resin. Anchor dowel bars into the existing pavement using either an epoxy resin or an adhesive grout. For tie bars and dowel bars where an epoxy resin is to be used, drill the holes 1/8 inch larger than the bar diameter. For dowel bars where an adhesive grout is to be used, drill holes 1/4 inch larger than the bar diameter. Use a clear or opaque grout retention disk in both resin and grout applications. Operate the equipment so as to prevent damage to the pavement being drilled. Obtain the Engineer's approval of the drilling procedure. Install load transfer assemblies according to the Standard Drawings and Standard Specifications.

In longitudinal joints, when indicated herein or in the Standard Drawings, install 1 inch diameter deformed tie bars, 18 inches long on 30-inch centers, starting and ending 20 inches inside each end of the repair area. In transverse construction joints, install 1 inch diameter deformed tie bars, or 1 inch diameter plain dowel bars, 18 inches long on 12 inch centers starting and ending 12 inches inside each edge of the repair area.

Except as specified herein or the Engineer directs otherwise, install the dowels and tie bars according to Section 511. Ensure the holes are dry and free of dust and debris. Use a nozzle to insert the grout or epoxy starting at the back of the drilled hole to allow for full coating of the dowel or tie bar. After placement, use a bond breaker on the section of the dowel bar that is protruding from the hole.
Mix, place, finish, and cure concrete according to Section 501 with the exception that the Department may allow truck mixing, 2-bag mixers, and hand finishing.

When required, use a form on the side of the slab at longitudinal joints. When the adjacent traffic lane is not closed to traffic or the drop-off is not protected, temporarily fill the space between the form and the adjacent pavement with DGA. After placing the slab, remove the DGA and form. Fill the hole with concrete and thoroughly consolidate by rodding, spading, and sufficient vibration to form a dense homogeneous mass. Use a form on the side of the slab adjacent to shoulders. Excavate and backfill as shown on Section F'-F'.

For patches less than 25 feet in length, use a bond breaker and do not install tie bars at the longitudinal joint. Bond breakers should not exceed 1/8 inch in thickness, e.g. tar paper.

Broom finish or, when the adjacent surface has a grooved finish, texture the surface according to Subsection 501.03.13 H). Finish the surface, including joints, to meet a surface tolerance of 1/8 inch in 10 feet that will be verified by straightedge. Cure the pavement and apply curing membranes according to 501.03.15.

Keep all pavement surfaces adjacent to this operation reasonably clean of excess grout and other materials at all times. Maintain all original longitudinal joints. Place transverse joints according to the details shown herein and on the Standard Drawings.

3.3 Joint Sealing. Seal all new or partially new joints with silicone rubber sealant or hot-poured elastic joint sealant according to Subsection 501.03.18.

4.0 MEASUREMENT.

4.1 Remove JPC Pavement. The Department will measure the quantity in square yards of surface area of pavement and curbs. The Department will not measure removal of underlying base material or curbs for payment and will consider it incidental to Remove JPC Pavement.

4.2 DGA or CSB. The Department will measure the quantity used to stabilize the existing base or to replace unsuitable material in tons. The Department will not measure removal of

existing base material or underlying material for payment and will consider such removal incidental to DGA or CSB. The Department will not measure DGA used for the drop-off protection and will consider it incidental to JPC Pavement .

4.3 Non-Reinforced JPC Pavement. When listed as a bid item, the Department will measure the quantity according to Subsection 501.04.01. The Department will not measure dowels, tie bars, hook bolts, or joint sealing for payment and will consider it incidental to Non-Reinforced JPC Pavement.

4.4 JPC Pavement. When listed as a bid item, the Department will measure according to Subsection 501.04.01. The Department will not measure dowels, tie bars, hook bolts, or joint sealing for payment and will consider it incidental to Non-Reinforced JPC Pavement. When not listed as a bid item, the Department will measure the quantity as Non-Reinforced JPC Pavement and make no additional payment for its use. JPC Pavement will be paid according to Section 5.0 below and according to the following payment schedule based on the compressive strength. The cylinders for payment will be tested two hours prior the scheduled opening of traffic.

3000 PSI and up	100% payment
2750 to 3000 PSI	75% payment and approval from the Engineer to open to traffic*
2500 to 2750 PSI	50% payment and approval from the Engineer to open to traffic*
2250 to 2500 PSI	25% payment and approval from the Engineer to open to traffic*
Below 2500 PSI	10% payment and no potential to open to traffic. Maintain traffic closure until concrete reaches a minimum of 2250 PSI*.

*If the Engineer approves opening to traffic below 3000 PSI, the Engineer will evaluate the concrete at 28 days (or sooner) to determine if the removal and replacement of the concrete is necessary due to pavement distress induced by the early opening (i.e. noticeable cracking). If required by the Engineer, remove and replace those slabs showing distress at no additional cost to the Department.

4.5 Underdrains. If listed as a bid item, the Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains. If not listed as a bid item, but required by the Engineer at the time of construction, the Department will pay for Underdrains as Extra Work according to Sections 104.03 and 109.04.,

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit

Full Depth Concrete Pavement Repair
Page 6 of 6

----	Remove JPC Pavement	Square Yard
00001	DGA Base	Ton
00003	Crushed Stone Base	Ton
02069-02071, 02073, 02075, 02084, 02086, 02088	JPC Pavement Non-Reinforced, thickness See Subsection 501.05	
01000	Perforated Pipe, 4-inch	Linear Foot
02598, 02599	Fabric-Geotextile, Type	Square Yard

Payment at the Contract unit prices per cubic foot shall be full compensation for all labor, equipment, materials, and incidentals full depth concrete pavement repair as specified herein and to the satisfaction of the Engineer.

SPECIAL NOTE FOR LIP CURB

Replace curbs in PCC pavement removal areas with Lip Integral Curb modified to match the shape of the existing adjacent curb remaining in place. The Department will not measure integral Lip Integral Curb when part of removal slab, but shall be incidental to JPC Pavement/24/9 Inch.

Sawcut pavement and remove damaged and deteriorated curbs in other locations not part of removal slabs listed in the summary sheet or as designated by the Engineer. Replace removed curbs with Lip Header Curb, modified to match the shape of the existing adjacent curb remaining in place and matching the depth of the existing PCC pavement; contrary to Standard Drawing RPM-100-09, 12 inch minimum depth will not be required. Prior to Diamond Grinding, the Engineer will designate the locations to be replaced outside PCC repair areas. The Department will measure and pay Lip Header Curb (Modified) that is not part of removal slabs according to Section 506.04.02. Payment at the Contract unit price per linear foot shall be full compensation for all labor, materials, equipment, and incidentals for sawcutting pavement, removing existing curb, and placing the Modified Lip Header Curb.

Engineer may adjust curb grade to maintain positive drainage to curb box inlets and/or drop box inlets.

SPECIAL NOTE FOR ASPHALT MIXTURES USING RECLAIMED MATERIALS

**** The Contractor may elect to use this Special Note in lieu of Section 409 of the 2008 Standard Specifications for Road and Bridge Construction. The Contractor must notify the Department in writing of which specification they plan to use prior to beginning work.**

2012-409.01 DESCRIPTION. 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. For other sources to be approved, satisfactorily establish to the Engineer that the quality of the material is acceptable.

Use either pre-consumer (manufacturer waste or new) or post-consumer reclaimed asphalt shingles (RAS) that are processed such that all the material passes the 3/8-in. sieve. Ensure pre-consumer RAS is free of deleterious materials. Ensure post-consumer RAS does not contain more than 1.5 percent wood by mass or more than 3.0 percent deleterious materials by mass.

2012-409.02 MATERIALS AND EQUIPMENT. Conform to the guidelines in Subsection 2012-409.03.03 for the required grade of asphalt binder which is based on the percentage of effective binder content of the mixture.

2012-409.03 CONSTRUCTION. Keep reclaimed material of different gradation, asphalt binder content, asphalt binder properties, and aggregate properties separate at all times, including when stockpiling and feeding. The Department may approve other methods and procedures provided that all characteristics of the reclaimed material remain uniform.

2012-409.03.01 Polish-Resistant Aggregate. When electing to utilize polish-resistant aggregate in reclaimed material to satisfy a portion of the polish-resistant aggregate requirements for the mix, provide documentation to the Engineer's satisfaction that the reclaimed material consists of the specified amount of polish-resistant aggregate. Provide samples of the reclaimed material to the Engineer for verification testing.

2012-409.03.02 Asphalt Binder Content Adjustment for RAS. Recognizing that not all asphalt binder in RAS is activated during the mixing operation to fully blend with the virgin materials, the Department will reduce the asphalt binder content determined by Kentucky Method 64-405 for RAS by 25 percent.

2012-409.03.03 Preparation of Mixture.

A) Mix Requirements. Conform to the Contract requirements for each mixture produced using reclaimed material consisting of RAP, RAS, or a combination of RAP and RAS. Conform to the following table to select the appropriate grade of virgin asphalt binder to blend with the reclaimed material. Calculate the percentage of effective binder content as follows:

*Percentage of effective binder content = [(A*B) + (0.75*C*D)]/E*, where

A = Asphalt binder content of the RAP (%);
B = Percentage of RAP in the mix (%);
C = Asphalt binder content of the RAS (%);
D = Percentage of RAS in the mix (%); and
E = Effective binder content of the mix (%).

ASPHALT MIXTURES WITH NOMINAL-MAXIMUM AGGREGATE SIZE OF 0.5 in., 0.38 in., and No. 4		
ASPHALT BINDER SPECIFIED IN MIXTURE BID ITEM	VIRGIN ASPHALT BINDER	
	RAP	
	≤ 20 % Effective Binder Content	21-30 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	PG 76-22	-----
	RAS	
	≤ 13 % Effective Binder Content	14-20 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	-----	-----
	RAP and RAS	
	≤ 15 % Effective Binder Content	16-25 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	-----	-----

ASPHALT MIXTURES WITH NOMINAL-MAXIMUM AGGREGATE SIZE OF 1.50 in., 1.00 in., and 0.75 in.		
ASPHALT BINDER SPECIFIED IN MIXTURE BID ITEM	VIRGIN ASPHALT BINDER	
	RAP	
	≤ 25 % Effective Binder Content	26-35 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	PG 76-22	-----
	RAS	
	≤ 16 % Effective Binder Content	17-24 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	-----	-----
	RAP and RAS	
	≤ 18 % Effective Binder Content	19-30 % Effective Binder Content
PG 64-22	PG 64-22	PG 58-28
PG 76-22	-----	-----

B) Mixing. Obtain the Engineer's approval for the method of incorporating the reclaimed material into the mixture. Thoroughly mix the new and reclaimed materials into a uniform mass. Ensure that the final mixture conforms to all requirements of the Contract. Ensure that the moisture content of the final mixture is not detrimental to the handling, hauling, placing, or compacting of the mixture.

2012-409.04 MEASUREMENT. The Department will not measure reclaimed material separately but will include it in the measured quantities of asphalt mixture produced.

2012-409.05 PAYMENT. The Department will make payment for the completed and accepted quantities under the appropriate pay item for the asphalt mixture being produced.

The Department will not make separate payment for incorporating reclaimed material. The Department will not increase or decrease the Contract unit prices for any asphalt mixture on the project as a result of using, or not using, reclaimed material in the asphalt mixtures.

SPECIAL NOTE FOR LIQUIDATED DAMAGES

In addition to the Liquidated Damages specified in Section 108.09, Liquidated Damages in the amount $500.00 per hour or part of an hour, not to exceed $5,000.00 per day, will be assessed for each day or part of a day a lane closure remains in place during the prohibited dates or hours as specified in the Traffic Control Plan, excluding delays caused by inclement weather. If work is delayed by inclement weather, the minimum work required to allow removal of the lane closure shall be resumed immediately as soon as weather permits.

In addition to the Liquidated Damages specified in Section 108.09, Liquidated damages in the amount of $500.00 per hour or part of an hour, not to exceed $5,000.00 per day, will be assessed for each excavated area for each day or part of a day beyond one (1) calendar day an excavated area remains open without the PCC Pavement being placed, excluding delays caused by inclement weather. If work is delayed by inclement weather, the work required to place the new PCC Pavement shall be resumed immediately as soon as weather permits.

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

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2008 Standard Specifications and interim Supplemental specifications, Special Notes and Special Provisions, and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, 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.

If requested by the Contractor and approved by the Engineer, establish zones for double fines for speeding violations when workers are present. Notify the Engineer a minimum of 24 hours prior to using the double fine signs. Dual mount "WARNING FINE DOUBLED IN WORK ZONE" signs and "END DOUBLE FINE" signs. Remove or cover the double fine signs when workers are not present in the double fine zone for more than a two hour period of time. The Department will not measure furnishing, erecting, covering and uncovering, and maintaining double fine work zone signs for separate payment but shall be incidental to Maintain and Control Traffic.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures and maintain all lanes open to traffic on the following days:

June 1, 2012 – June 3, 2012 Glasgow Highland Games

On days Glasgow Independent Schools or Barren County Schools are in regular session, maintain one lane in each direction open to traffic during the following hours:

7:00 a.m. – 8:30 a.m.	East and West Bound
2:00 p.m. – 3:30 p.m.	East and West Bound

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed.

On allowable days and hours and as required by the work, in areas with 3 or more lanes maintain a minimum of one lane of traffic in each direction at all times during construction. On allowable days and hours and as required by the work, in areas with 2 lanes, maintain alternating one way traffic during construction (see drawings for additional phasing details). Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles up to 16 feet in width through the work

zone. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

Night work will be allowed on this project. Obtain the Engineer's approval of the method of lighting prior to use.

Take these restrictions into account when preparing bid. The Department will not consider any claims for money or allow time extensions for any delays to the Contractor as a result of these restrictions.

LANE & SHOULDER CLOSURES

Do not establish more than one lane closure concurrently in each direction of travel. Limit the length of a lane closure to one quarter of a mile. Complete all PCC Repairs within that lane closure before removing that lane closure and erecting a second lane closure in the same direction of travel. The Engineer may allow lane and shoulder closures during non-working hours for PCC repairs and concrete curing; however do not park equipment or store materials on a closed shoulder or lane during non-working hours. The Engineer will not allow lane closures during nonworking hours for Diamond Grinding Operations or installation of pavement markings.

Two weeks prior to beginning work, provide the Engineer a proposed schedule of lane closures for approval. The Department will provide public notification.

ACCESS TO PROPERTY

With prior permission from the Engineer, the Contractor may close access to side streets and roads, schools, churches, commercial, and residential properties only when required by active work in progress, as determined by the Engineer, in the immediate vicinity of the approaches or entrances subject to the following conditions:

1. If streets and roads, schools, churches, commercial, and residential properties have multiple access points to US 68 or other public streets, do not close more than one access point at the same time.

2. With prior approval from the Engineer, the Contractor may close streets and roads, schools, churches, commercial, and residential properties with only a single access point during working hours and for the minimum length of time for concrete curing, if curing is required during non-working hours. However, provide reasonable egress and ingress to each such property when actual operations requiring a closure are not in progress at that location. Close each such access for the absolute minimum length of time required for actual operations or concrete curing. The Engineer will not allow the time of closure to be extended for the Contractor's convenience. The.

Engineer may require partial width construction, temporary entrances, and other accommodations to maintain minimum levels of access and public safety.

3. Notify all residents, property owners, and city public safety and public works officials twenty-four hours in advance of any approach or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

4. The Department will make payment at the Contract unit prices for DGA and asphalt materials if needed to construct and maintain any temporary entrances; however, no direct payment will be allowed for pipe, excavation, and/or embankment needed, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each approach or entrance.

PROJECT TRAFFIC COORDINATOR

Furnish a Project Traffic Coordinator as per Section 112.03.12 for an unclassified project. In addition to the requirements of Section 112.03.02(B), the Traffic Coordinator shall provide for inspection of the project's maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. Provide the personnel access on the project to a radio or telephone to be used in case of emergencies or accidents.

SIGNS

Contrary to Section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for signs directed by the Engineer to be replaced due to damage, poor condition, readability, or reflectivity will not be measured for payment. Retain possession of signs after construction is complete.

BARRICADES

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

to damage, poor condition, or reflectivity will not be measured for payment. Retain possession of barricades after construction is complete.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions, provide additional changeable message signs as directed by the Engineer. Place changeable message signs at locations designated by the Engineer. As the actual queue lengthens and/or shortens relocate or provide additional changeable message signs as directed by the Engineer. The locations designated may vary as the work progresses. The messages required to be provided shall be designated by the Engineer. Operate the Changeable Message Signs at all times. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign within 24 hours.

The Department will measure for payment the maximum number of changeable message signs in concurrent use at the same time on a single day on all sections of the contract. Individual changeable message 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 changeable message signs directed by the Engineer to be replaced due to damage, poor condition, or readability will not be measured for payment. Retain possession of changeable message signs after construction is complete.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. Individual arrow panels 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 arrow panels directed by the Engineer to be replaced due to damage, poor condition, or readability will not be measured for payment. Retain possession of arrow panels after construction is complete.

PAVEMENT MARKINGS

Coordinate the installation of all permanent striping with the Engineer and the District Traffic Engineer. If the Engineer determines that the final striping will vary from the existing, the District traffic Engineer will provide a Striping Plan prior to diamond Grinding operations.

Temporary Paint Striping will not be used on the project. Temporary striping shown on the attached drawings is for information only. Construction Grabber Cones shall be used for lane delineation during construction phases.

1. Permanent striping shall be in place before a lane is opened to traffic; and

2. If the Contractor's methods do not meet the Engineer's approval, then use an approved "Removable Lane Tape" in lieu of Grabber Cones; however, The Department will not measure removable lane tape for separate payment it will be incidental to maintain and control traffic.

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 W8-9 or W8-9A, or W8-11) 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 the newly surfaced area and the existing surface areas that 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" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight working hours only. Wedge with appropriate material with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4 inches - The Engineer will allow drop-offs exceeding 4 inches only during active operations during the interval between removal of PCC Pavement and the placement of the new PCC pavement in the removal areas. Place plastic drums, vertical panels or barricades every 25 feet. Place Type III Barricades facing oncoming traffic in both directions. Remove the PCC Pavement, stabilize the base, and replace the PCC pavement in such a manner that the PCC pavement is replaced on the same day as removed. If operations are not active at individual drop-off areas, wedge with DGA with 3:1 or flatter slope. Remove the wedge and place new PCC Pavement in the drop-off area as soon as possible, but no later than the same day as removed.

In lieu of a wedge, drop-offs at lateral trenches may be covered by a 1" thick steel plate when work is not actively in progress at the pavement removal area; the plate shall be anchored to the pavement by any method approved by the Engineer that will prevent it being dislodged by accidental impact. If for any reason, it is necessary to excavate small areas, any holes adjacent to traffic where there exists a possibility that a vehicle may drop a wheel into the holes shall be filled with asphalt or plated. No direct payment will be made for the wedge or steel plates, but shall be incidental to other items of work.

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver – e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related

Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed

- Nor more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the signs is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent thief (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS.

Word	Abbrev.	Example
Access	ACCS	ACCIDENT AHEAD/USE ACCS RD NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/USE ALT RTE NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/DETOUR NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/MERGE LEFT

Commercial	COMM	OVRSZ COMM VEH/USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/EXPECT DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/DETOUR EXIT 20
Emergency	EMER	EMER VEH AHEAD/PREPARE TO STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/DETOUR EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/DETOUR EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ALL TRAF EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/EXPECT DELAYS
Hour	HR	ACCIDENT ON AA HWY/2 HR DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/DETOUR EXIT 20
Lane	LN	LN CLOSED/MERGE LEFT
Left	LFT	LANE CLOSED/MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/SLOW
Major	MAJ	MAJ DELWAYS I75/USE ALT RTE
Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/USE I275 NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/DETOUR EXIT 60
Prepare	PREP	ACCIDENT 3 MIL/PREP TO STOP
Right	RGT	EVENT PKING NEXT RGT
Road	RD	HAZMAT IN RD/ALL TRAF EXIT 25
Roadwork	RDWK	RDWK NEXT 4 MI/POSSIBLE DELAYS
Route	RTE	MAJ DELAYS I75/USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/DETOUR EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD
Street	ST	MAIN ST CLOSED/USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS.

Abbrev.	**Intended Word**	**Word Erroneously Given**
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)

LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

TYPICAL MESSAGES

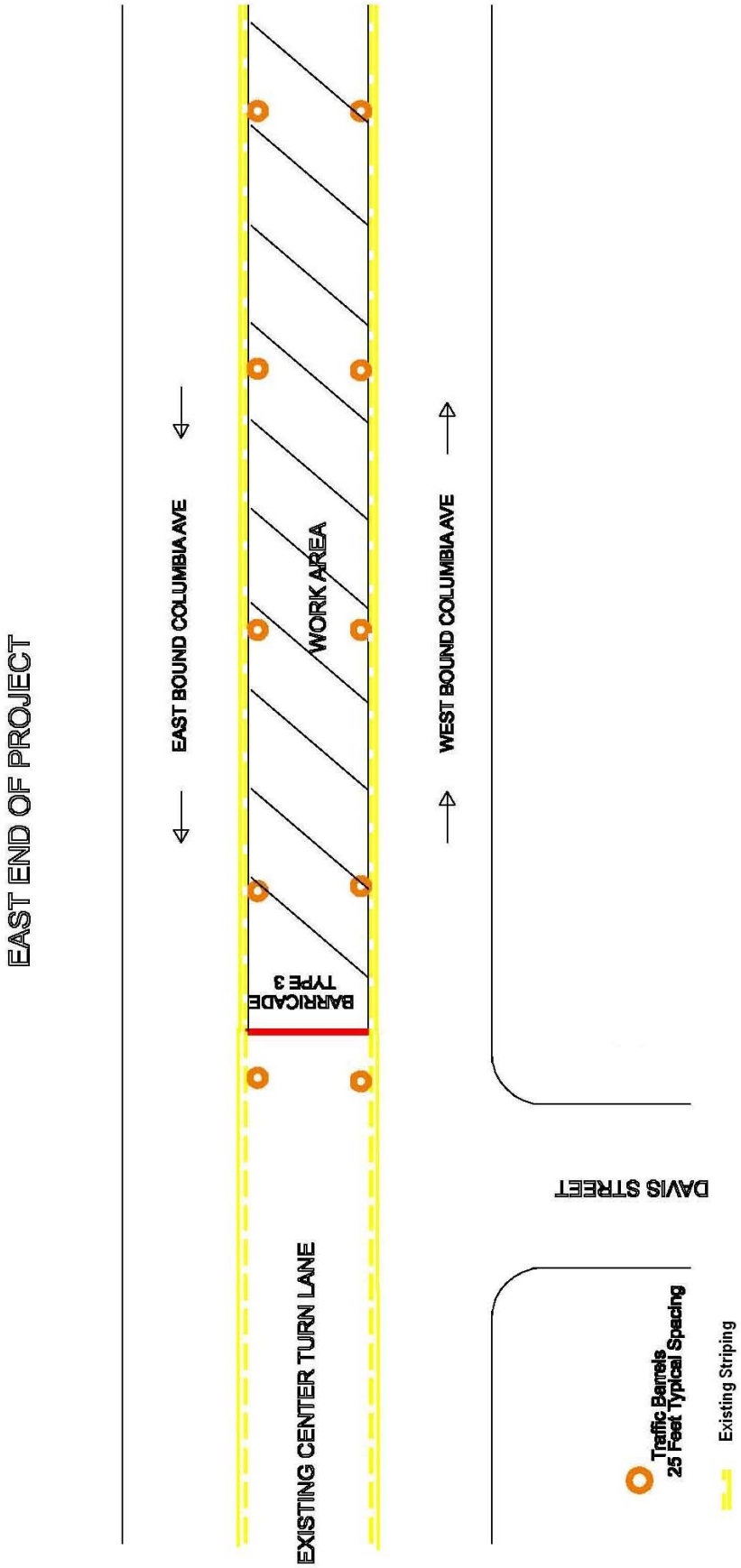
The following is a list of typical messages used on CMS. The list consists of the reason or problem that you want the driver to be aware of and the action that you want the driver to take.

Reason/Problem	Action
ACCIDENT	ALL TRAFFIC EXIT RT
ACCIDENT/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT
FOG XX MILES	PASS TO RIGHT
FREEWAY CLOSED	PREPARE TO STOP
FRESH OIL	REDUCE SPEED
HAZMAT SPILL	SLOW
ICE	SLOW DOWN
INCIDENT AHEAD	STAY IN LANE
LANES (NARROW, SHIFT, MERGE, ETC.)	STOP AHEAD
LEFT LANE CLOSED	STOP XX MILES
LEFT LANE NARROWS	TUNE RADIO 1610 AM
LEFT 2 LANES CLOSED	USE NN ROAD
LEFT SHOULDER CLOSED	USE CENTER LANE
LOOSE GRAVEL	USE DETOUR ROUTE
MEDIAN WORK XX MILES	USE LEFT TURN LANE
MOVING WORK ZONE, WORKERS IN ROADWAY	USE NEXT EXIT
NEXT EXIT CLOSED	USE RIGHT LANE
NO OVERSIZED LOADS	WATCH FOR FLAGGER
NO PASSING	

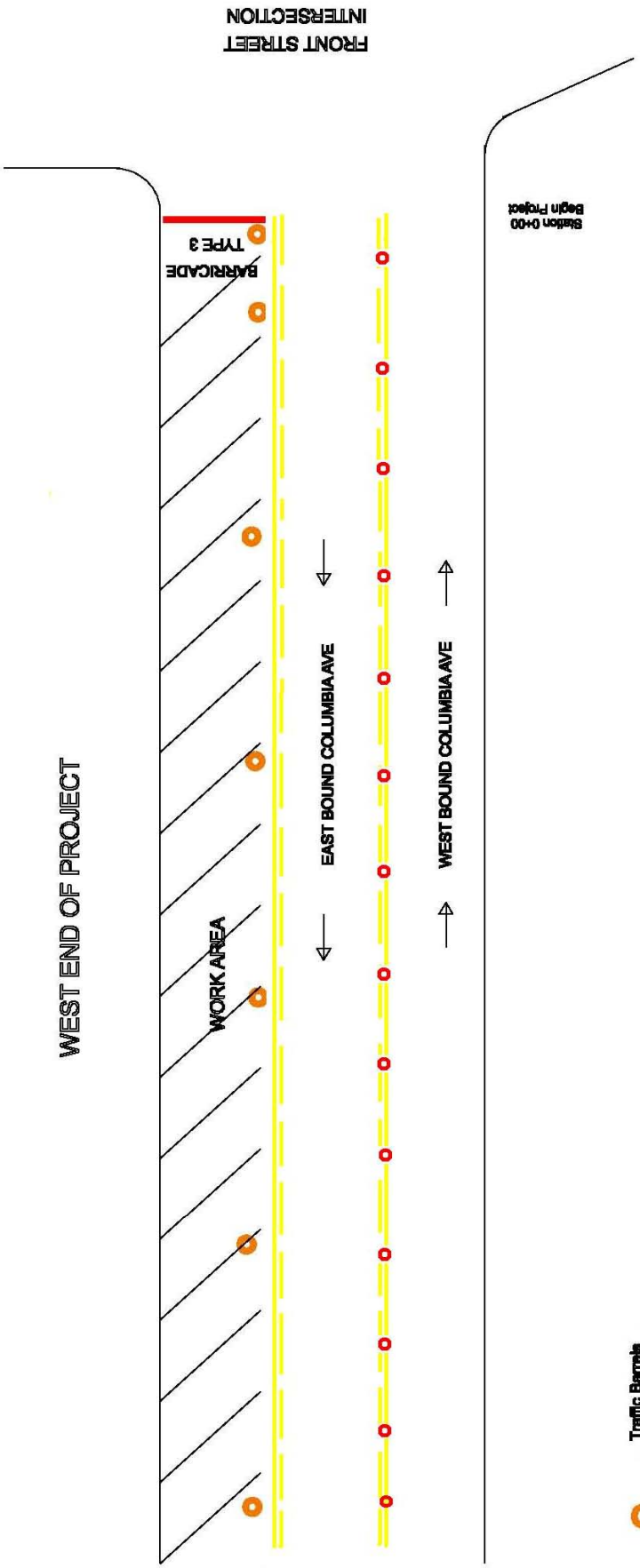
NO SHOULDER
ONE LANE BRIDGE
PEOPLE CROSSING
RAMP CLOSED
RAMP (SLIPPERY, ICE, ETC.)
RIGHT LANE CLOSED
RIGHT LANE NARROWS
RIGHT SHOULDER CLOSED
ROAD CLOSED
ROAD CLOSED XX MILES
ROAD (SLIPPERY, ICE, ETC.)
ROAD WORK
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)
ROAD WORK XX MILES
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)
NEW SIGNAL XX MILES
SLOW 1 (OR 2) - WAY TRAFFIC
SOFT SHOULDER
STALLED VEHICLES AHEAD
TRAFFIC BACKUP
TRAFFIC SLOWS
TRUCK CROSSING
TRUCKS ENTERING
TOW TRUCK AHEAD
UNEVEN LANES
WATER ON ROAD
WET PAINT
WORK ZONE XX MILES
WORKERS AHEAD

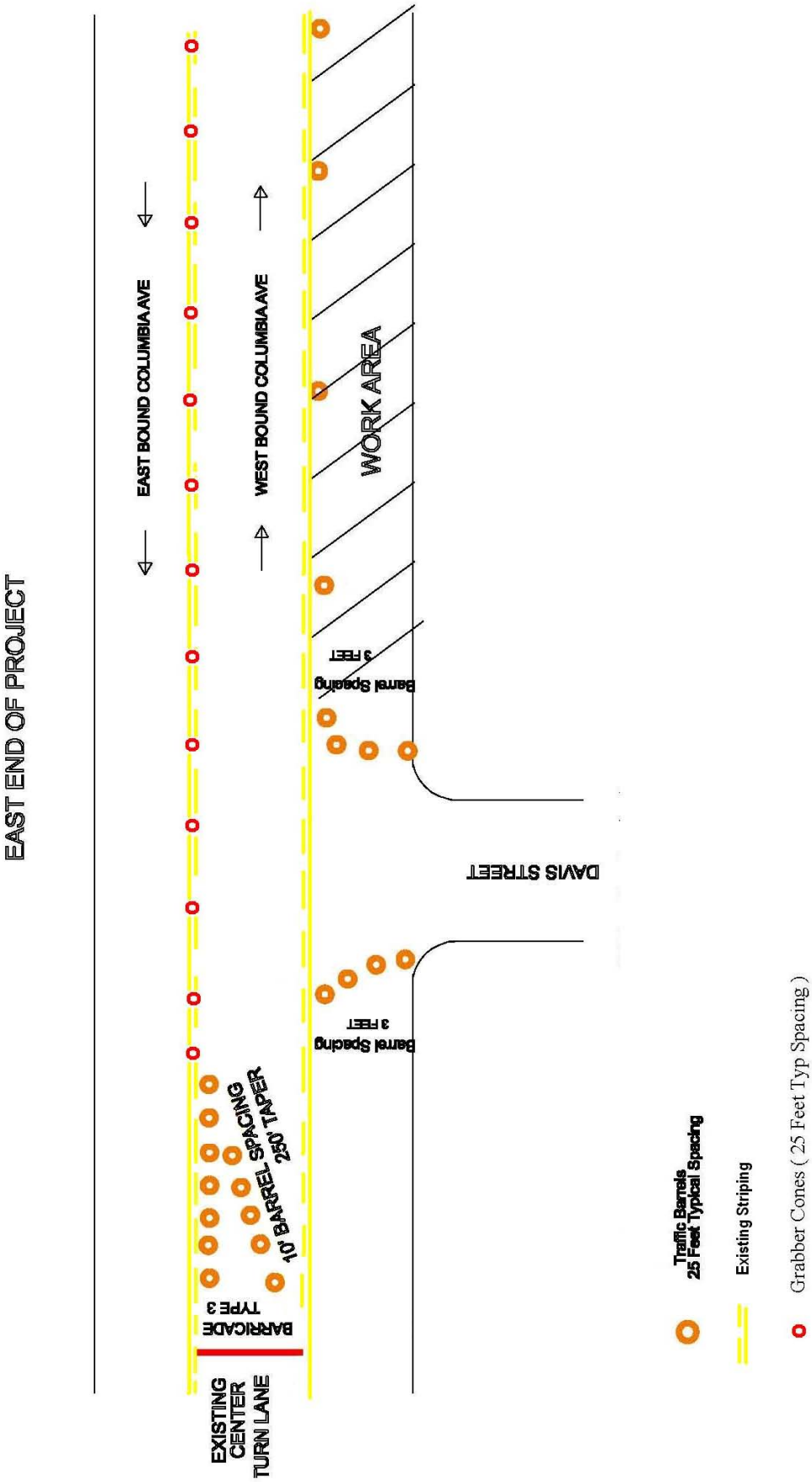
1/16/10

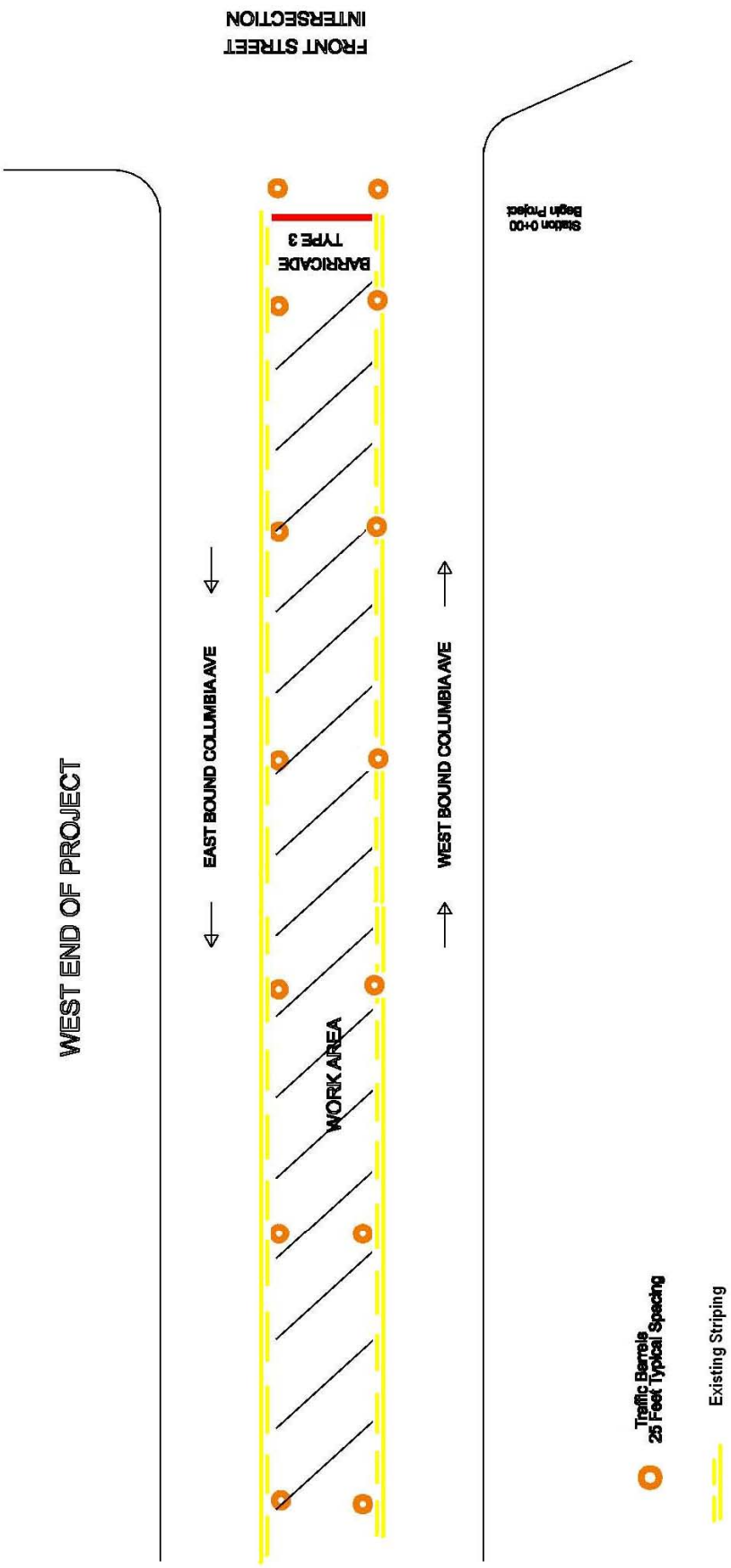
use and placement of changeable message signs.docx

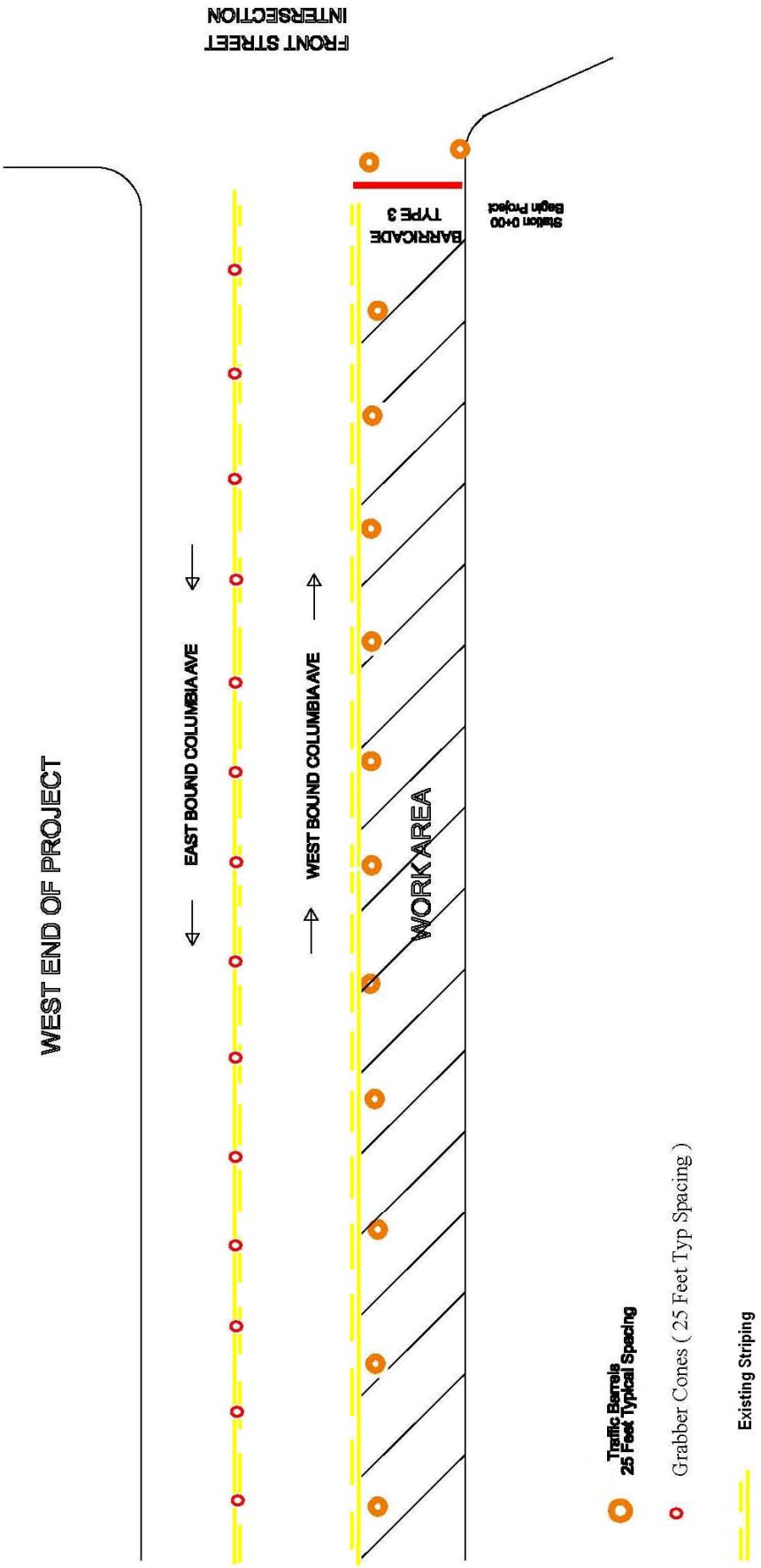

EAST END OF PROJECT
EAST BOUND COLUMBIA AVE
WORK AREA
WEST BOUND COLUMBIA AVE
BARRICADE TYPE 3
EXISTING CENTER TURN LANE
DAVIS STREET
Traffic Barrels
25 Feet Typical Spacing
Existing Striping

Traffic Control Diagram

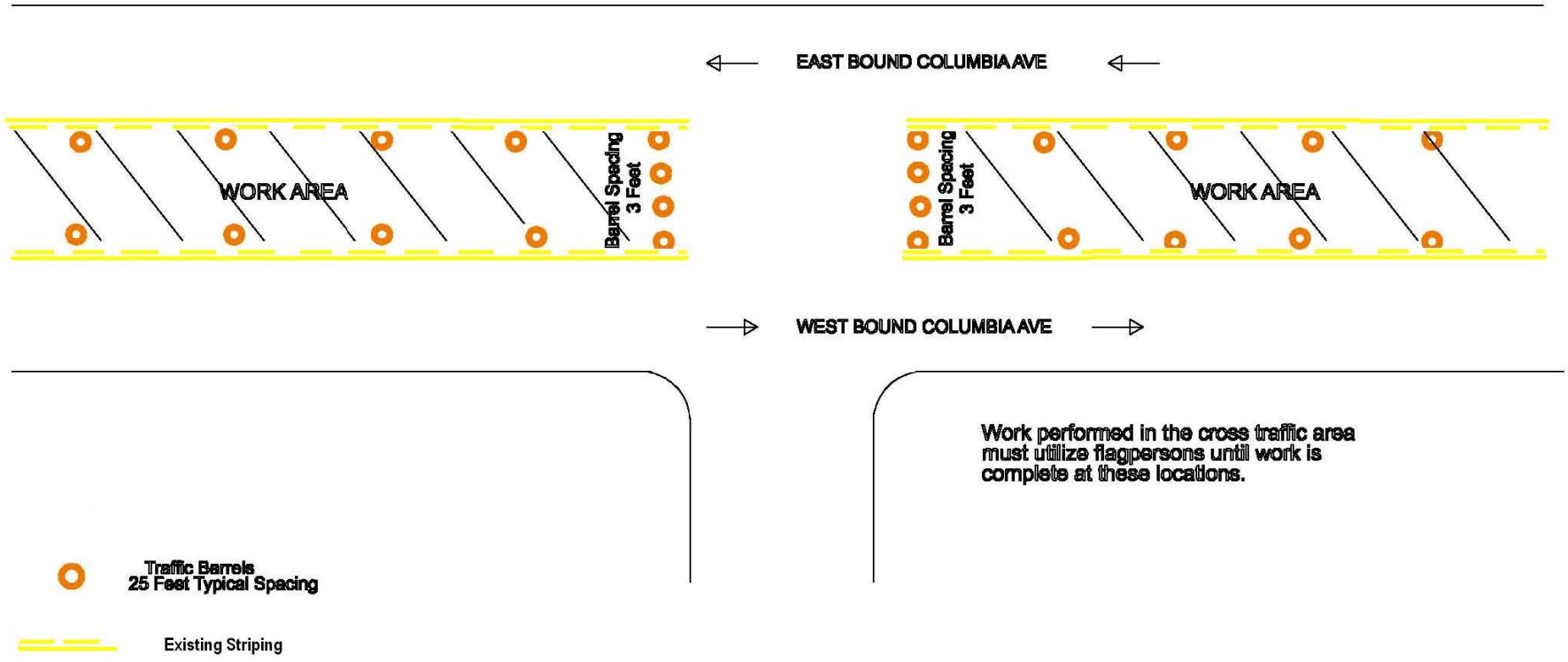


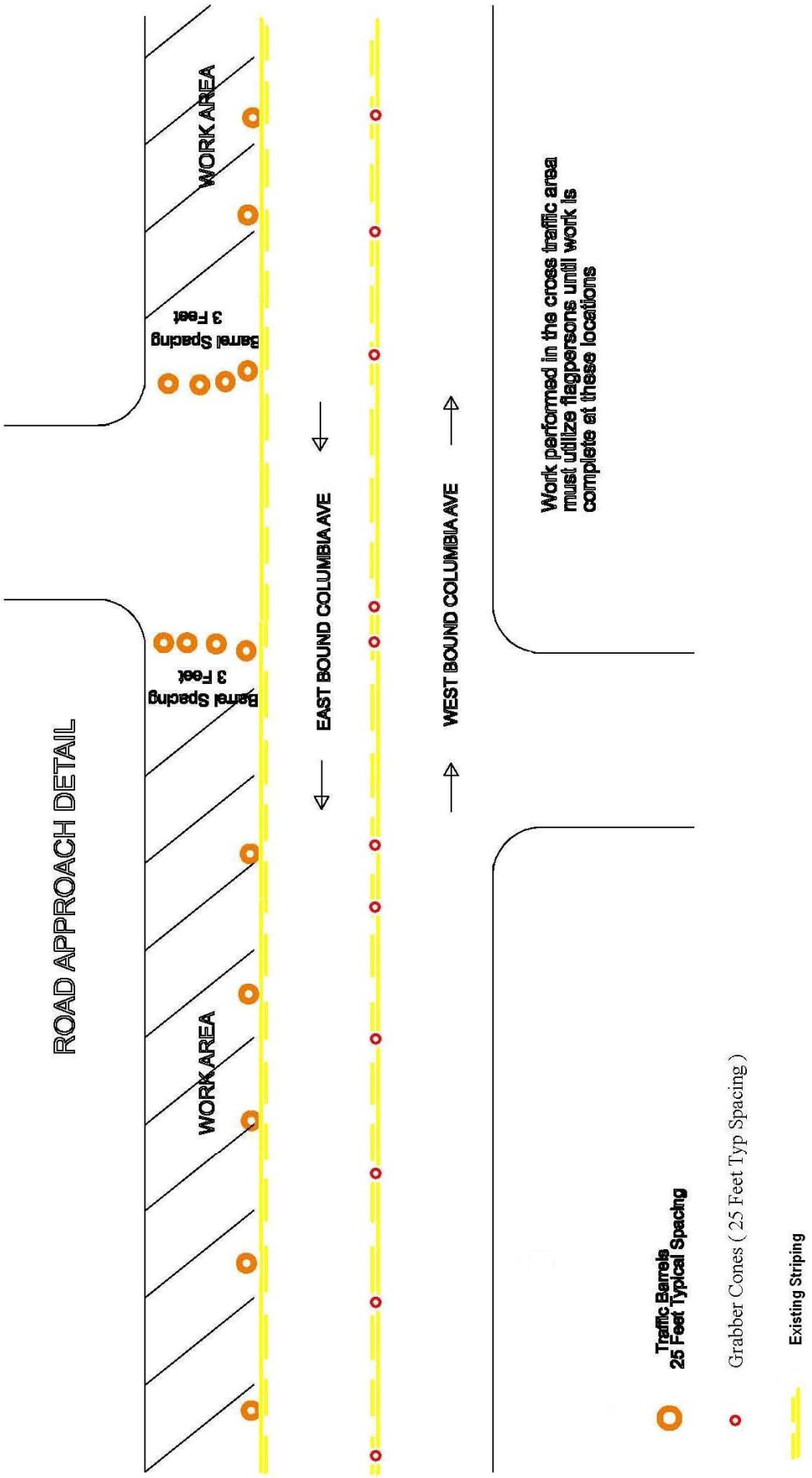

EAST END OF PROJECT
EAST BOUND COLUMBIA AVE
WEST BOUND COLUMBIA AVE
WORK AREA
Barrel Spacing 3 FEET
DAVIS STREET
Barrel Spacing 3 FEET
BARRICADE TYPE 3
10' BARREL SPACING 250' TAPER
EXISTING CENTER TURN LANE
Traffic Barrels 25 Feet Typical Spacing
Existing Striping
Grabber Cones (25 Feet Typ Spacing)

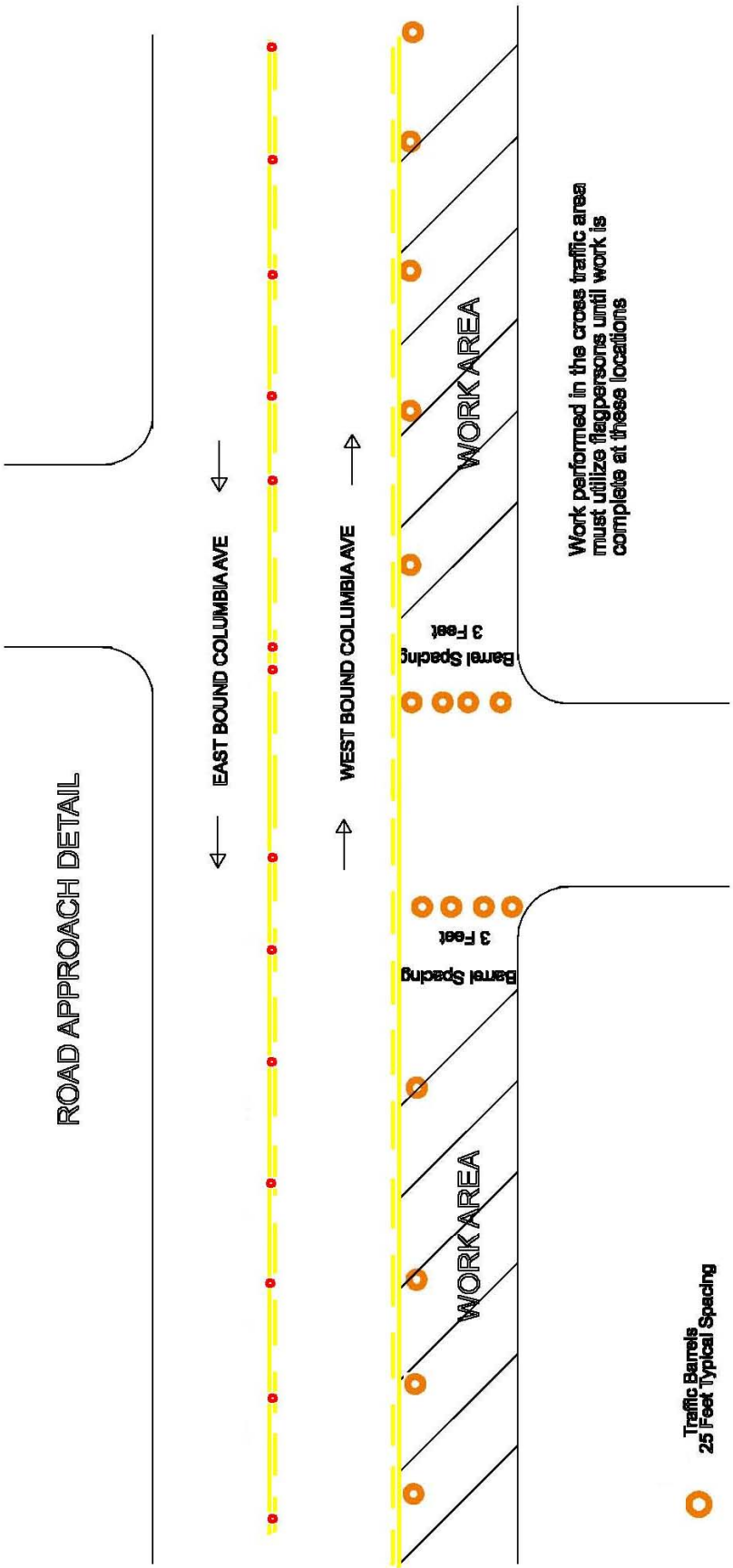

FRONT STREET
INTERSECTION
Station 0+00
Begin Project
BARRICADE
TYPE 3
EAST BOUND COLUMBIA AVE
WEST BOUND COLUMBIA AVE
WORK AREA
WEST END OF PROJECT
Traffic Barrels
25 Feet Typical Spacing
Existing Striping

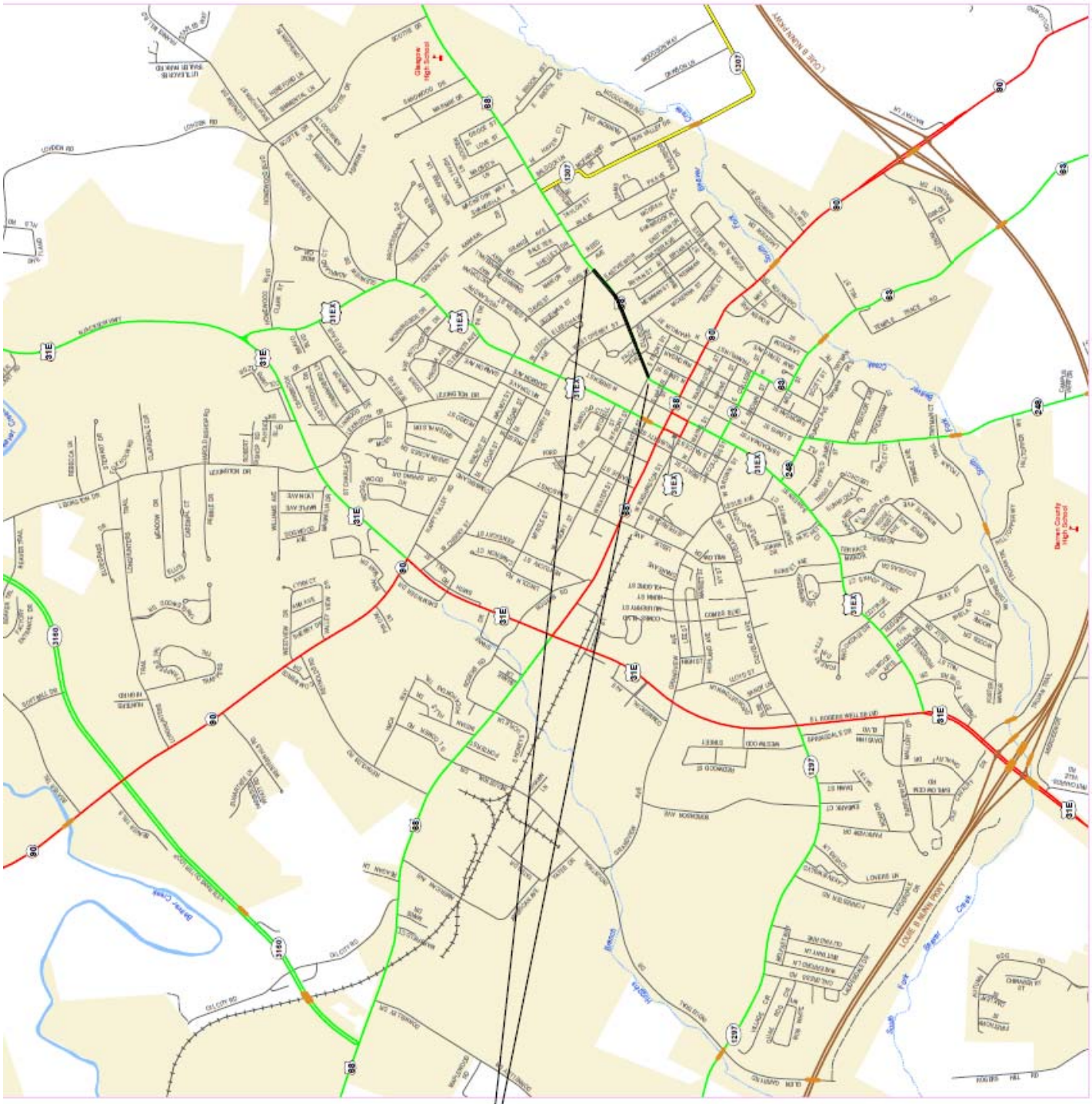

FRONT STREET
INTERSECTION
BARRICADE
TYPE 3
Station 0+00
Begin Project
WEST BOUND COLUMBIA AVE
EAST BOUND COLUMBIA AVE
WORK AREA
WEST END OF PROJECT
Traffic Barrels
25 Feet Typical Spacing
Grabber Cones (25 Feet Typ Spacing)
Existing Striping

ROAD APPROACH DETAIL




ROAD APPROACH DETAIL
WORK AREA
Barrel Spacing
3 Feet
WORK AREA
Barrel Spacing
3 Feet
EAST BOUND COLUMBIA AVE
WEST BOUND COLUMBIA AVE
Work performed in the cross traffic area must utilize flagpersons until work is complete at these locations
Traffic Barrels
25 Feet Typical Spacing
Grabber Cones (25 Feet Typ Spacing)
Existing Striping


ROAD APPROACH DETAIL
EAST BOUND COLUMBIA AVE
WEST BOUND COLUMBIA AVE
WORK AREA
WORK AREA
Barrel Spacing
3 Feet
Barrel Spacing
3 Feet
Work performed in the cross traffic area must utilize flagpersons until work is complete at these locations
Traffic Barrels
25 Feet Typical Spacing
Grabber Cones (25 Feet Typ Spacing)
Existing Striping


FE01 005 0068 003-004

Station	Direction	Length	Width	SY	Lip Curb	Comments
- 0+5	EB	14	8.7	13.53		INCLUDES CURB
- 0+5	EB	14	4	6.22		BEGINNING JOINT @ 0+00 GAS VALVE @ - 0+12
0+5	EB	13	8.7	12.57		INCLUDES CURB
0+5	EB	13	4	5.78		CRACK JOINT SPLITS IN MIDDLE
0+15	EB	7	8.7	6.77		INCLUDES CURB
0+15	EB	7	4	3.11		
0+25	EB	10	NEW			CURB ONLY
0+25	EB	10	NEW			SAW 2 C/L ONLY
0+35	EB	8.3	8.7	8.02		
0+35	EB	8.3	5.2	4.80		
0+50	EB	22.2	8.7	21.46		
0+50	EB	25.2	5	14.00		
0+67	EB	12.5	NEW			CURB ONLY - RAISE FOR DRAINAGE
0+67	EB	12.5	5	6.94		
0+77	EB	15.5	NEW			CURB ONLY - RAISE FOR DRAINAGE - WATER VALVE
1+00	EB	26	CURB		26.0	CURB ONLY - RAISE FOR DRAINAGE
1+00	EB	26	5.2	15.02		NEW SLAB - POSSIBLY RAISE FOR DRAINAGE
1+00	EB	26	8.7	25.13		NEW SLAB - POSSIBLY RAISE FOR DRAINAGE
1+50	EB	10	CURB		10.0	CURB ONLY
1+75	EB	23	CURB		23.0	CURB ONLY
2+00	EB	22	5	12.22		MID
2+00	EB	22	8.7	21.27		CRACK JOINT
2+25	EB	26	4.8	13.87		MID
2+25	EB	26	8.7	25.13		
2+40	EB	8	4.8	4.27		MID
2+40	EB	8	8.7	7.73		
2+45	EB	4.3	4.8	2.29		UTILITY POLE - CUT MID
2+48	EB	4.2	8.7	4.06		UTILITY POLE - CUT MID
2+55	EB	14	8.7	13.53		
2+55	EB	14	4.8	7.47		MID
2+75	EB	25	8.7	24.17		
2+75	EB	20.4	4.8	10.88		MID
3+00	EB	25	8.7	24.17		
3+00	EB	20.4	4.5	10.20		MID
3+25	EB	20	4.5	10.00		MID
3+25	EB	20	8.7	19.33		
3+40	EB			0.00		NEW SLAB
3+40	EB			0.00		NEW SLAB
3+50	EB	20.5	8.7	19.82		
3+50	EB	20.5	4.5	10.25		MID
3+75	EB	19	4.5	9.50		
3+75	EB	12		0.00		NEW - SAW CUT ONLY
3+75	EB	25	8.7	24.17		
4+00	EB	21	8.7	20.30		
4+00	EB	14.5		0.00		NEW - MID - SAW CUT ONLY
4+15	EB	8.3		0.00		CURB ONLY
4+25	EB			0.00		NEW WITH GRATE
4+25	EB			0.00		NEW WITH GRATE
4+35	EB	20	CURB		20.0	CURB ONLY

4+35	EB			0.00		NEW
4+35	EB			0.00		NEW
4+50	EB	17	4.5	8.50		MID
4+50	EB	17	8.7	16.43		
4+65	EB			0.00		NEW
4+65	EB			0.00		NEW
4+75	EB	26.5	CURB		26.5	CURB ONLY
4+75	EB			0.00		NEW
4+75	EB			0.00		NEW
5+00	EB	17	8.7	16.43		CRACK IN MID
5+15	EB	10	CURB		10.0	CURB ONLY
5+15	EB			0.00		NEW
5+15	EB			0.00		NEW
5+45	EB	21	8.6	20.07		
5+45	EB	23.5	4.5	11.75		MID
5+50	EB	25	4.5	12.50		MID
5+50	EB	25	8.7	24.17		AT LIGHT POLE - GAS STATION
5+80	EB	20.2	8.7	19.53		
5+80	EB	20.2	4.5	10.10		MID
5+90	EB	9.5	CURB		9.5	CURB ONLY
5+90	EB			0.00		NEW
5+90	EB			0.00		NEW
6+00	EB	15.3	8.7	14.79		
6+00	EB	20	4.5	10.00		MID
6+15	EB	10	CURB		10.0	CURB ONLY
6+15	EB					NEW OUTSIDE
6+25	EB	25	4.5	12.50		MID
6+25	EB	15	8.7	14.50		
6+40	EB			0.00		NEW - MID
6+40	EB	10	CURB		10.0	CURB ONLY
6+55	EB	20	8.7	19.33		
6+55	EB	25	4.5	12.50		MID
6+80	EB	13	4.5	6.50		
6+80	EB	25	8.7	24.17		
6+85	EB			0.00		NEW - MID
7+00	EB			0.00		NEW - MID
7+00	EB	22.5	8.5	21.25		
7+17	EB			0.00		NEW - MID
7+17	EB			0.00		NEW - OUTSIDE
7+22	EB	17.5	CURB		17.5	CURB ONLY
7+25	EB			0.00		NEW - OUTSIDE @ GRATE
7+25	EB	18	4.5	9.00		MID
7+50-70	EB	36	CURB		36.0	CURB ONLY
7+50	EB			0.00		NEW
7+50	EB			0.00		NEW
7+60	EB			0.00		NEW
7+60	EB			0.00		NEW
7+70	EB			0.00		NEW - MID
7+75	EB	20	8.5	18.89		
7+80	EB			0.00		NEW - MID

8+00	EB			0.00		
8+00	EB			0.00		
8+10 - 50	EB	5	58	32.22		
8+20	EB			0.00		NEW
8+20	EB			0.00		NEW
8+30	EB	13	4.5	6.50		NEW - OUTSIDE
8+30	EB	21	4.5	10.50		MID
8+55	EB	21	4.5	10.50		MID
8+55	EB	21	8.5	19.83		
8+80	EB	25	4.5	12.50		MID
8+80	EB	25	8.5	23.61		
9+05	EB	25	4.5	12.50		MCKENNA STREET - MID
9+05	EB	25	8.5	23.61		MCKENNA STREET
9+30	EB	25	4.5	12.50		MCKENNA STREET - MID
9+30	EB	25	8.5	23.61		MCKENNA STREET
9+56	EB	31.5	4.5	15.75		MID
9+56	EB	28	8.5	26.44		
9+77	EB			0.00		NEW
9+85	EB	25	4.5	12.50		MID
9+70 - 10+16	EB	47	CURB		47.0	CURB ONLY
9+90	EB			0.00		NEW
10+00	EB			0.00		NEW - MID
10+00	EB			0.00		NEW
10+15	EB	18	4.5	9.00		MID
10+15	EB	18	8.5	17.00		
10+20-66	EB	46	CURB		46.0	CURB ONLY
10+32	EB			0.00		NEW - MID
10+32	EB			0.00		NEW
10+45	EB			0.00		NEW - MID
10+45	EB			0.00		NEW
10+55	EB			0.00		NEW -MID
10+55	EB			0.00		NEW
10+70	EB			0.00		NEW - MID
10+75	EB	28	8.5	26.44		
10+85	EB			0.00		NEW - MID
11+00	EB	25	8.5	23.61		
11+06	EB	22	4.5	11.00		
11+26	EB	17	8.5	16.06		
11+30	EB	25	4.5	12.50		MID
11+40	EB			0.00		NEW
11+40	EB	12	CURB		12.0	CURB ONLY
11+54	EB	23	4.5	11.50		MID
11+58	EB	24	8.5	22.67		
11+73	EB			0.00		NEW - MID
11+80	EB	25	8.5	23.61		
11+88	EB			0.00		NEW - MID
12+07	EB			0.00		NEW - MID
12+07	EB	25	8.5	23.61		
12+25	EB			0.00		NEW - MID
12+26	EB	18	8.5	17.00		

12+40	EB			0.00		NEW - MID
12+43	EB			0.00		NEW
12+36	EB	93	CURB		93.0	12+36 - 13+29 CURB ONLY
12+58	EB	20	4.5	10.00		
12+58	EB			0.00		NEW
12+72	EB			0.00		NEW - MID
12+72	EB			0.00		NEW
12+85	EB			0.00		NEW
12+96	EB			0.00		NEW - MID
12+96	EB			0.00		NEW
13+12	EB			0.00		NEW - MID
13+12	EB			0.00		NEW
13+23	EB			0.00		NEW
13+24	EB			0.00		NEW - MID
13+37	EB	16	8.5	15.11		
13+40	EB			0.00		NEW - MID
13+58	EB	16	4.5	8.00		
13+58	EB	26	8.5	24.56		
13+71	EB			0.00		NEW - MID
13+77	EB	12	8.5	11.33		
13+78	EB	8	4.5	4.00		MID
13+90	EB			0.00		NEW - MID
13+90	EB			0.00		NEW
13+81-98	EB	17	CURB		17.0	CURB ONLY
14+08	EB	20	4.5	10.00		MID
14+08	EB	20	8.5	18.89		
14+30	EB	25	4.5	12.50		MID
14+30	EB	25	8.5	23.61		
14+55	EB	25	4.5	12.50		MID
14+55	EB	25	8.5	23.61		
14+80	EB	25	4.5	12.50		MID
14+80	EB	25	8.5	23.61		
15+07	EB	25	4.5	12.50		MID
15+07	EB	25	8.5	23.61		
15+29	EB	20	4.5	10.00		MID
15+29	EB	20	8.5	18.89		
15+44	EB			0.00		NEW - MID
15+44	EB			0.00		NEW
15+39-50	EB	11	CURB		11.0	CURB ONLY
15+53	EB	8	4.5	4.00		MID
15+58	EB	18	8.5	17.00		
15+62	EB	10		0.00		NEW - MID - PARTIAL SLAB PATCH
15+75	EB		8.5	0.00		NEW
15+75	EB			0.00		NEW - MID
15+66-84	EB	18	CURB		18.0	CURB ONLY
15+90	EB	11	8.5	10.39		
15+92	EB			0.00		NEW - MID
16+08	EB	25	8.5	23.61		
16+08	EB	23	4.5	11.50		
16+30	EB	25	8.5	23.61		

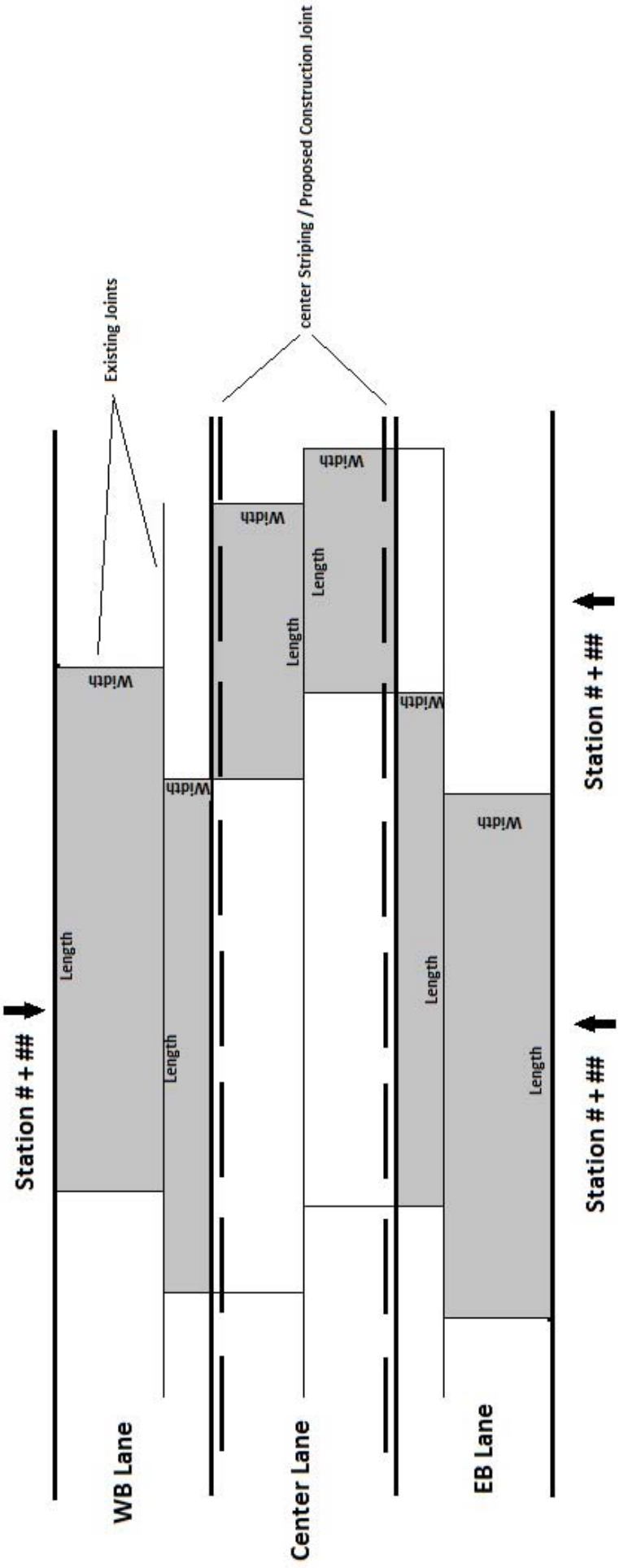
16+30	EB	22	4.5	11.00		
16+50	EB	8.5	8.5	8.03		
16+50	EB			0.00		NEW - MID
16+55	EB	193	CURB		193.0	16+55 TO 18+48 CURB ONLY
16+66	EB			0.00		NEW - MID
16+78	EB			0.00		NEW
16+85	EB	25	4.5	12.50		MID
16+90	EB			0.00		NEW
17+04	EB			0.00		NEW
17+10	EB	25	4.5	12.50		MID
17+15	EB			0.00		NEW
17+30	EB			0.00		NEW
17+35	EB	25	4.5	12.50		MID
17+50	EB			0.00		NEW
17+55	EB	12.5	4.5	6.25		MID
17+69	EB			0.00		NEW - MID
17+69	EB			0.00		NEW
17+82	EB			0.00		NEW
17+82	EB	11	4.5	5.50		MID
17+95	EB			0.00		NEW - MID
17+95	EB			0.00		NEW
18+15	EB	25	4.5	12.50		MID
18+08	EB			0.00		NEW
18+20	EB			0.00		NEW
18+37	EB	22	4.5	11.00		MID
18+37	EB			0.00		NEW
18+53	EB			0.00		NEW - MID
18+53	EB			0.00		NEW
18+66	EB	16	4.5	8.00		MID
18+66	EB			0.00		NEW
18+79	EB			0.00		NEW - MID
18+79	EB			0.00		NEW
18+95	EB	21	4.5	10.50		MID
18+95	EB			0.00		NEW
19+12	EB			0.00		NEW
19+15	EB	21	4.5	10.50		MID
19+28	EB			0.00		NEW
19+30	EB			0.00		NEW - MID
19+41	EB			0.00		NEW
19+45	EB	20	4.5	10.00		MID
19+56	EB			0.00		NEW
19+70	EB	27	4.5	13.50		MID
19+76	EB			0.00		NEW
19+92	EB	21	4.5	10.50		MID
19+86	EB	37	CURB		37.0	19+86 TO 20+23 - CURB ONLY
20+09	EB			0.00		NEW
20+09	EB			0.00		NEW
20+23	EB	18	4.5	9.00		MID
20+23	EB			0.00		NEW
20+40	EB			0.00		NEW - MID

20+40	EB			0.00		NEW
20+55	EB			0.00		NEW - MID
20+55	EB			0.00		NEW
20+59-70	EB	11	CURB		11.0	CURB ONLY
20+68	EB			0.00		NEW - MID
20+73	EB			0.00		NEW
20+80	EB	10	4.5	5.00		MID
20+94	EB	22	4.5	11.00		MID
21+07	EB			0.00		NEW
21+10	EB			0.00		NEW - MID
21+25	EB			0.00		NEW
21+25	EB	20	4.5	10.00		MID
21+38	EB			0.00		NEW - MID
21+38	EB			0.00		NEW
21+50	EB			0.00		NEW
21+50	EB			0.00		NEW
21+63	EB			0.00		CULVERT TOP INLET GRATE
0+00	WB	25	4	11.11		MID
0+00	WB	25	8.5	23.61		
0+20	WB	25	4	11.11		MID
0+20	WB	25	8.5	23.61		
0+50	WB	25	4	11.11		MID
0+50	WB	25	8.5	23.61		
0+80	WB	22	4	9.78		MID
0+80	WB	22	8.5	20.78		
2+00	WB	23	4	10.22		MID
2+00	WB	23	8.5	21.72		
2+30	WB	25	4	11.11		MID
2+30	WB	25	8.5	23.61		
2+40	WB	8	8.5	7.56		
2+40	WB	8	4	3.56		MID
2+50	WB	4	4	1.78		MID
2+50	WB	4	8.5	3.78		
2+60	WB	13	4	5.78		MID
2+60	WB	13	8.5	12.28		
2+80	WB	25.5	4	11.33		MID
2+80	WB	25.5	8.5	24.08		
3+00	WB	25	4	11.11		MID
3+00	WB	25	8.5	23.61		
3+30	WB	20	4	8.89		MID
3+30	WB	25	8.5	23.61		
3+50	WB	15	4	6.67		MID
3+50	WB	25	8.5	23.61		
3+80	WB	25	8.5	23.61		
3+80	WB	20	4	8.89		MID
4+00	WB	16.5	8.5	15.58		
4+00	WB	16	4	7.11		MID
4+50	WB	22	4	9.78		MID
4+50	WB	22	8.5	20.78		
4+80	WB	22	8.5	20.78		

4+80	WB	25	4	11.11		MID
5+00	WB	25	4	11.11		MID
5+30	WB	25	4	11.11		MID
5+30	WB	22.5	8.5	21.25		
5+50	WB	25	8.5	23.61		
5+50	WB	14	4	6.22		MID
5+80	WB	25	8.5	23.61		
5+80	WB	20	4	8.89		MID
6+00	WB	25	4	11.11		MID
6+00	WB	25	8.5	23.61		
6+30	WB	17.5	4	7.78		MID
6+30	WB	25	8.5	23.61		
6+50	WB	20	8.5	18.89		
6+80	WB	20	8.5	18.89		
7+00	WB	25	8.5	23.61		
7+30	WB	15	4	6.67		MID
7+30	WB	20.5	8.5	19.36		
7+60	WB	14	8.5	13.22		
7+60	WB	12	4	5.33		MID
7+75	WB	25.5	4	11.33		MID
7+75	WB	14.5	8.5	13.69	8	
8+00	WB	13	4	5.78		MID
8+00	WB	22	8.5	20.78		
8+30	WB	25	8.5	23.61		
8+50	WB	25	8.5	23.61		
8+80	WB	17	8.5	16.06		
9+00	WB	22	8.5	20.78		
9+30	WB	25	8.5	23.61		
9+50	WB	13	8.5	12.28		
9+60	WB	20	4	8.89		MID
9+90	WB	30	4	13.33		MID
9+90	WB	27.5	8.5	25.97		
10+10	WB	25	4	11.11		MID
10+10	WB	25	8.5	23.61		
10+50	WB	25	4	11.11		MID
10+50	WB	25	8.5	23.61		
10+70	WB	14	4	6.22		MID , W Cherry
10+70	WB	14	8.5	13.22		W Cherry
0+05	Center	15	5	8.33		Left turn lane at red light
0+05	Center	15	6	10.00		
0+16	Center	7	5	3.89		
0+25	Center	25	6	16.67		
0+35	Center	8.5	5	4.72		
0+50	Center	22.5	5	12.50		
0+50	Center	22.5	6	15.00		Cracked down center of slab
0+69	Center	12.5	5	6.94		
0+74	Center	23.5	6	15.67		
1+14	Center	20	5	11.11		New slab cracked

1+14	Center	20	6	13.33		New slab cracked
2+00	Center	21.5	5	11.94		
2+00	Center	21.5	6	14.33		
2+26	Center	26	5	14.44		
2+26	Center	26	6	17.33		
2+42	Center	8	5	4.44		
2+42	Center	8	6	5.33		
2+48	Center	4	5	2.22		Utilities
2+48	Center	4	6	2.67		Utilities
2+57	Center	13.5	5	7.50		
2+57	Center	13.5	6	9.00		
2+76	Center	20	5	11.11		
2+76	Center	25	6	16.67		
3+00	Center	20	5	11.11		
3+00	Center	25	6	16.67		
9+30	Center	25	6	16.67		TWLTL between McKenna & E Cherry St.
9+55	Center	31	6	20.67		
9+62	Center	21	6	14.00		
9+85	Center	25	6	16.67		
9+85	Center	29	6	19.33		
10+13	Center	19	6	12.67		
10+13	Center	24	6	16.00		

Totals **3205** **692**


center Striping / Proposed Construction Joint
Existing Joints
Station # + ##
Station # + ##
Station # + ##
Width
Length
WB Lane
Center Lane
EB Lane

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.*

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

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SUBSECTION: **REVISION:**	102.07.02 Computer Bidding. Replace the first paragraph with the following: Subsequent to registering for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement (http://transportation.ky.gov/contract/). Download the bid file from the Bid Express Bidding Service Website to prepare a Bid Proposal for submission to the Department. Submit Bid Proposal electronically through Bid Express Bidding Service. Delete the second and third paragraph.
SUBSECTION: **REVISION:**	102.08 Irregular Bid Proposals. Delete the following from the first paragraph: 4) fails to submit a disk created from the Highway Bid Program. Replace the second paragraph with the following: The Department will consider Bid Proposals irregular and may reject them for the following reasons: 1) when there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the Bid Proposal incomplete, indefinite, or ambiguous as to its meaning; or 2) when the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a Contract pursuant to an award; or 3) any failure to comply with the provisions of Subsection 102.07; or 4) Bid Proposals in which the Department determines that the prices are unbalanced; or when the sum of the total amount of the Bid Proposal under consideration exceeds the bidder's Current Capacity Rating.
SUBSECTION: **REVISION:**	102.09 Bid Proposal Guaranty. Insert the following after the first sentence: Bid Proposals must have a bid proposal guaranty in the amount indicated in the bid proposal form accompany the submittal. A guaranty in the form of a paper bid bond, cashier's check, or certified check in an amount no less than the amount indicated on the submitted electronic bid is required when the electronic bid bond was not utilized with the Bid Express Bidding Service. Paper bid bonds must be delivered to the Division of Construction Procurement prior to the time of the letting.
SUBSECTION: **REVISION:**	102.10 Delivery of Bid Proposals. Replace paragraph with the following: Submit all Bid Proposals prior to the time specified in the Notice to Contractors. All bids shall be submitted electronically using Bid Express Bidding Services. Electronically submitted bids must be done in accordance with the requirements of the Bid Express Bidding Service.
SUBSECTION: **REVISION:**	102.11 Withdrawal or Revision of Bid Proposals. Replace the paragraph with the following: Bid Proposals can be withdrawn in accordance the requirements of the Bid Express Bidding Service prior to the time of the Letting.

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

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SUBSECTION: **REVISION:**	105.12 Final Inspection and Acceptance of Work. Insert the following paragraphs after the first paragraph: Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completion. Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work. Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspection(s). The 90 calendar day allowance is cumulative regardless of the number of follow-up electrical inspections required. The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repairing damage done by other contractors during the construction of the remaining project. Failure to complete the electrical corrective work within the 90 calendar day allowance will result in penalties assessed to the project. Penalties will be assessed at ½ the rate of liquidated damages established for the contract. Replace the following in the second sentence of the second paragraph: Replace Section 213 with Section 212. Delete the fifth paragraph from the section.
SUBSECTION: **REVISION:**	105.13 Claim Resolution Process. Replace the last sentence of the 3. Bullet with the following: If the Contractor did not submit an as-bid schedule at the Pre-Construction Meeting or a written narrative in accordance with Subsection 108.02, the Cabinet will not consider the claim for delay. Delete the last paragraph from the section.

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SUBSECTION: **REVISION:**	106.04 Buy America Requirement. Replace the section with the following: **106.04 Buy America Requirement.** Follow the "Buy America" provisions as required by Title 23 Code of Federal Regulations § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of: • Coating, • Galvanizing, • Painting, and • Other coating that protects or enhances the value of steel or iron products. The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material: • Pig iron, • Processed, pelletized, and reduced iron ore material, or • Processed alloys. The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States. Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department. Use foreign materials only under the following conditions: 1) When the materials are not permanently incorporated into the project; or 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or $2,500.00, whichever is greater. The Contractor shall submit to the Engineer the origin and value of any foreign material used.
SUBSECTION: **REVISION:**	106.10 Field Welder Certification Requirements. Insert the following sentence before the first sentence of the first paragraph: All field welding must be performed by a certified welder unless otherwise noted.
SUBSECTION: **REVISION:**	108.02 Progress Schedule. Insert the following prior to the first paragraph: Specification 108.02 applies to all Cabinet projects except the following project types: • Right of Way Mowing and/or Litter Removal • Waterborne Paint Striping • Projects that contain Special Provision 82 • Projects that contain the Special Note for CPM Scheduling Insert the following paragraph after paragraph two: Working without the submittal of a Written Narrative is violation of this specification and additionally voids the Contractor's right to delay claims. Insert the following paragraph after paragraph six: The submittal of bar chart or Critical Path Method schedule does not relieve the Contractor's requirement to submit a Written Narrative schedule.

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

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

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	B) Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour. Correct the non-compliant issue within 4 hours from initial notification by the Engineer. If the issue is not corrected within 4 hours from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at $200 per hour. C) Short-term stationary is work that occupies a location for more than 1 hour within a single 24-hour period. Correct the non-compliant issue within 1 hour from initial notification by the Engineer. If the issue is not corrected within 1 hour from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at $200 per hour. If the Contractor remains in violation of the Maintain and Control of Traffic requirements, or if the Department determines it to be in the public's interest, work will be suspended in accordance with Section 108.08 until the deficiencies are corrected. The Department reserves the right to correct deficiencies by any means available and charge the Contractor for labor, equipment, and material costs incurred in emergency situations.
SUBSECTION: **REVISION:**	206.03.02 Embankment Replace the last paragraph with the following: When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A).
SUBSECTION: **REVISION:**	213.03.03 Inspection and Maintenance. Replace the last sentence of the second paragraph with the following: Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7 calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event. Insert the following paragraph after the second paragraph: When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure compliance with the inspection and maintenance requirements of the permit. The Engineer will perform verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will provide copies of the inspection only when improvements to the BMP's are required. Verification inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event.

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

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SUBSECTION: 401.03.01 Preparation of Mixtures.
REVISION: 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 Recycled Asphalt Pavement (RAP)		240	—
Asphalt Binders	PG 64-22	230	330
	PG 76-22	285	350
Asphalt Mixtures at Plant (Measured in Truck)	PG 64-22 HMA	250	330
	PG 76-22 HMA	310	350
	PG 64-22 WMA	230	275
	PG 76-22 WMA	250	300
Asphalt Mixtures at Project (Measured in Truck When Discharging)	PG 64-22 HMA	230	330
	PG 76-22 HMA	300	350
	PG 64-22 WMA	210	275
	PG 76-22 WMA	240	300

SUBSECTION: 402.01 Description.
REVISION: 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 402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.
REVISION: 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: 402.05.02 Asphalt Mixtures and Mixtures With RAP.
REVISION: Replace Subsection Title as below:

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

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

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SUBSECTION: 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
PART: C) Conventional and RAP Mixtures Placed on Shoulders.
REVISION: Replace Title and Text with the following:

C) HMA, WMA and RAP Mixtures Placed on Shoulders or Placed as Asphalt Pavement Wedge.

1) Placed monolithically with the Mainline – Width of 4 feet or less. The Department will pay as mainline mixture.
2) Placed monolithically with the Mainline – Width of greater than 4 feet. The Department will pay as mainline mixture but use 1.00 for the Lane and Joint Density Pay Value for shoulder or Asphalt Pavement Wedge quantities.
3) Placed Separately. The Department will use 1.00 for the Lane and Joint Density Pay Value.

SUBSECTION: 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
PART: D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.
REVISION: Replace the title with the following:
D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.

Delete the following:
D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge. The Department will pay as mainline mixture but use a 1.00 pay value for all properties.

SUBSECTION: 402.05.02 Asphalt Mixtures for Temporary Pavement.
PART: E) Asphalt Mixtures for Temporary Pavement.
REVISION: Replace E) Asphalt Mixtures for Temporary Pavement with the following:

D) Asphalt Mixtures for Temporary Pavement.

SUBSECTION: 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
PART: Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures
TABLES: VMA
REVISION: Replace the VMA table with the following:

VMA	
Pay Value	Deviation From Minimum
1.00	≥ min. VMA
0.95	0.1-0.5 below min.
0.90	0.6-1 0 below min.
(1)	> 1.0 below min.

SUBSECTION: 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
PART: Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures
TABLES: VMA
REVISION: Replace the VMA table with the following:

VMA	
Pay Value	Deviation From Minimum
1.00	≥ min. VMA
0.95	0.1-0.5 below min.
0.90	0.6-1.0 below min.
(1)	> 1.0 below min.

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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 bel w min.
0.9	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)**	$N_{initial}$	N_{design}	N_{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.

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SUBSECTION: 410.03.01 Corrective Work.
REVISION: Replace the last sentence of the paragraph with the following:

Provide a final surface comparable to the adjacent pavement that does not require corrective work in respect to texture, appearance, and skid resistance.

SUBSECTION: 410.03.02 Ride Quality.
PART: B) Requirements.
NUMBER: 1) Category A.
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 lieu of corrective work.

SUBSECTION: 410.03.02 Ride Quality.
PART: B) Requirements.
NUMBER: 2) Category B.
REVISION: Replace the second and third sentence of the first paragraph with the following:

When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and replace the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of $750 per 0.1-lane-mile section may be applied in lieu of corrective work.

SUBSECTION: 410.05 PAYMENT.
REVISION: Add the following sentence to the end of the first paragraph:

The sum of the pay value adjustments for ride quality shall not exceed $0 for the project as a whole.

SUBSECTION: 413.05.02 CL3 SMA BASE 1.00D PG76-22.
REVISION: Insert the following sentence between the first and second sentence of the first paragraph:

The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

SUBSECTION: 413.05.02 CL3 SMA BASE 1.00D PG 76-22.
TABLE: JOINT DENSITY TABLE
REVISION: Replace the joint density table with the following:

LANE DENSITY	
Pay Value	Test Result (%)
1.05	95.0-96.5
1.00	93.0-94.9
0.95	92.0-92.9 or 96.6-97.0
0.90	91.0-91.9 or 97.1-97.5
(1)	< 91.0 or > 97.5

SUBSECTION: 413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.
REVISION: Insert the following sentence between the first and second sentence of the first paragraph:

The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

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SUBSECTION: 413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.
TABLE: JOINT DENSITY TABLE
REVISION: Replace the joint density table with the following:

DENSITY		
Pay Value	Lane Density Test Result (%)	Joint Density Test Result (%)
1.05	95.0-96.5	92.0-96.0
1.00	93.0-94.9	90.0-91.9
0.95	92.0-92.9 or 96.6-97.0	89.0-89.9 or 96.1-96.5
0.90	91.0-91.9 or 97.1-97.5	88.0-88.9 or 96.6-97.0
0.75	----	< 88.0 or > 97.0
(1)	< 91.0 or > 97.5	----

SUBSECTION: 501.05.02 Ride Quality.
REVISION: Add the following sentence to the end of the first paragraph:

The sum of the pay value adjustments for the ride quality shall not exceed $0 for the project as a whole.

SUBSECTION: 505.03.04 Detectable Warnings.
REVISION: 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.

SUBSECTION: 505.04.04 Detectable Warnings.
REVISION: Replace the paragraph with the following:

The Department will measure the quantity in square feet. All retrofit applications for maintenance projects will require the removal of existing sidewalks to meet the requirements of the standard drawings applicable to the project. The cost associated with the removal of the existing sidewalk will be incidental to the detectable warnings bid item or incidental to the bid item for the construction of the concrete sidewalk unless otherwise noted.

SUBSECTION: 505.05 PAYMENT.
REVISION: Add the following to the bid item table:

Code	Pay Item	Pay Unit
23158ES505	Detectable Warnings	Square Foot

SUBSECTION: 509.01 DESCRIPTION.
REVISION: Replace the second paragraph with the following:

The Department may allow the use of similar units that conform to the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 (TL-3) requirements and the typical features depicted by the Standard Drawings. Obtain the Engineers approval prior to use. Ensure the barrier wall shape, length, material, drain slot dimensions and locations typical features are met and the reported maximum deflection is 3 feet or less from the NCHRP 350 TL-3 for Test 3 – 11 (pickup truck impacting at 60 mph at a 25-degree angle.)

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

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

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

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SUBSECTION:
REVISION:

701.05 PAYMENT.

Add the following pay item to the list of pay items:

Code	Pay Item	Pay Unit
23131ER701	Pipeline Video Inspection	Linear Foot

SUBSECTION:
TABLE:
REVISION:

701.05 PAYMENT

PIPE DEFLECTION DETERMINED BY CAMERA TESTING

Replace this table with the following table and note:

PIPE DEFLECTION	
Amount of Deflection (%)	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. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price.

SUBSECTION:
TABLE:
REVISION:

701.05 PAYMENT

PIPE DEFLECTION DETERMINED BY MANDREL TESTING

Delete this table.

SUBSECTION:
REVISION:

713.02.01 Paint.

Replace with the following:

Conform to Section 842 and Section 846.

SUBSECTION:
REVISION:

713.03 CONSTRUCTION.

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

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

SUBSECTION:
REVISION:

713.03.03 Paint Application.

Replace the second paragraph with the following table:

Material	**Paint Application Rate**	**Glass Beads Application Rate**
4 inch waterborne paint	Min. of 16.5 gallons/mile	Min. of 6 pounds/gallon
6 inch waterborne paint	Min. of 24.8 gallons/mile	Min. of 6 pounds/gallon
6 inch durable waterborne paint	Min. of 36 gallons/mile	Min. of 6 pounds/gallon

SUBSECTION:
REVISION:

713.03.04 Marking Removal.

Replace the last sentence of the paragraph with the following:

Vacuum all marking material and removal debris concurrently with the marking removal operation.

SUBSECTION:
REVISION:

713.05 PAYMENT.

Insert the following codes and pay items below the Pavement Striping – Permanent Paint:

Code	Pay Item	Pay Unit
24189ER	Durable Waterborne Marking – 6 IN W	Linear Foot
24190ER	Durable Waterborne Marking – 6 IN Y	Linear Foot
24191ER	Durable Waterborne Marking – 12 IN W	Linear Foot

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

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SUBSECTION: 717.03.05 Proving Period.
PART: A) Requirements.
REVISION: Insert the following to this section:

2) Type I Tape. During the proving period, ensure that the pavement marking material shows no signs of failure due to blistering, excessive cracking, bleeding, staining, discoloration, oil content of the pavement materials, drippings, chipping, spalling, poor adhesion to the pavement, loss of retroreflectivity, vehicular damage, and normal wear. Type I Tape is manufactured off site and warranted by the manufacturer to meet certain retroreflective requirements. As long as the material is adequately bonded to the surface and shows no signs of failure due to the other items listed in Subsection 714.03.06 A) 1), retroreflectivity readings will not be required. In the absence of readings, the Department will accept tape based on a nighttime visual observation.

SUBSECTION: 717.03.06 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: 717.05 PAYMENT.
REVISION: Insert the following bid item codes:

Code	Pay Unit	Pay Item
06563	Pave Marking – R/R X Bucks 16 IN	Linear Foot
20782NS714	Pave Marking Thermo – Bike	Each
23251ES717, 23264ES717	Pave Mark TY I Tape X-Walk, Size	Linear Foot
23252ES717, 23265ES717	Pave Mark TY I Tape Stop Bar, Size	Linear Foot
23253ES717	Pave Mark TY I Tape Cross Hatch	Square Foot
23254ES717	Pave Mark TY I Tape Dotted Lane Extension	Linear Foot
23255ES717	Pave Mark TY I Tape Arrow, Type	Each
23268ES717-23270ES717		
23256ES717	Pave Mark TY I Tape- ONLY	Each
23257ES717	Pave Mark TY I Tape- SCHOOL	Each
23266ES717	Pave Mark TY 1 Tape R/R X Bucks-16 IN	Linear Foot
23267ES717	Pave Mark TY 1 Tape-Bike	Each

SUBSECTION: 725.02.02 Type VI Class C & CT.
REVISION: Replace bullet 2) with the following:

2) The SCI100GM System as developed by SCI Products, Inc. of St. Charles, Illinois. For all miscellaneous metal work conform to ASTM A 36 and galvanize according to ASTM A 123. For the SCI100GM fender panels conform to AASHTO 180. Galvanize the SCI100GM fender panels and SCI100GM -beam connectors after fabrication according to ASTM A 123.

SUBSECTION: 725.02.04 Type VII Class C.
REVISION: Replace bullet 2) with the following:

2) The SCI100GM System as developed by SCI Products, Inc. of St. Charles, Illinois. For all miscellaneous metal work conform to ASTM A 36 and galvanize according to ASTM A 123. For the SCI100GM fender panels conform to AASHTO 180. Galvanize the SCI100GM fender panels and SCI100GM-beam connectors after fabrication according to ASTM A 123.

SUBSECTION: 801.01 REQUIREMENTS.
REVISION: Delete the fourth sentence of the first paragraph and add the following to the second paragraph.

When supplying cement with a SO_3 content above the value in table I of ASTM C 150, include supportive ASTM C 1038 14-day expansion test data for the supplied SO_3 content on the certification.

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

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

SIZES OF COARSE AGGREGATES

	Sieve	AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT															
Aggregate Size	Nominal [3] Maximum Aggregate Size	4 inch	3 1/2 inch	3 inch	2 1/2 inch	2 inch	1 1/2 inch	1 inch	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
1	3 ½ inch	100	90-100		25-60		0-15		0-5								
2	2 ½ inch			100	90-100	35-70	0-15		0-5								
23	2 inch			100		40-90		0-15		0-5							
3	2 inch				100	90-100	35-70	0-15		0-5							
357	2 inch				100	95-100		35-70		10-30		0-5					
4	1 ½ inch					100	90-100	20-55	0-15		0-5						
467	1 ½ inch					100	95-100		35-70		10-30	0-5					
5	1 inch						100	90-100	20-55	0-10	0-5						
57	1 inch						100	95-100		25-60		0-10	0-5				
610	1 inch						100	85-100		40-75		15-40					
67	3/4 inch							100	90-100		20-55	0-10	0-5				
68	3/4 inch							100	90-100		30-65	5-25	0-10	0-5			
710	3/4 inch							100	80-100		30-75	0-30					
78	1/2 inch								100	90-100	40-75	5-25	0-10	0-5			
8	3/8 inch									100	85-100	10-30	0-10	0-5			
9-M	3/8 inch									100	75-100	0-25	0-5				
10 [2]	No. 4										100	85-100				10-30	
11 [2]	No. 4										100	40-90	10-40			0-5	
DENSE GRADED AGGREGATE [1]	3/4 inch							100	70-100		50-80	30-65			10-40		4-13
CRUSHED STONE BASE [1]	1 ½ inch				100		90-100		60-95		30-70	15-55			5-20		0-8

[1] *Gradation performed by wet sieve KM 64-620 or AASHTO T 11/T 27.*
[2] *Sizes shown for convenience and are not to be considered as coarse aggregates.*
[3] *Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained.*

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

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SUBSECTION: **REVISION:**	805.16 SAMPLING AND TESTING. Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion Test. Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.
SUBSECTION: **REVISION:**	810.04.01 Coating Requirements. Replace the "Subsection 806.07" references with "Subsection 806.06"
SUBSECTION: **PART:** **REVISION:**	810.06.01 Polyvinyl Chloride (PVC) Pipe. B) Culvert and Entrance Pipe. Replace the title with the following: B) Culvert Pipe, Storm Sewer, and Entrance Pipe.
SUBSECTION: **REVISION:**	823.02 LIQUID MEMBRANE FORMING COMPOUNDS. Add the following: Effective July 1, 2011, to remain on or be added to the Department's approved list, products must have completed testing or been submitted for testing through the National Transportation Product Evaluation Program (NTPEP) for Concrete Curing Compounds.
SUBSECTION: **REVISION:**	837.03 APPROVAL. Replace the last sentence with the following: The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material.
SUBSECTION: **REVISION:**	837.03.01 Composition. COMPOSITION Table: Replace Lead Chromate | 0.0 max. | 4.0 min. with Heavy Metals Content | Comply with 40 CFR 261
SUBSECTION: **TABLE:** **REVISION:**	842.02 APPROVAL. PAINT COMPOSITION Revise the following in the table: Replace the 2.0ΔE* values in the table with 4.0ΔE* for both Yellow and White Paint on both the Daytime and Nighttime Color Spectrophotometer.
SECTION: **REVISION:**	DIVISION 800 MATERIAL DETAILS Add the following section in Division 800 **SECTION 846 – DURABLE WATERBORNE PAINT** **846.01 DESCRIPTION.** This section covers quick-drying durable waterborne pavement striping paint for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete, bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces. **846.02 Approval.** Select materials that conform to the composition requirements below. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping

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

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

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

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 WATERBORNE PAVEMENT STRIPING PAINT REDUCTION SCHEDULE						
Non-conforming Property	Resin	Color	Contrast	TiO_2	VOC	Heavy Metals Content
Reduction Rate	60%	10%	10%	10%	60%	60%

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

(Effective with the July15, 2011 Letting)

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

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

*Insert numerals as directed by the Engineer.
Add other messages during the project when required by the Engineer.

2.3 Requirements for Flip-Disc Type Signs. Flip-disc type signs will have the following additional requirements:

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

2.4 Power.

1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
2) Diesel Power Source. Ensure the following is provided for:

   a) At least 24 spare bulbs available on the project for quick replacement of burned out bulbs.
   b) Black light at both top and bottom of each line to illuminate discs for visibility at night or under adverse weather conditions, for flip disk signs.

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

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

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

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

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

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

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

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

January 5, 2010

STANDARD DRAWINGS THAT APPLY

CURVE WIDENING AND SUPERELEVATION TRANSITIONS RGS-001-06
SUPERELEVATION FOR MULTILANE PAVEMENTS RGS-002-05
MISCELLANEOUS STANDARDS PART 1 ..... RGX-001-05
CURB AND GUTTER, CURBS AND VALLEY GUTTER RPM-100-09
NON-REINFORCED CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS RPN-001-06
NON-REINFORCED CONCRETE PAVEMENT RPN-015-04
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING RPN-020-03
CONCRETE PAVEMENT JOINT DETAILS RPS-010-10
EXPANSION AND CONTRACTION JOINTS - LOAD TRANSFER ASSEMBLIES RPS-020-13
PREFORMED COMPRESSION JOINT SEAL FOR CONCRETE PAVEMENT RPX-010-04
HOT POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT RPX-015-03
SILICONE RUBBER SEALS USED IN PORTLAND CONCRETE PAVEMENT RPX-020-05
NETTING RRE-002-04
PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANE TPM-140-01
LANE CLOSURE TWO-LANE HIGHWAY CASE I TTC-100-01
LANE CLOSURE TWO-LANE HIGHWAY CASE II TTC-105-01
LANE CLOSURE MULTI-LANE HIGHWAY CASE I TTC-115-01
LANE CLOSURE MULTI-LANE HIGHWAY CASE II TTC-120-01
SHOULDER CLOSURE TTC-135-01
MEDIAN CROSSOVER CASE I TTC-140-01
POST SPLICING DETAIL TTD-110-01
MOBILE OPERATION FOR PAINT STRIPING CASE I TTS-100-01
MOBILE OPERATION FOR PAINT STRIPING CASE II TTS-105-01
MOBILE OPERATION FOR PAINT STRIPING CASE III TTS-110-01
MOBILE OPERATION FOR PAINT STRIPING CASE IV TTS-115-01

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

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

I. Application
II. Nondiscrimination of Employees (KRS 344)
III. Payment of Predetermined Minimum Wages
IV. Statements and Payrolls

I. APPLICATION

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

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

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

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

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.

2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.

2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.

3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

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

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

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

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

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

4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.

9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

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

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

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

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

Revised 2-16-95

EXECUTIVE BRANCH CODE OF ETHICS

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

> KRS 11A.040 (6) provides:
>
> No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.
>
> KRS 11A.040 (8) states:
>
> A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:
> a) The date of leaving office or termination of employment; or
> b) The date the term of office expires to which the public servant was elected.

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

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

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

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

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

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

Determination No. CR-11-II-HWY

Project No.
Highway

Date of Determination: August 4, 2011

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

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

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

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

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

Michael Donta, Deputy Commissioner
Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS	
BOILERMAKERS:	BASE RATE	$24.65
	FRINGE BENEFIT	12.94
BRICKLAYERS:		
Bricklayers:	BASE RATE	$22.90
	FRINGE BENEFITS	8.50
Stone Mason:	BASE RATE	$21.50
	FRINGE BENEFITS	8.50
CARPENTERS:		
Carpenters:	BASE RATE	$22.40
	FRINGE BENEFITS	8.75
Piledrivers:	BASE RATE	$22.05
	FRINGE BENEFITS	8.75
CEMENT MASONS:	BASE RATE	$21.25
	FRINGE BENEFITS	8.50
ELECTRICIANS:	*BASE RATE	$29.36
	FRINGE BENEFITS	10.55

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

LINEMAN:	*BASE RATE	$30.09
	FRINGE BENEFITS	10.94
EQUIPMENT OPERATOR:	*BASE RATE	$26.90
	FRINGE BENEFITS	10.31
GROUNDSMAN:	*BASE RATE	$17.79
	FRINGE BENEFITS	8.51
IRONWORKERS:	BASE RATE	$ 25.77
	FRINGE BENEFITS	18.54

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

CLASSIFICATIONS | RATE AND FRINGE BENEFITS

OPERATING ENGINEERS:

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

BASE RATE $23.80
FRINGE BENEFITS 8.75

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

BASE RATE $21.55
FRINGE BENEFITS 8.75

Group B2:
Greaser on grease facilities servicing heavy equipment:

BASE RATE $21.90
FRINGE BENEFITS 8.75

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

BASE RATE $21.31
FRINGE BENEFITS 8.75

PAINTERS:
All Excluding Bridges:

BASE RATE $19.92
FRINGE BENEFITS 9.57

Bridges:

BASE RATE $23.92
FRINGE BENEFITS 10.07

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

ERRATUM

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

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

Determination Number: CR-II-II-HWY

DELETE:

Ironworkers	BASE RATE	$25.77
	FRINGE BENEFIT	18.54

INSERT:

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

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

This 8th day of November, 2011.

ERRATUM

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

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

Determination Number: CR-II-II-HWY

DELETE:

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

INSERT:

Ironworkers	BASE RATE	$25.77
	FRINGE BENEFIT	18.54

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

This 4TH day of May, 2012.

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

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

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

These rates are listed pursuant to the KentuckyDetermination No. CR-11-II HWY dated August 04, 2011, erratum dated November 8, 2011, and erratum dated May 4, 2012. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

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

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

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

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

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

OVERTIME:

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

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

PART IV

INSURANCE

INSURANCE

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

1) Commercial General Liability-Occurrence form – not less than $2,000,000 General aggregate, $2,000,000 Products & Completed Aggregate, $1,000,000 Personal & Advertising, $1,000,000 each occurrence.

2) Automobile Liability- $1,000,000 per accident

3) Employers Liability:

   a) $100,000 Each Accident Bodily Injury
   b) $500,000 Policy limit Bodily Injury by Disease
   c) $100,000 Each Employee Bodily Injury by Disease

4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
   a) "policy contains no deductible clauses."
   b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."

5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

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

PART V

BID ITEMS

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 122328 PAGE: 1
COUNTY: BARREN LETTING: 05/18/12
PROPOSAL: FE01 005 068X 002-004 CALL NO: 308

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
	SECTION 0001	ROADWAY			
0010	00001	DGA BASE	50.000 TON		
0020	01885	LIP HEADER CURB MODIFIED	692.000 LF		
0030	02014	BARRICADE-TYPE III	2.000 EACH		
0040	02023	JPC PAVEMENT-9 IN/24	3,205.000 SQYD		
0050	02058	REMOVE PCC PAVEMENT	3,205.000 SQYD		
0060	02060	PCC PAVEMENT DIAMOND GRINDING	7,000.000 SQYD		
0070	02115	SAW-CLEAN-RESEAL TVERSE JOINT	700.000 LF		
0080	02116	SAW-CLEAN-RESEAL LONGIT JOINT	2,000.000 LF		
0090	02562	SIGNS	330.000 SQFT		
0100	02599	FABRIC-GEOTEXTILE TYPE IV	500.000 SQYD		
0110	02650	MAINTAIN & CONTROL TRAFFIC	(1.00) LS		
0120	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.000 EACH		
0130	02775	ARROW PANEL	2.000 EACH		
0140	06514	PAVE STRIPING-PERM PAINT-4 IN	6,660.000 LF		
0150	06591	PAVEMENT MARKER TYPE V-BY	50.000 EACH		
0160	10020NS	FUEL ADJUSTMENT	479.000 DOLL	1.00	479.00
	SECTION 0002	DEMOBILIZATION			
0170	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			