



CALL NO. 103

CONTRACT ID. 071042

BOONE COUNTY

FED/STATE PROJECT NUMBER IM 275-9 (106)

LETTING DATE: July 27, 2007

Sealed Bids will be received in the Division of Construction Procurement and/or the Auditorium located on the 1st floor of the Transportation Cabinet Office Building until 10:00 AM EASTERN DAYLIGHT TIME July 27, 2007. Bids will be publicly opened and read at 10:00 AM EASTERN DAYLIGHT TIME

ROAD AND/OR BRIDGE PLANS

DBE CERTIFICATION REQUIRED

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

(Check guaranty submitted: Cashier's Check Certified Check Bid Bond)

BID BONDS WHEN SUBMITTED WILL BE RETAINED WITH THE PROPOSAL

DBE General Plan Included

BID

PROPOSAL ISSUED TO: _____

SPECIMEN

Address

City

State

Zip

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PART I
SCOPE OF WORK

CONTRACT ID - 071042

ADMINISTRATIVE DISTRICT - 06

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - BOONE
IM 275-9 (106)

PCN - DE008027507W2

COVINGTON-LAWRENCEBURG(IN) ROAD I-275 PAVEMENT AND BRIDGE REHAB. FROM 0.75 MILE S. OF KY
8 UNDERPASS TO 0.25 MILE SOUTH OF THE KY-IN STATE LINE, A DISTANCE OF 2.85 MILES. JPC
PAVEMENT WITH GRADE & DRAIN. SYP NO. 06-02028.00.
GEOGRAPHIC COORDINATES LATITUDE 39^05'00" LONGITUDE 84^44'00"

COMPLETION DATE(S) AND LIQUIDATED DAMAGES ESTABLISHED:

COMPLETION DATE - July 01, 2008

APPLIES TO ENTIRE CONTRACT

SEE SPECIAL NOTES FOR LIQUIDATED DAMAGES

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be incorporated into the proposal when the bid is submitted to the Kentucky Department of Highways. Failure to use the correct and most recent bid sheet(s) may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Highway Bid 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 items created from the web site to prepare a bid proposal for submission to the Department. The bidder must insert the completed bid item sheets printed from the Program into the bidder's proposal and submit with the disk created by said program.

JOINT VENTURE BIDDING

Joint Venture bidding is permissible. However, both companies MUST purchase a bidding proposal. Either proposal may be submitted but must contain the company names and signatures of both parties where required. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

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

CONTRACT DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract is 2% of the total value of the contract.

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

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 65.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the 2004 Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating
102.08 Irregular Proposals
102.09 Proposal Guaranty

102.10 Delivery of Proposals
102.14 Disqualification of Bidders

CIVIL RIGHTS ACT OF 1964

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

NOTICE TO ALL BIDDERS

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

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

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

FHWA 1273

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

SECOND TIER SUBCONTRACTS

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

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

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

1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
2. Description of the work each is to perform including the work item , unit, quantity, unit price and total amount of the work to be performed by the individual DBE;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows:
 - a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
 - the amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
 - b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
 - c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
4. Written and signed documentation of the bidder’s commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and

5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

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

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

1. Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
2. Whether the bidder provided solicitations through all reasonable and available means;
3. Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

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

Prime contractors will incorporate a requirement into DBE subcontracts, including supply contracts, that DBEs must provide to the Division of Construction, a copy of all checks received from the prime contractor within seven days of receipt of payment for work performed on Cabinet projects. Checks to DBE subcontractors must include the PCN number, estimate number, and the sequence and quantity.

DEFAULT OR DECERTIFICATION OF THE DBE

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

NATIONAL HIGHWAY

This project is on the *NATIONAL HIGHWAY SYSTEM*.

ASPHALT MIXTURE

The rate of application for all asphalt mixtures shall be estimated at 110 lbs/sy per inch of depth, unless otherwise noted.

DGA BASE

The rate of application for DGA Base shall be estimated at 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

The rate of application shall be estimated at 115 lbs/sy per inch of depth. Payment for necessary grading and/or shaping of existing shoulders prior to placing of Dense Graded Aggregate Base shall be included in the unit price bid per ton for Dense Graded Aggregate Base.

INCIDENTAL SURFACING

The quantities established in the proposal include estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, and road and street approaches. These items are to be paved to the limits as shown on Standard Drawing RPM 110 or to the limits as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, the paving of the crossroads shall be to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. These areas are to be surfaced or resurfaced as directed by the Engineer and no direct payment will be allowed for placing and compacting.

JPC RIDE QUALITY

JPC Pavement Smoothness requirements shall apply on this project in accordance with Section 501 of the *2004 Standard Specifications*.

ASPHALT PAVEMENT RIDE QUALITY

Pavement Rideability Requirements shall apply on this project in accordance with Section 410 of the *2004 Standard Specifications*.

FUEL AND ASPHALT PAY ADJUSTMENT

These contract items Lot Pay Adjustment, Asphalt Adjustment and Fuel Adjustment, are for possible future payments. Additional monies may need to be setup with an additional change order if existing contract amount is insufficient to pay all items on the contract. Unit price is \$1.00. Quantity will be actual adjustment after work is completed.

OPTION A

The Contractor is advised that the compaction of asphalt mixtures furnished for driving lanes and ramps, at 25mm (1 inch) or greater, on this project will be accepted according to OPTION A in accordance with Section 402 and Section 403 of the *2004 Standard Specification*. Joint cores as described in subsection 402.03.02 are required for surface mixtures only. The compaction of all other asphalt mixtures will be accepted by OPTION B.

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SPECIAL NOTE FOR CONCRETE BRIDGE RESTORATION USING HYDRODEMOLITION AND CONCRETE OVERLAY

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2004 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Furnish the necessary labor, materials and equipment to remove bridge deck concrete using hydrodemolition equipment and place the new overlay. Remove asphalt and concrete overlays when applicable. Remove patches other than sound concrete and all loose and unsound concrete according to these specifications and in reasonably close conformity with the grades, thickness, or sections shown on the plans or as the Engineer directs. Provide shielding, water control, erosion control, vacuuming, and removal of all concrete and debris, jack hammering and chipping in areas inaccessible to the hydrodemolition equipment and all other aspects of work necessary to prepare the deck and place Latex Modified Concrete (LMC) on bridge decks following hydrodemolition surface preparation.

2.0 MATERIALS AND EQUIPMENT. The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

2.1 Hydrodemolition Equipment. Use hydrodemolition equipment with a filtering and pumping unit operating with a self-propelled computerized robot utilizing high pressure water jets. Ensure the equipment is capable of removing concrete to the depth specified on the plans, or as the Engineer directs, and capable of removing rust and concrete particles from reinforcing steel.

2.2 Mechanical Scarifying Equipment. Use a power-operated mechanical scarifier capable of uniformly scarifying or removing the old concrete or asphalt wearing surface from the bridge deck to the depths required in the plans or as the Engineer directs. Ensure the equipment is self-propelled with sufficient power, traction and stability to maintain accurate depth of cut and slope; capable of accurately and automatically establishing profile grades along each edge of the machine by referencing the existing bridge deck by means of a ski or matching shoe, or from an independent grade control.

2.3 Vacuum Cleanup Equipment. Use vacuum cleanup equipment, equipped with fugitive dust control devices, capable of washing the deck with pressurized water, dislodging all slurry, hydrodemolition and milling debris from the deck surface and removing it along with the water all in the same pass.

2.4 Hand-Held Blast Cleaning Equipment. Use water blasting equipment capable of exposing fine and coarse aggregates, thoroughly cleaning all exposed reinforcing steel, and removing any unsound concrete or laitance layers from the proposed concrete overlay surface. Ensure the equipment is capable of delivering a minimum of 25 gpm at 10,000 psi.

2.5 Power-Driven Hand Tools. Use power-driven hand tools and jackhammers not exceeding the nominal 35 pound class. Use chipping hammers not exceeding the nominal 15 pound class. Use only hand chipping tools when removing concrete within one inch of

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reinforcing steel. When operating mechanically driven tools, do not exceed a maximum angle of 45 degrees from the bridge floor surface.

2.6 Water. Use potable water in the hydrodemolition operation.

2.7 Latex Modified Concrete (LMC). Conform to Subsection 606.02.

2.8 Equipment. Conform to Subsection 606.02.10 (C) and (E).

3.0 CONSTRUCTION. Perform no operations without reasonable engineering controls that limit fugitive dust. Conform to all federal, state, regional and local government requirements regarding control of dust generated by blasting operations. Protect traffic under the bridge and adjacent to the work zone while removing bridge deck concrete.

3.1 Removal of Existing Asphalt and Concrete Overlays. When the bridge deck has an existing overlay, remove the overlay and any waterproofing material that was part of the deck. The Department will allow conventional scarifying equipment to remove the existing overlay and waterproofing material from the original bridge deck. Scarify to a depth of 1/4 inch below the original bridge deck surface. When chloride contamination or debonding is present at the top mat reinforcing steel interface or in the concrete below the top mat of reinforcing steel, remove additional depths of concrete as the Engineer directs. Inspect the existing deck for these conditions. Remove all concrete and waterproofing debris from the scarification operation prior to starting the hydrodemolition operations.

If the use of mechanical scarifying equipment results in the snagging of the top mat of steel reinforcement, stop, adjust the depth of removal, and repair or replace all damaged and dislodged reinforcing steel.

3.2 Scarification of Bridge Decks with No Existing Overlay. The Department will allow conventional scarifying equipment to remove an initial portion of the hydrodemolition depth. When conventional equipment is used, scarify a minimum of 1/4 inch and no deeper than the top mat of reinforcing steel. Remove all concrete debris from the scarification operation prior to starting the hydrodemolition operations.

If the use of mechanical scarifying equipment results in the snagging of the top mat of steel reinforcement, stop, adjust the depth of removal, and repair or replace all damaged and dislodged reinforcing steel.

3.3 Removal of Debonded and Deteriorated Deck Concrete, Variable Thickness. When "Removal Debonded, Deteriorated Existing Variable Thickness Concrete Overlay" is specified in the plans, perform the following:

- 1) After removing the existing concrete overlay, clean the deck to allow sounding.
- 2) The Engineer shall sound and mark the areas of unbonded variable thickness existing concrete overlay for removal.
- 3) Remove by chipping all obviously loose, debonded and deteriorated concrete. Remove in a manner that prevents cutting, elongating or damaging reinforcing steel. Replace any damaged reinforcing steel.

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- 4) Remove all “islands” that will not allow the minimum uniform thickness of new concrete overlay to be placed. Existing modified concrete may be left in patch areas as the Engineer directs providing the existing concrete patch is sound.
- 5) When the Engineer approves the marked removal areas, Concrete Removal by Hydrodemolition may be performed.

3.4 Concrete Removal by Hydrodemolition. Perform hydrodemolition surface preparation over the entire top surface of the reinforced concrete bridge deck to provide a rough and bondable surface and to remove all unsound concrete during the initial hydrodemolition surface preparation pass. Unsound concrete is defined as existing bridge deck concrete that is deteriorated, spalled or determined by the Engineer to be unsound.

Keep the amount of steel exposed to a minimum. Providing the existing concrete is sound, the Department will waive the requirement to provide a minimum ¾-inch clearance around all reinforcing bars that are more than 50 percent exposed.

Repair or replace damaged or dislodged reinforcing steel. Replacement includes the removal of any additional concrete required to position the new reinforcing steel at the correct height and to provide the required lap splice lengths.

Use jack-hammers in areas that are inaccessible to the self propelled robot or in patching areas that require additional handwork to remove the remaining unsound concrete.

Completely remove all construction debris, milling debris and dust from the bridge deck surface prior to the calibration and commencement of the hydrodemolition surface preparation operation.

Prior to starting the removal operation with hydrodemolition, calibrate the equipment on an area of sound concrete the Engineer designates. In the case of an existing overlay, perform calibration on the original deck concrete that is sound and not on any remaining concrete overlay material.

After calibration, move the equipment to a known unsound area to verify that all unsound concrete is removed by the established recorded settings. Calibration is required on each structure, each day that hydro-demolition is performed, and as required to achieve the results specified on the Plans.

Verify the removal every 30 feet along the cutting path. If necessary, recalibrate the equipment to ensure the specified depth of removal and the goal of removing all unsound concrete with hydrodemolition are achieved. Stop operations if sound concrete is being removed.

Block all deck edges, drains and expansion joints on the deck and install aggregate or straw dams every 150 feet, 6 inches high by one foot wide minimum, to strain run-off. The deck will serve as a settlement basin within itself. If further straining is necessary to produce visibly clear water prior to releasing it to the surrounding environment, construct a settlement basin outside or at the end of the structure is required.

Submit a plan for approval to the Engineer for control and filtering of all water discharged during operation.

Provide shielding, as necessary, to ensure containment of all dislodged concrete within the removal area in order to protect the traveling public from flying debris both on and under the work site.

3.5 Cleaning. Perform cleaning in a timely manner, before debris and water is allowed to dry on the deck surface. Clean the hydrodemolition debris and slurry with a vacuum

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system equipped with fugitive dust control devices and capability of removing wet debris and water all in the same pass. The vacuum equipment shall be capable of washing the deck with pressurized water during the vacuum operation to dislodge all debris and slurry from the deck surface.

3.6 Resounding. After the hydrodemolition operation has completed the removal operation, resound the deck to ensure all unsound material has been removed. The Engineer will perform the final sounding of the deck. In no case shall the final sounding be made unless the deck is free from standing water. Final sounding shall consist of as many successive resoundings as required to ensure that all deteriorated and fractured concrete has been removed. Perform additional removal with the hand held high-pressure wands (10,000 psi), jack-hammers (35 pound maximum), and chipping hammers.

3.7 Full Depth Repair. Where the deck is sound for less than one half of its original depth, remove the concrete for a maximum of 5" in the limited areas as the Engineer directs. Clean the concrete faces and reinforcing steel. Use overlay material to fill the repair area. No payment will be made for the removal and the replacement material will be paid per the special notes.

3.8 Preparation Prior to Overlay Placement. Remove all lips, slivers, or other edges by jackhammer that may interfere with bonding of the new overlay. Blast Clean all surfaces to which the overlay is to bond no more than 24 hours prior to placing the overlay. These surfaces include expansion joints, scuppers exposed reinforcing and structural steel, the work face of a previously placed overlay, and the faces of curbs and barriers up to a height of at least one inch above the proposed overlay surface. Clean exposed reinforcing and structural steel to remove all loose and built-up rust, asphalt residue, and all other contaminants detrimental to achieving an adequate bond. Areas of steel where the original hydrodemolition was applied should normally be adequately cleaned, but inspect to assure cleanliness requirements are met. Suitable blast cleaning methods may include high pressure water blasting (10,000 psi minimum), water blasting (less than 10,000 psi) with abrasives in the water, abrasive blasting with containment, or vacuum abrasive blasting. Ensure the concrete surfaces are free of spalls, laitance, and all contaminants detrimental to achieving an adequate bond.

Clean bridge scuppers of all foreign matter and plug prior to placing the overlay. Following overlay placement, unplug the scuppers to permit free drainage of water from the deck surface.

Do not allow vehicles other than approved construction equipment on those sections of the deck where hydrodemolition has begun. Prevent contamination of the deck by construction equipment or from any other source.

3.9 Overlay. Conform to Subsection 606.03 construction requirements for the Latex Modified Concrete (LMC) Overlay except as modified in this note. Perform Bridge deck repairs and place the LMC overlay as soon as practical following the removal of deck surface, pouring of full depth repair areas, performance of hydrodemolition, and the subsequent cleaning of the deck. Perform spud vibration along all parapet walls, curbs, deck edges, forms, expansion joints, deck drains, etc. and at all variable depth locations.

Boone Co.
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3.9.1 Weather Limitations. Do not place the overlay when it is raining, when the ambient air temperature is below 45 °F or when it is predicted to fall below 45 °F during the curing period. Only place overlays when the overlay surface evaporation rate, as affected by ambient air temperature, concrete temperature, deck temperature, relative humidity and wind velocity, is 0.1 pound per square foot per hour or less. Do not place the overlay if the ambient air temperature is 85 °F or greater or predicted to go above 85 °F during the overlay placement regardless of the surface evaporation rate. Determine and document the atmospheric conditions, subject to verification by the Engineer. Measure weather parameters within 10 feet of the placement area. Use Figure 1 in ACI 308 to determine the loss of surface moisture for the overlay. In no case shall the temperature of the overlay concrete exceed 85 °F during placement.

3.9.2 Limitation on Placing Operations. Prior to overlay placement, the Engineer will establish the Contractor's ability to place the LMC overlay on a continuous basis and to consolidate, finish, texture, prior to the formation of plastic surface film, and curing.

When the Engineer directs, provide a representative of the latex manufacturer during the proportioning, mixing, placing and finishing of the overlay. The Department will not permit operations and procedures the representative considers detrimental to the integrity and durability of the repaired and overlaid bridge deck.

If placement of the overlay is to be made at night, submit a plan to provide adequate lighting for the work area. Submit the plan at least 15 calendar days in advance for approval. Do not place concrete without an approved plan. Direct lights so they do not affect or distract approaching traffic.

Do not allow workers to walk in the freshly placed overlay once the finishing machine has made the first pass.

During delays in the overlay concrete's placement operations of more than 10 minutes or when a plastic surface film develops on a LMC overlay, cover the work face with wet burlap. If an excessive delay is anticipated, install a bulkhead at the work face and stop the overlay placement.

Unless otherwise authorized by the Engineer, do not place an overlay adjacent to a previous overlay which has cured for less than 36 hours.

Do not allow traffic on the bridge deck until the curing period specified in Subsection 606.03.17 is complete.

Prior to the end of the full curing period for any section, use no power driven tools heavier than a 15 pound chipping hammer adjacent to the new overlay.

4.0 MEASUREMENT.

4.1 Existing Asphalt Overlay Removal. The Department will measure the actual quantity of the existing asphalt wearing course and waterproofing material removed in square yards. The Department will consider repair of damaged or dislodged reinforcing steel incidental to this bid item.

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Item No. 2-2028

4.2 Existing Concrete Overlay Removal. The Department will measure the actual quantity of the existing concrete overlay removed in square yards. The Department will consider repair of damaged or dislodged reinforcing steel incidental to this bid item.

4.3 Removal of Debonded and Deteriorated Deck Concrete, Variable Thickness. The Department will measure the actual square yards of areas marked by the Engineer.

4.4 Hydrodemolition. The Department will measure the actual quantity of the deck area prepared for overlay in square yards. The Department will not measure for payment the surface preparation, hydrodemolition, 1/4-inch scarification of the existing concrete deck, jack hammering and hand-chipping in areas inaccessible to the hydrodemolition equipment, repair of damaged or dislodged reinforcing steel, removal of the surface preparation debris, cleaning, labor, materials, and equipment required to complete this work and will consider them incidental to this item of work.

4.5 Steel Reinforcement. The Department will only measure for payment those areas marked in the field by the Engineer. The Department will not measure steel damaged by the concrete or overlay removal process. When listed as a bid item, the Department will measure the quantity in pounds. When not listed, the Department will measure the quantity as Extra Work according to Subsection 104.03.

4.6 Latex Modified Concrete Using Hydrodemolition, (1½ inches thick). The Department will measure the quantity in cubic yards using the theoretical volume required for the overlay shown in the Plans.

4.7 Latex Modified Concrete, Variable Depth, Material Only. The Department will measure Latex Modified Concrete, Variable Depth, Material Only by the cubic yard complete in place. The Department will determine the number of cubic yards by deducting the theoretical volume (plan specified thickness) of bridge deck overlay (LMC) from the total volume (as indicated by the batch quantity tickets) of LMC required to obtain the finished grade shown on the Plans or established by the Engineer.

5.0 PAYMENT.

5.1 Latex Modified Concrete, Variable Depth, Material Only. The Department will pay for accepted quantities of (LMC) Variable depth at the invoice price of the materials delivered to the project plus 15 percent, except in no case shall maximum payment exceed \$400 per cubic yard plus 15 percent where Type I Portland Cement is used, \$500.00 per cubic yard plus 15 percent where Type III Portland Cement is used and \$700.00 per cubic yard where Rapid Set Cement is used. The Department will consider all other costs associated with placement of Latex Modified Concrete, Variable Depth, Materials Only incidental to the item, Latex Modified Concrete Using Hydrodemolition (1½ inches thick) as they are placed in one operation.

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

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<u>Item</u>	<u>Description</u>	<u>Unit</u>
8550	Hydrodemolition	Square Yard
----	Removal of Debonded and Deteriorated Deck Concrete, Variable Thickness	Square Yard
----	Existing Asphalt Overlay Removal	Square Yard
----	Existing Concrete Overlay Removal	Square Yard
8150	Steel Reinforcement	Pound
----	Latex Modified Concrete Using Hydrodemolition, thickness	Cubic Yard
----	Latex Modified Concrete, Variable Depth, Material Only	Cubic Yard

January 18, 2007

Item No. 6-2028.00
Boone County, I-275
IM 275-9 (106)

**SPECIAL NOTE
FOR
MOVABLE CONCRETE TRAFFIC BARRIER**

a. Description. Furnish, install, operate, and maintain the Moveable Concrete Traffic Barrier (MCTB) at locations designated in the contract documents or as directed by the Engineer. Operating the MCTB includes relocating and adjusting the barrier system laterally and longitudinally as described in this special note and as directed by the Engineer.

b. Materials and Equipment. The MCTB and Barrier Transfer Machine (BTM) as specified herein may be obtained from Barrier Systems, Inc., 180 River Road, Rio Vista, California 94571, (888) 800-3691.

1. **Moveable Concrete Traffic Barrier** - The MCTB must consist of reinforced pre-cast concrete sections 32 inches high, 24 inches wide at the base and 37 inches long. The barrier length, pin-to-pin, must be 39 inches. The basic shape of the barrier shall be the New Jersey Shape modified at the top with the T-Head.

Fabricate the MCTB from materials conforming to the following.

Reinforcing Bars	Grade 40 or 60
Steel Hinges	ASTM A 36
Through Rods	ASTM A 36
Hinge Pins	AISI 4140 or 4142

Fabricate sections with four $\frac{7}{8}$ -inch threaded rods extending the length of each section to accommodate four steel hinges, two on each side, set into recesses formed in the barrier. Connect the sections with $1\frac{1}{8}$ -inch hinge pins through the barrier hinges, to form a continuous wall.

2. **Barrier Reflector Markers** - Furnish the MCTB with the appropriate color for the traffic pattern (yellow or white) barrier reflector markers. Place barrier reflectors every 20 feet along the MCTB. The barrier reflectors shall be attached per the (barrier reflector) manufacture's recommendation. Barrier reflector markers may be placed in either of the following configurations.
 - A. On each side of the barrier, no higher than 6 inches from the bottom on the sloped surface.
 - B. Bi-directional barrier reflectors on top of the barrier positioned 10 degrees to parallel. These barrier markers must stay in place to accommodate to 2-inch height clearance for operation of the barrier transfer machine.

Paint is not an acceptable alternative to the required barrier reflectors; however, existing paint from previous use of the MCTB does not need to be removed, except directly under the barrier reflector. A low profile flexible barrier reflector (similar to the Bunzl Extrusion PCBM T-12, phone 800-822-7528) or a low profile rigid barrier reflector (similar to the Astro Optics Curb Marker, CM-1, phone 847-428-3181) are acceptable.

3. **Barrier Transfer Machine** - Furnish and use a self propelled Barrier Transfer Machine (BTM) to move the wall. The BTM must be in good working condition and equipped and operable as follows.
 - A. Capable of lateral transfer of continuous lengths of MCTB from 4 feet to 18 feet in one inch increments at speeds up to 5 mph while lifting the barrier to accommodate differences in roadway elevation up to 18 inches.
 - B. Able to move the MCTB 12 feet in either direction from a neutral 1800 foot radius curve without disassembly.
 - C. Attain a maximum speed of 5 mph when transporting sections of barrier down the roadway.
 - D. Operate under all of the restrictions of the contract and site conditions (i.e. rough pavement).
 - E. Employ a capstan system to maintain the MCTB wall in a neutral longitudinal position when transferred on certain grades and curves.
 - F. Able to transfer the MCTB laterally up to 9 feet or more without causing any part of the equipment or barrier to extend into traffic.
 - G. Equipped with a tow fitting at each end to allow the BTM to be towed while continuing to make the necessary lateral transfer of the barrier, in the event of power plant malfunction or failure.
 - H. Equipped with an engine block heater.

c. Construction. The entire MCTB system must be available for installation at the time of project need (per the progress schedule). No extension of time will be granted for the lack of availability of the MCTB system. Order the MCTB as soon as the project contract is awarded as it may take considerable time to have all the components delivered to the project site. Deletion of the MCTB is not an option that will be considered.

The Engineer will inspect the MCTB upon delivery to the project site and periodically throughout the life of the project. Any barrier sections delivered to the project site having damage or defects that will affect the performance of the system, as determined by the Engineer, must be replaced with a suitable unit. Any unit that is damaged or rendered unsuitable by the Contractor's operations or adjacent traffic during the life of the project, as determined by the Engineer, must be replaced with a suitable unit. All costs associated with removing damaged or defective barrier sections (caused by the Contractor) and replacing them as specified in this paragraph will be borne by the Contractor.

Place the MCTB at the location(s) indicated in the contract documents, or as directed by the Engineer. Connect the individual units of the barrier, as specified by the manufacturer, to form a continuous chain to facilitate lateral and longitudinal movement by the Barrier Transfer Machine.

Place MCTB before diverting traffic or beginning the associated construction work. During installation of the MCTB, protect traffic by the use or installation of standard warning and channelizing devices. Place MCTB in the direction of traffic flow. Remove MCTB in the direction opposite to the traffic flow. When the MCTB is placed on pavement, clean the pavement of all material (sand, gravel, dirt, ice, snow, etc.) that would reduce the friction between the MCTB section and the underlying pavement. During each movement of the MCTB, remove debris accumulated next to the wall, which may hinder traffic, once the MCTB is moved. Dispose of all debris as required by the standard specifications.

Ensure that all incomplete MCTB installations or removals which result in barrier blunt ends exposed to traffic inside the clear zone are made crash-safe.

When the MCTB is relocated, adjusted, or placed back in operation, or as directed by the Engineer, clean and replace all damaged reflector markers. Completely remove barrier markers damaged after the MCTB has been placed in initial operation and replace with new markers. Position the replacement markers directly in front of the damaged marker.

All costs associated with replacing markers damaged by the Contractor's equipment (including the BTM) will be borne by the Contractor.

Identify a storage area for the BTM and that is acceptable to the Engineer. Perform all maintenance operations recommended by the manufacture of the BTM. Complete repairs expeditiously to ensure the BTM is available for use on the project as required. Furnish and maintain a sufficient supply of spare parts and trained personnel to ensure that the specified lane configurations are available at the required times.

Before the MCTB is put into use on the project, the Engineer will determine the schedule that the MCTB is to be moved each day.

d. Measurement and Payment. The completed work as measured will be paid for at the contract unit price for the following contract items (pay item).

Contract Item (Pay Item)	Pay Unit
Moveable Conc Traf Barrier.....	Foot

Movable Conc Traf Barrier will be measured for the maximum length required by the Engineer at one time during the life of the contract. This pay item includes all costs to:

- furnish, and install the concrete barrier at the initial location with barrier reflector markers attached;
- furnish, operate and maintain the Transfer and Transport Machine;
- provide training for BTM operators by the manufacture or its representative;
- move the barrier back into proper configuration if it is hit by vehicular traffic, including any additional traffic control necessary.
- operate the concrete barrier, including moving the barrier up to 18 feet laterally, two times per day;

- store the concrete barrier and BTM during the winter;
- relocate the concrete barrier from eastbound I-275 to westbound I-275 (roadbed relocation), remove and properly dispose of debris from the roadway during each move;
- maintain the concrete barrier; and
- remove the concrete barrier from the project when it is no longer needed.

All costs associated with any adjustments made to move the wall back to its proper alignment due to being hit by Contractor's equipment will be borne by the Contractor. If barrier reflectors are damaged by other than the Contractor, they must be replaced and will be paid as Delineator for Barrier, according to section 509.05 of the standard specification. All costs associated with replacing barrier reflectors damaged by the Contractor will be borne by the Contractor.

The Department will pay 90 percent of the quantity upon satisfactory installation of the units. The Department will pay the remaining 10 percent upon removal of the units from the project.

Special Note for Expediting Project Work Order

Please be advised that the Department intends to expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this, the Contractor is required to "hand carry" all required project information to facilitate the process. Please be advised that the Department's ability to expedite this project is dependent on the Contractor submitting accurate paperwork.

10A

SPECIAL NOTE FOR TYPE 3 RUMBLE STRIPS

Contrary to Subsection 501.03.13 J) of the Department's 2000 Standard Specifications for Road and Bridge Construction and Standard Drawing RPM-145, sealing Type 3 rumble strips with an epoxy sealer is no longer required.

February 24, 2000

June 15, 2007

**SPECIAL NOTE
FOR
FIXED COMPLETION DATE & DISINCENTIVE FEE**

The Contract time for this project shall be a fixed completion date in accordance with the provisions of Section 108.07.04 of the Standard Specifications for Road and Bridge Construction and in accordance with the following additional provisions:

- a) Work shall be completed on the project through “Phase II of the Construction Phasing and Sequence of Construction” plan, with westbound traffic shifted back to the westbound roadway as set forth at the beginning of “Phase III of the Construction Phasing and Sequence of Construction” by November 15, 2007.
- b) Work shall be completed on the project by July 1, 2008.

Contrary to Section 108.07.04 of the Standard Specifications for Road and Bridge Construction, time extensions for the fixed completion date for Part a) above, due to increases in quantities, additional work, weather conditions, or for any other reason, will not be permitted.

Disincentive Fee – A disincentive fee of \$5,000 per calendar day will be charged for each calendar day after November 15, 2007 that work as set forth above in Part a) is not complete and for each calendar day after July 1, 2008 that work as set forth above in Part b) is not complete. Contrary to Section 108.09 of the Standard Specifications for Road and Bridge Construction, standard contract liquidated damages will not be charged.

Contrary to Section 108.09 of the Standard Specifications for Road and Bridge Construction, the \$5,000 per calendar day Disincentive Fee will be charged during the months of December through March for any work not completed as set forth above in Part a).

Contrary to Section 108.09 of the Standard Specifications for Road and Bridge Construction, the \$5,000 per calendar day Disincentive Fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation.

Disincentives are also included for Lane Closures associated with Bridge-End Digouts at the Kentucky end of the Ohio River Bridge and Ramp Closures for work on the I-275 – KY 8 Interchange. For the disincentive schedules for this work see Sheet R40 in the plans.

Changes to Construction Phasing and Sequence of Construction Plan – The contract dates as set forth above provide for traffic on I-275 through the project during December 2007 through March 2008 to be:

- 1) On new concrete pavement in the westbound direction and
- 2) Existing concrete pavement with an asphalt overlay (bondbreaker in accordance with note included on the paving summary) in the eastbound direction.

June 15, 2007

Nothing in this note is intended to prevent the Contractor with approval of the engineer to change the Construction Phasing and Sequence of Construction Plan as provided for in the plans or undertake and complete work beyond the beginning of Phase III in calendar year 2007 as set forth above; however the provisions above shall still apply to the contract.

Maintenance of I-275 Eastbound Roadway – Contrary to Section 105.11 of the Standard Specifications for Road and Bridge Construction, the Contractor shall be responsible for pothole patching of the I-275 eastbound roadway until the new concrete pavement is completed for that portion of the project. Payment for pothole patching shall be incidental to the bid item “Maintain and Control Traffic.”

I-275, Boone County
FD52 006 0275 011-013
IM 275-9(106)
6-2028.00

**SPECIAL NOTE
FOR
FIXED COMPLETION DATE AND DISINCENTIVE FEES**

Fixed Completion Date and Disincentive Fees

This project will have a fixed completion date of November 15, 2007 for completion of all work associated with this project. This fixed completion date includes all work associated with this project. Contrary to Section 108.07.04 of the Standard Specifications, **time extensions for the fixed completion date listed above, due to increases in quantities, additional work, weather conditions, or for any other reason, will not be permitted.**

A disincentive fee of \$10,000 per calendar day will be charged for each calendar day after November 15, 2007 that all work associated with this project is not complete. Contrary to the Standard Specifications standard contract liquidated damages will not be charged.

Contrary to Section 108.09 of the Standard Specifications, **the \$10,000 per calendar day Disincentive Fee will be charged during the months of December through March for all work that is not complete.** Contrary to Section 108.09 of the Standard Specifications, **the \$10,000 per calendar day disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation.**

Lane Closure Disincentive for Phase 1A and 1B Construction (Bridge-End Digouts)

See Sheet R40 in the plans for the disincentive schedule for these phases of work.

SPECIAL NOTE FOR PROJECT IDENTIFICATION SIGNS

When directed by the Engineer, install Project Identification Signs furnished by the Department at each end of the project. The signs furnished by the Department will be approximately 44" X 72" or 72" X 120" aluminum sign blanks with standard color reflective sheeting with the applicable county and project names affixed. The Engineer will determine the size and location of the signs, if any, to be used on the project(s) at the time of construction.

Pick up the signs to be furnished by the Department at the District Traffic Operations Facility. Furnish posts and hardware for mounting the signs. Install the signs at locations determined by the Engineer. Maintain the signs during the duration of the project. Upon completion of the work, remove the signs and return them to District Traffic Operations Facility. Retain possession of the posts and hardware.

The Department will measure installation of the Project Identification Signs in individual units, Each. Payment at the contract unit price Each shall be full compensation for all labor, materials, equipment, and incidentals required for picking up, installing, maintaining, and returning the project identification signs furnished by the Department.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
20588NC	Install Project Identification Signs	Each

SPECIAL PROVISION FOR WASTE AND BORROW SITES

The contractor is advised that it is their responsibility to gain U.S. Army Corp of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". "Waters of the United States" are defined as perennial or intermittent streams, ponds or wetlands. Ephemeral streams are also considered jurisdictional waters, and are typically dry except during rainfall, but have a defined drainage channel. Questions concerning any potential impacts to "Waters..." should be brought to the attention of the appropriate District Office for the Corps of Engineers for a determination, prior to disturbance. Any fees associated with obtaining approval from the U.S. Army Corp of Engineer or other appropriate regulatory agencies for waste and borrow sites is the responsibility of the contractor.

DIVISION OF PLANNING

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

I. DESCRIPTION

Except as specified in these notes, perform all work according to the Department's 2004 Standard Specifications, applicable Special Provisions and Special Notes, Sepia and Standard Drawings, and the drawings elsewhere in this proposal. Article references are to the Standard Specifications.

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

II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual. Have all materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes. All materials shall be approved prior to being utilized. The Contractor shall submit for approval five (5) copies of descriptive literature, drawings, and any requested design data for the materials he proposes to use. No substitutions for approved materials will be made without the written approval of the Engineer.

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

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

C. Junction Box Type 10 in. x 8 in. x 4 in. The junction box shall have minimum inside dimensions of at least 10 inches high by 8 inches wide by 4.6 inches deep, made of a UV stabilized nonmetallic material (plastic) or non-rusting metal, and be weatherproof (NEMA 4X enclosure). It shall have a removable replaceable door with a continuous durable weatherproof gasket between the body and overhanging door to ensure a watertight seal. The door shall be hinged with stainless steel screws, hinge(s) and pin(s). The door shall also have a stainless steel padlockable latch on the side opposite the hinge(s). An approved enclosure is the Hubbell-Wiegmann model VJ1008HWPL1.

Inductance Loop and Piezoelectric Axle Sensor Installation

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D. Junction Box Type A. The junction box Type A shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 13 inches wide by 24 inches long by 18 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

E. Junction Box Type B. The junction box Type B shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 11 inches wide by 18 inches long by 12 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

F. Junction Box Type C. The junction box Type C shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC Style, or approved equal. It shall have nominal inside dimensions of 24 inches wide by 36 inches long by 30 inches deep with an open bottom. The removable cover shall be attached with a minimum of two 3/8-inch stainless steel hex bolts and washers.

G. Cabinet Type G. A controller cabinet Type G shall be constructed of type 5052-H32 sheet aluminum with a minimum thickness of 0.125 inches. The cabinet shall meet or exceed the industry standards set forth by the UL 50 and the National Electrical Manufacturer's Association (NEMA) 3R. The cabinet shall have a dimension of 41 inches high by 25 inches wide by 16 inches deep. The cabinet shall include kits for a back panel and two shelves. The cabinet shall be designed with a sloped top to prevent the accumulation of water on its top surface. The single door opening shall be double flanged on all four sides, hinged on the right side, equipped with a three-point latching mechanism, and include a door restraint. The door shall be equipped with a Corbin tumbler #2 lock. The cabinet shall be equipped with two adjustable "C" mounting channels on both side and back walls to allow for versatile positioning of shelves. Manufacturer's shop drawings shall be submitted demonstrating details of equipment housing and installation. If electrical service is specified, a 120-volt GFCI AC duplex receptacle shall be provided in the cabinet.

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

Econolite Control Products.
P.O. Box 6150
3360 E. La Palma
Anaheim, California 92806-2856

H. Galvanized Steel Cabinet. The cabinet shall be a hinged cover NEMA Type 3R medium enclosure, constructed of 16 or 14 gauge galvanized steel, and have inside

Inductance Loop and Piezoelectric Axle Sensor Installation

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dimensions of 20 inches high by 20 inches wide by 8 inches deep. This shall be the standard size that contractors shall place their bids on. The cabinet shall meet the industry standards set forth by the Underwriters Laboratories Inc. (UL) 50 and the National Electrical Manufacturers Association (NEMA). The finish shall consist of an American National Standards Institute (ANSI) 61 gray polyester powder finish inside and out over the galvanized steel. The cabinet shall have the following features:

- Drip shield top and seam-free sides, front, and back, to provide protection in outdoor installations against rain, sleet, and snow.
- 16 gauge galvanized steel continuous stainless steel pin.
- Cover fastened securely with captive plated steel screws.
- Hasp and staple provided for padlocking.
- No gaskets or knockouts.
- Back plate mounted inside the cabinet for terminal strip installation.

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

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

I. Wood Post. The wood post shall be 4 inches by 4 inches by 8 feet long, and is pretreated to conform to the American Wood Preservers' Association (AWPA) C-14. All wood posts shall be sawed on all four sides, having both ends square, and conform to the dimensions specified. The wood post is described in detail in Section 820.01 of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, 2004 edition.

J. Conduit. Conduit shall be rigid steel waterproofed conduit unless otherwise specified. All conduits shall be galvanized inside and out and shall conform to the Underwriters' Laboratories (UL) requirements for rigid metallic conduit. IMC will not be accepted. Furnish all conduit fittings, bodies, boxes, joints, couplings and mounting hardware.

K. Loop Wire. All loop wire shall be plainly marked in accordance with the provisions of the current editions of the National Electric Code (NEC). The wire shall be 14-gauge single conductor, insulated in polyethylene (PE) with a 0.004-inch thick nylon coating, and enclosed in a 0.030-inch thick PE tube jacket. The wire shall meet the requirements of the International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition. Any other wire shall be of appropriate size and type per the NEC and Section 834.01 Wiring of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, 2004 edition.

Inductance Loop and Piezoelectric Axle Sensor Installation

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L. Cable No. 14/1 Pair. Cable No. 14/1 pair or loop lead-in cable shall be 14 AWG, stranded, paired conductors, electrically shielded and shall conform to IMSA 19-2. All cable shall be plainly marked in accordance with the provisions of the National Electric Code.

M. Traffic Loop Encapsulant. The traffic loop encapsulant shall consist of a one-part polyurethane as described in Section 835.06 of the Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, 2004 edition.

N. Seeding and Protection. Use seed mixture No. I per Section 212-Erosion Control of the Department's 2004 Standard Specifications for Road and Bridge Construction book.

O. Electrical Service. The contractor shall initiate a work order for the installation of electrical service to the power site. A representative from the Division of Planning and the local utility company shall be consulted prior to choosing an exact location for the pole. The contractor shall be responsible for clearing the right-of-way for the electrical service drop. The electrical service shall be a minimum 60-ampere, which is capable of supplying 120 volts or 240 volts to the electronics. The installation and materials specified in the construction notes below, shall be made incidental to the bid item established for electrical service. A 120-volt GFCI AC duplex receptacle shall be provided in the cabinet. Contractor is responsible for correct size and type of wire. Contractor is responsible for obtaining any and all electrical inspections, memberships, meter base and any other requirements by the utilities serving the installation and pays all fees required.

P. Piezoelectric Sensors. The sensor shall consist of a metal strip 0.260" wide x 0.063" thick; ± 0.005 " and be furnished in the specified lengths. The sensor shall include a 100-foot electrical coax-cable connected to one end. The coax-cable shall be RG 58 type with an underground/direct burial rated outer jacket. The OD of the cable is 0.187". The nominal capacitance of the cable is 27 pF/ft. Piezo lead-in cables are to be run splice free to their cabinets. Many installations exceed the 100-foot length so the piezo should be ordered with a lead-in of appropriate length. Standard lead-ins can be ordered from 100 to 300 feet in 50-foot increments. The manufacturer should be contacted regarding longer distances.

- 1. Piezoelectric Sensor: Roadtrax BL Class I or Approved Equal.** Furnish Class I Piezoelectric Sensor to be used to collect truck weigh-in-motion data. Class I sensors are typically furnished in 6- or 11-foot lengths. See Notes and Estimate of Quantities for sensor type and length. One installation bracket for every 6 inches of sensor length shall also be supplied.
- 2. Piezoelectric Sensor, Roadtrax BL Class II or Approved Equal.** Furnish Class II Piezoelectric Sensor to be used to collect vehicle classification data. Class II sensors are typically furnished in 6-foot lengths. See Notes and Estimate of

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Quantities for sensor type and length. One installation bracket for every 6 inches of sensor length shall also be supplied.

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

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

Measurement Specialties, Inc.
80 Little Falls Road
Fairfield, NJ 07004

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

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

Compressive Strength (psi)	ASTM D638	5000 min.
Water Absorbtion	ASTM D570	0.3% max
Wear Resistance	ASTM D4060	CS10 wheel, 1000 gm load 1000 cycles, 186 mg loss

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

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

Measurement Specialties, Inc.
80 Little Falls Road
Fairfield, NJ 07004

PAT Traffic Control Corporation
1665 Orchard Drive
Chambersburg, PA 17201

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

III. CONSTRUCTION METHODS

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

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

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

B. Junction Box Type 6" x 6" x 4" or 10" x 8" x 4" (as noted). The contractor shall stub the rigid steel conduit to the junction box so the bottom of the box is approximately 18" above the ground. The junction box shall be located at or beyond the shoulder and mounted on the side of a post approximately 3 feet beyond the guardrail post using banding material or other appropriate mounting hardware with the hinge side up. See Figures 2a and 2b for additional details. Leave approximately 18" of slack lead-in wire coiled inside the junction box. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

C. Junction Box Type A (or B or C). Install the Junction Box Type A near the edge of pavement and flush with the ground level (see Figure 3). Place roughly 18 inches of No. 57 aggregate underneath the junction box Type B to allow drainage. Extend the loop lead-in wires splice-free to the cabinet. Run the wire from the junction box Type A through the conduit at a minimum depth of 6 inches. Stub the conduit up into the junction box Type A from its base to accommodate the lead-in wires. Leave at least 2 feet of slack lead-in wire coiled inside the junction box Type A. The conduit fittings, backfilling, and aggregate shall be incidental to the junction box Type A. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

D. Cabinet Type G. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". Place a concrete foundation of appropriate size for mounting the cabinet. The cabinet shall be mounted on the concrete base such that the bottom of the cabinet is 27" above the ground. The door of the cabinet shall open away from traffic. Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 1/4" conduit to be stubbed out in the

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bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. A ¾" rigid steel conduit shall be stubbed up into the cabinet and run 2 feet up the electrical service pole and terminated to a ¾" weatherhead. This conduit shall be run in the same ditch as the electrical service. If electrical service is not provided as an item in the contract, the ¾" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "¾ in. conduit end" (see Figure 8). A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

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

E. Install Base Mount Enclosure. Locate the cabinet sufficiently beyond the roadside by determining the minimum clear zones in accordance with the "Roadside Design Guide". For this project, a base mount Model 170 Controller Cabinet, without anchor bolts, will be State-furnished. The contractor shall construct each cabinet foundation as shown on the plans per the attached Figures 9a and 9b, "Base Mounted 170 Cabinet Detail", (including furnishing and installing anchor bolts). Contractor shall install the cabinet on the concrete base such that the doors of the cabinet open away from traffic (hinges are away from traffic), and shall make all field wiring connections to the sensors, electrical and telephone services (as applicable). Fasten the cabinet to the foundation using anchor rods and caulk the gap between the cabinet and the base. Stub rigid conduit up into the cabinet from its base. Install an extra 1 ¼" conduit to be stubbed out in the bottom of the cabinet and run out 2 feet from the concrete base and plugged with duct seal or taped shut with electrical tape toward the roadway for future use. An 8' copper clad ground rod shall be driven into the soil and bonded to the rigid conduit via #4 solid copper wire and ran through the concrete and up into the cabinet. Two 1" rigid steel conduits shall be stubbed up into the cabinet, one for electrical service and one for telephone service (whether installed at this time or in the future). They shall be run a minimum of 2 feet up the electrical service pole and/or telephone source and terminated to 1" weatherheads. These conduits shall be run in the same ditch if possible. If electrical service is not provided as an item in the contract, the 1" rigid steel conduit shall be run out 2 feet from the concrete base and plugged with plumbers putty or taped shut with electrical tape. The location of the plugged end shall be marked with a wooden stake and labeled "1 in. conduit end". A 120-volt, 20-amp GFCI AC duplex receptacle shall be provided in the cabinet.

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Leave at least 6 feet of slack sensor lead-in wire in the cabinet. Include the following major items as incidental to the cost of this bid item: concrete foundation, anchor rods and associated hardware, ground rod, #4 solid copper wire, bonding clamps, caulking, electrical material and connections (if applicable). The Division of Planning will supply the cabinet, additional harnesses and do final sensor connections inside the cabinet. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or other sensors. See Location Drawing for sensor numbers to be placed on all lead-ins.

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

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

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

G. Wood Post. Set the treated-wood post 3 feet below the ground and place the backfill material in the hole, compacting until flush with the existing earth. Mount the cabinet to the post using ¼" x 2 ½" galvanized lag bolts at the top and bottom of the cabinet. The base of the cabinet shall be 4 feet above ground level. Stub the rigid steel conduit up into the base of the cabinet. Affix the conduit to the post using two conduit straps, a maximum of 18" on-center, and ¼" x 2 ½" galvanized lag bolts. Cabinet door shall open facing away from traffic (see Figure 7).

H. Conduit. Rigid steel waterproofed conduit encasement shall be provided for all conductors where conductors run to a junction box or cabinet. All conduit installations shall conform to the provisions of the NEC, except where directed otherwise. Bonded slip joints will be permitted for joining rigid conduit to the junction box or cabinet. Where a standard coupling cannot be used, an approved threaded union coupling shall be used.

All conduit ends shall be reamed to remove burrs and sharp edges. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted

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with a rust inhibitive paint. Conduit bends shall have a radius of no less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans.

Conduit that will be subject to regular pressure from traffic shall be laid to a minimum depth of 24 inches below grade. Conduit that will not be subject to regular pressure from traffic shall be laid to a minimum depth of 6 inches below grade. All conduit openings shall be waterproofed with a flexible, removable sealant, including those ending in junction boxes and cabinets. This shall be accomplished using duct seal, or plumber's putty, by working it around the wires and then extending it 1 inch into the end of the conduit. After the conduit has been installed and before the backfilling is started, the conduit installation shall be inspected and approved by the Engineer. In backfilling trenches, the backfill material shall be placed and compacted in lifts of 9 inches or less. Any area disturbed as a result of the contractor's operations shall be restored to the satisfaction of the Engineer.

I. Wiring. All wiring shall conform to the provisions of the NEC unless otherwise shown on the plans. Permanent identification numbers shall be affixed to all wires in each junction box and cabinet in order to distinguish between the loops and/or sensors. See Location Drawing Figure 1 for sensor numbers to be placed on all lead-ins. All wiring shall be taken to a cabinet or junction box. Leave at least 2 feet of "slack" lead-in wire inside each Type B junction box and steel cabinet, a minimum of 4 feet of wire inside the Type G cabinet and a minimum of 6 feet of wire inside the base mounted Type 170 cabinet.

J. Splicing. Sensor lead-in cable lengths for each sensor shall allow sufficient but not excessive slack for splicing connections. All splices shall conform to the provisions of the NEC unless otherwise shown on the plans. Loop lead-in wire splices to shielded pair cables shall be twisted and soldered. Other splices shall be twisted and soldered or made with mechanical connectors of a type approved by the Engineer. Splices for loop wire shall be protected by either heat shrink tubing or a double spiral wrapping of vinyl electrical tape. For splicing home-run coax cable to the sensor's lead-in cable, the same coax cable, supplied by the manufacturer, shall be used. For coax-cable splices, the contractor shall provide kits (3M Scotchcast 3832 Buried Service Wire Encapsulation Kit or equal) to protect them. All splices are to be made in junction boxes unless approved by a representative of the Division of Planning.

K. Loops. A location table is furnished in the Supplemental Notes, along with an estimate of quantities, to display the approximate location for loop installation in the existing pavement. The contractor and a representative of Planning will verify the precise location on site. The contractor shall be careful to avoid expansion joints and pavement sections where potholes, cracks, or any other roadway flaws exist. This will not only facilitate installation of the equipment, but also will increase the accuracy and service life span of the sensors.

There shall be a minimum of 6 feet between loops in adjacent lanes for 12-foot wide

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lanes. Unless indicated otherwise, loops in the same lane shall be spaced 16 feet from leading edge to leading edge (see Figure 6). All loop dimensions shall be 6 feet by 6 feet square unless otherwise indicated by the Location Drawing. Center and mark each loop in the lane such that its sides are parallel and perpendicular to the direction of traffic. Make the saw-cut for the loop 1/4-inch wide and at a depth such that the top loop wire is a minimum of 1 inch below the surface of rigid (PCC/Concrete) pavement or 3 inches below the surface of asphalt pavement. Drill a 1.5" hole at all four corners of the loop to prevent sharp bends in the wire (see Figure 4).

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

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

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

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

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

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Planning Equipment Branch.

All loop inductance readings shall be between 100 and 300 microhenries. The loop inductance between two loops in the same lane shall be within 20 microhenries of each other. Inductance loop conductors shall test free of shorts and unauthorized grounds. Upon completion of the project, all loops must pass an insulation resistance test of at least 100 million ohms to ground when tested with a 500 Volt direct current potential in a reasonably dry atmosphere between conductors and ground.

L. Electrical Service. A treated-wood service pole, per Section 820 of the Department's 2004 Standard Specifications, with a 20-foot minimum length and a 6- to 12-inch diameter, or approved equal, is to be furnished by the Contractor. Install the electrical service pole adjacent to the cabinet at a depth of at least 4 feet while maintaining a 12-foot minimum clearance for the electrical service drop. Compact the backfill material to support the electrical service drop without leaning. Install an appropriate pole support guy wire and anchor if necessary. Install rigid conduit up the length of the pole with three separate insulated conductors (No. 4 copper wire) in the conduit and a weatherhead at the top.

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

M. Piezoelectric Sensor, Roadtrax BL Class I/II or Approved Equal. Determine where on the roadway the piezoelectric sensor will be installed. Roadway ruts shall not be in excess of 1/2 inch under a 4-foot straight edge. Install the piezoelectric sensor perpendicular to traffic. Locate the sensor in the lane as shown on the site detail sheet. Eleven-foot length sensors should be centered in the lane. The following is a typical step by step procedure for the installation of a piezoelectric sensor. Refer specifically to the manufacturer's current instructions provided with the sensor prior to installation.

1. Carefully mark the slot to be cut, perpendicular to the flow of traffic. Ensure that the sensors are properly positioned in the lane.
2. It is strongly recommended that a 3/4" wide diamond blade be used for cutting the slot, or that blades be ganged together to get a single 3/4 inch wide cut. The slot shall be wet cut to minimize damage to the road.

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

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passive cable end, the dam should be about 3-5" past the end of the lead attachment area.

19. The encapsulation material should be placed full depth, overfilled, and allowed to cure 10 minutes before shaving level with the surface. Ensure it fills around and underneath the sensor completely and there is not a trough on top.
20. Remove the tape on the sides of the sensor as soon as the adhesive starts to cure.
21. Carefully remove all the plumbers putty from ends of the sensor.
22. Route the lead in cable through the slot cut for it, and cover with approved loop sealant.
23. After the encapsulant has hardened, grind the top of the installation using an angle grinder. The profile should be flush with the road surface or with a slight, 1/16" mound. There shall be no concave portion to the mound.
24. Clean up the site. Sealant curing time varies with temperature and humidity. Contractor shall ensure that the complete curing of the encapsulation material has taken place prior to subjecting the sensors to traffic.

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

N. Cleanup and Restoration. The contractor will be responsible for all damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. This includes any filling of ruts and leveling ground appropriately. Clean the site and dispose of all waste and debris off the right-of-way at sites obtained by the contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mixture No. I per Section 212.03.03 Permanent Seeding and Protection of the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, 2004 edition.

O. On-Site Inspection. Each contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize themselves with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.

P. Property Damage. The contractor will be responsible for all damage to public and/or private property resulting from his work.

Q. Caution. Information shown on the plans and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional

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compensation if the conditions encountered are not in accordance with the information shown.

R. Utility Clearance. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the contractor while relocating their facilities.

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

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IV. BID NOTES AND METHOD OF MEASUREMENT FOR PAYMENT

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

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

B. Junction Box Type 6" x 6" x 4" (or Type 10" x 8" x 4" if noted). Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes connectors, splice sleeves, conduit fittings, mounting materials and any other items required to complete this part of the installation. Incidental to this item is furnishing and installing any specified post (wood, channel, metal, etc.) as required for the installation.

C. Junction Box Type A (B or C). Each type junction box shall include furnishing and installing specified junction box in accordance with the specifications. This item includes concrete (if required), #57 aggregate, conduit fittings and backfilling around the unit.

D. Cabinet Type G (NEMA-3R). Cabinet (each) shall include furnishing and installing a Type G cabinet as specified. This item shall include constructing the concrete base or mounting cabinet to pole, installation of duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, all internal shelving, brackets, any necessary pole mounting hardware and electrical inspection fees.

E. Install Base Mount Enclosure. Install base mount enclosure (each) shall include installing a State-furnished cabinet or enclosure as specified. This item shall include all materials and labor for constructing the concrete base (or, if specified, mounting cabinet to pole), installation of the cabinet, duplex receptacle and connection of all detectors (where applicable). Incidental to this item shall be furnishing, installing electrical service conductors, conduits, fused cutout, ground rods, telephone service conduits from the cabinet to the telephone company disconnect box, all internal shelving, brackets, anchor bolts, any necessary pole mounting hardware and electrical inspection fees if applicable.

F. Galvanized Steel Cabinet. Cabinet (each) shall include furnishing and installing a galvanized steel cabinet and post(s) as specified on the drawing. This item shall include mounting the cabinet to post and the connection of all detectors. Incidental to this item shall be furnishing and installing conductors, conduit, ground rods, any necessary pole mounting hardware and any electrical inspection fees.

G. Wood Post. Wood post (each) shall include furnishing and installing a wood post as specified. This item includes excavation, concrete (if required), and backfilling around the unit.

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H. Conduit. Conduit shall include furnishing and installing specified conduit in accordance with specifications. This item includes conduit fittings, bodies, boxes, expansion joints, couplings, duct seal, bonding straps and any other necessary hardware. Conduit will be measured in linear feet.

I. Wire (or Cable). Wire or cable shall include furnishing and installing specified wire or cable within conduit, saw slot, or overhead as indicated on the detail sheets. This can include, but is not limited to: loop wire, Cable No. 14/1 Pair, etc. Incidental to this item shall be the labeling of all wires and cables in each junction box, cabinet and splice box; furnishing and installing of splice boots, cable rings or other hardware required for installing cable. Loop wire and cable will be measured in linear feet.

J. Loop Saw Slot and Fill. Loop saw slot and fill shall include sawing, cleaning and filling saw slots for induction loops, lead-in wires, etc. with loop sealant or specified approved material. Sawing and filling slot for wire will be measured in linear feet.

K. Trenching and Backfilling. Trenching and backfilling shall include excavation, backfilling, temporary erosion control, seeding, protection and restoration of disturbed areas to original condition. This item includes concrete, asphalt or approved replacement material for sidewalks, curbs, roadways, etc. (if required). Trenching and backfilling will be measured in linear feet.

L. Electrical Service. Electrical services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing an electrical service, which has passed all required inspections. This will be measured in individual units each.

M. Telephone Service. Telephone services shall include all related work, labor, materials (e.g. meter, straps, conduit, fittings, wire, etc.) and fees towards furnishing and installing a telephone service, which has passed all required inspections. This will be measured in individual units each.

N. Piezoelectric Sensor or Approved Equal. Piezoelectric sensor (each) shall include furnishing and installing a Class I or Class II Piezoelectric Sensor in accordance with the specifications. Lead-in wire, splice kits, encapsulation material, grout, testing, and accessories shall be incidental to this bid item.

REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways Standard Specifications for Road and Bridge Construction, 2004 edition, and Supplemental Specifications.
2. National Electrical Code (NEC), latest edition.
3. International Municipal Signal Association (IMSA) Specification No. 51-7- latest edition.
4. FHWA Manual of Uniform Traffic Control Devices, latest edition.
5. "Roadside Design Guide", developed in 1996 by the American Association of State Highway and Transportation Officials (AASHTO).
6. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

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

7. Kentucky Department of Highways Sepia Drawings:

Silt Fence

Updated: April 11, 2006

DIVISION OF PLANNING

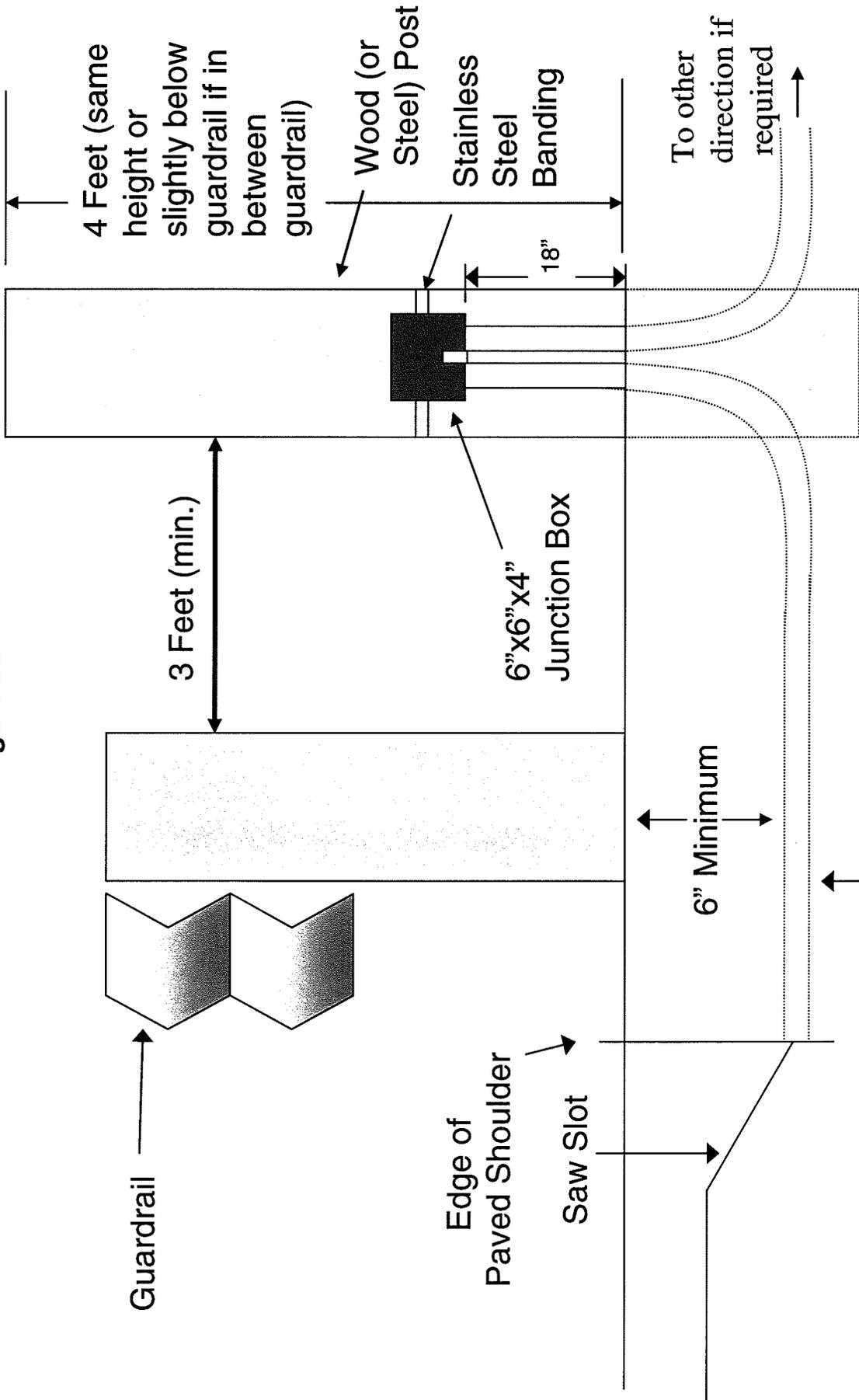
**STANDARD DETAILS FOR INSTALLATION
OF TRAFFIC COUNTING INDUCTANCE
LOOPS AND AXLE SENSORS**

DRAWINGS ARE NOT TO SCALE

02/27/06

Junction Box Type 6"x6"x4" Detail

Figure 2a

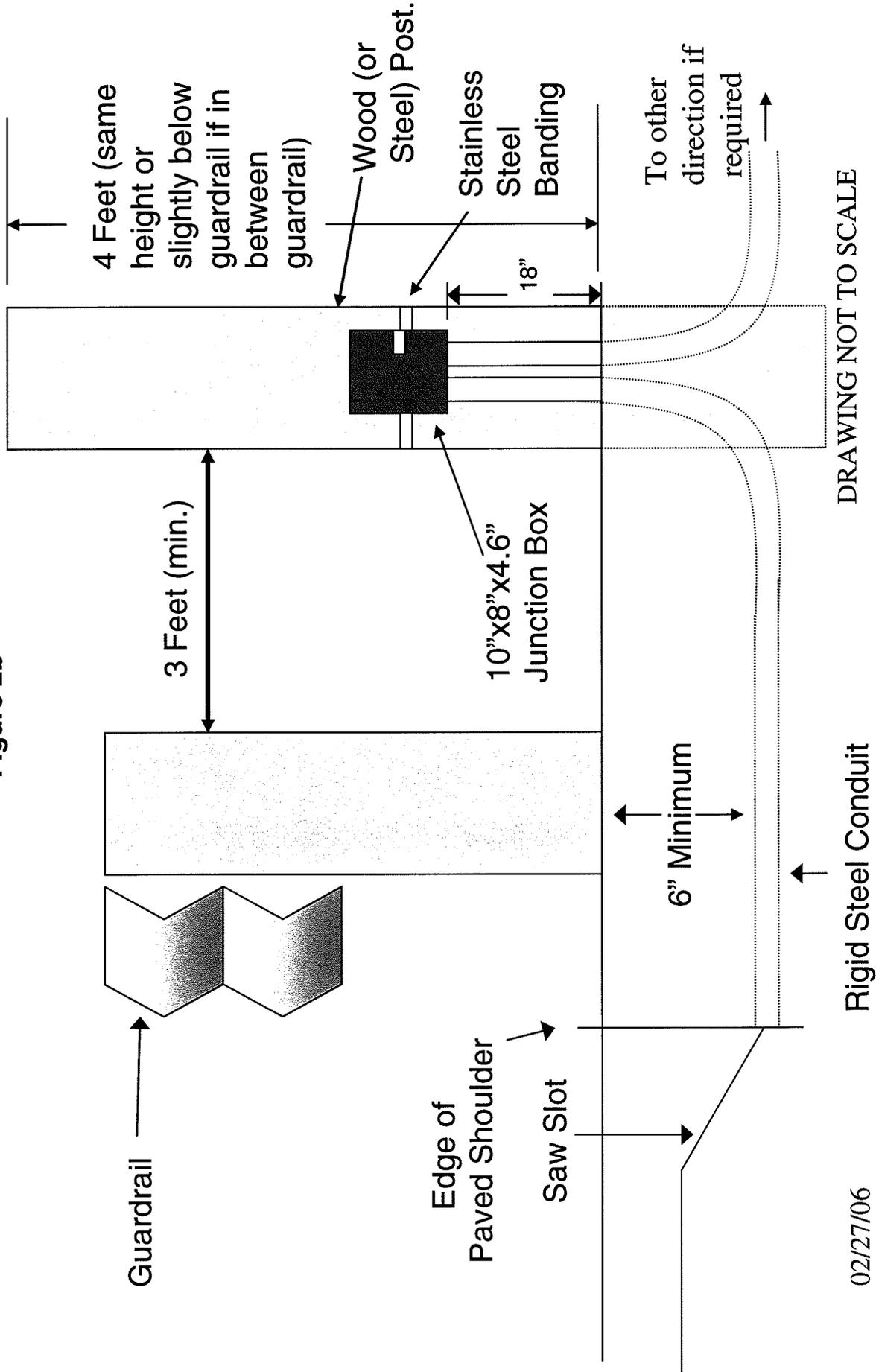


02/27/06

DRAWING NOT TO SCALE

Junction Box Type 10"x8"x4.6" Detail

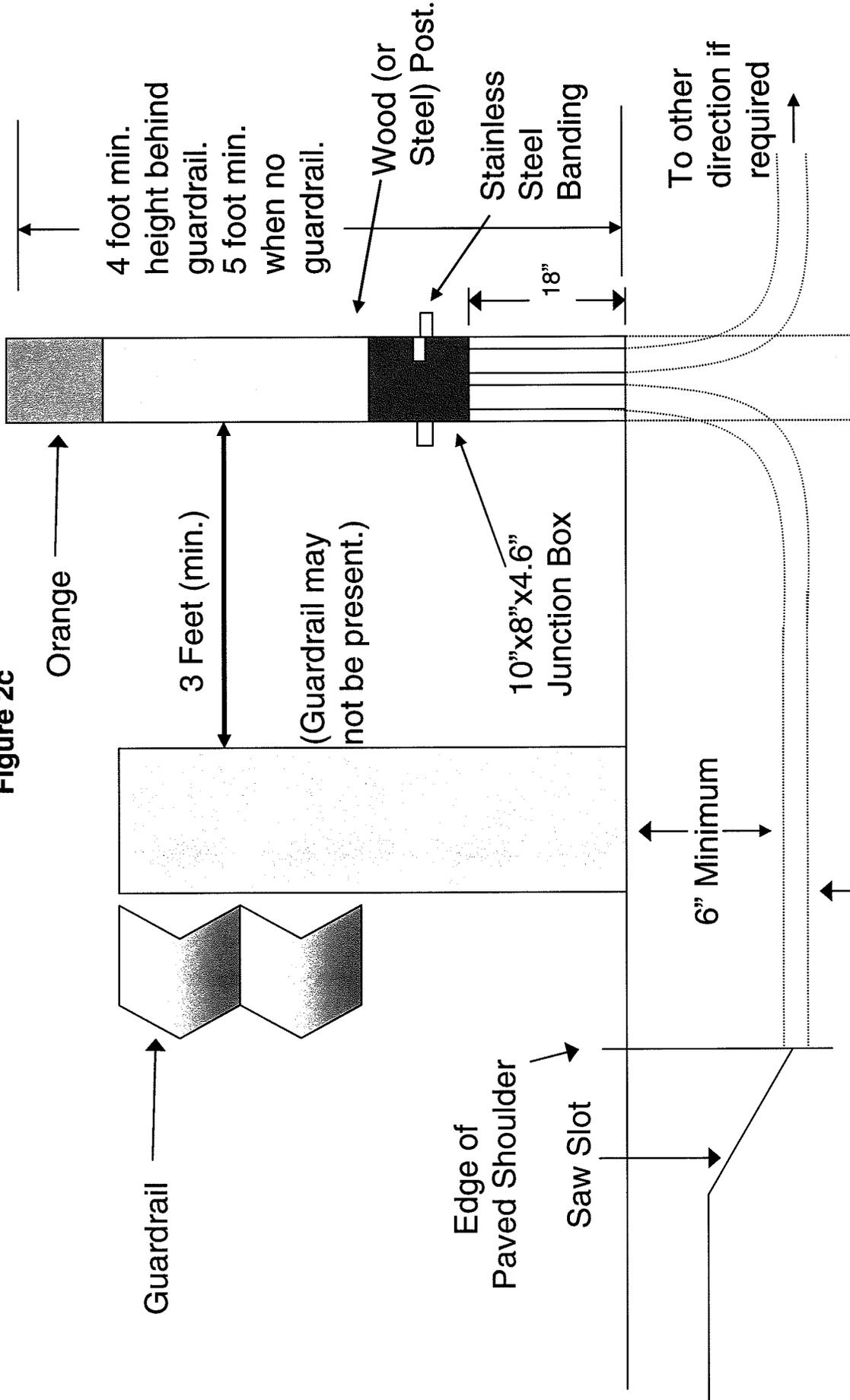
Figure 2b



02/27/06

Junction Box Type 10" x 8" x 4" Detail

Figure 2c



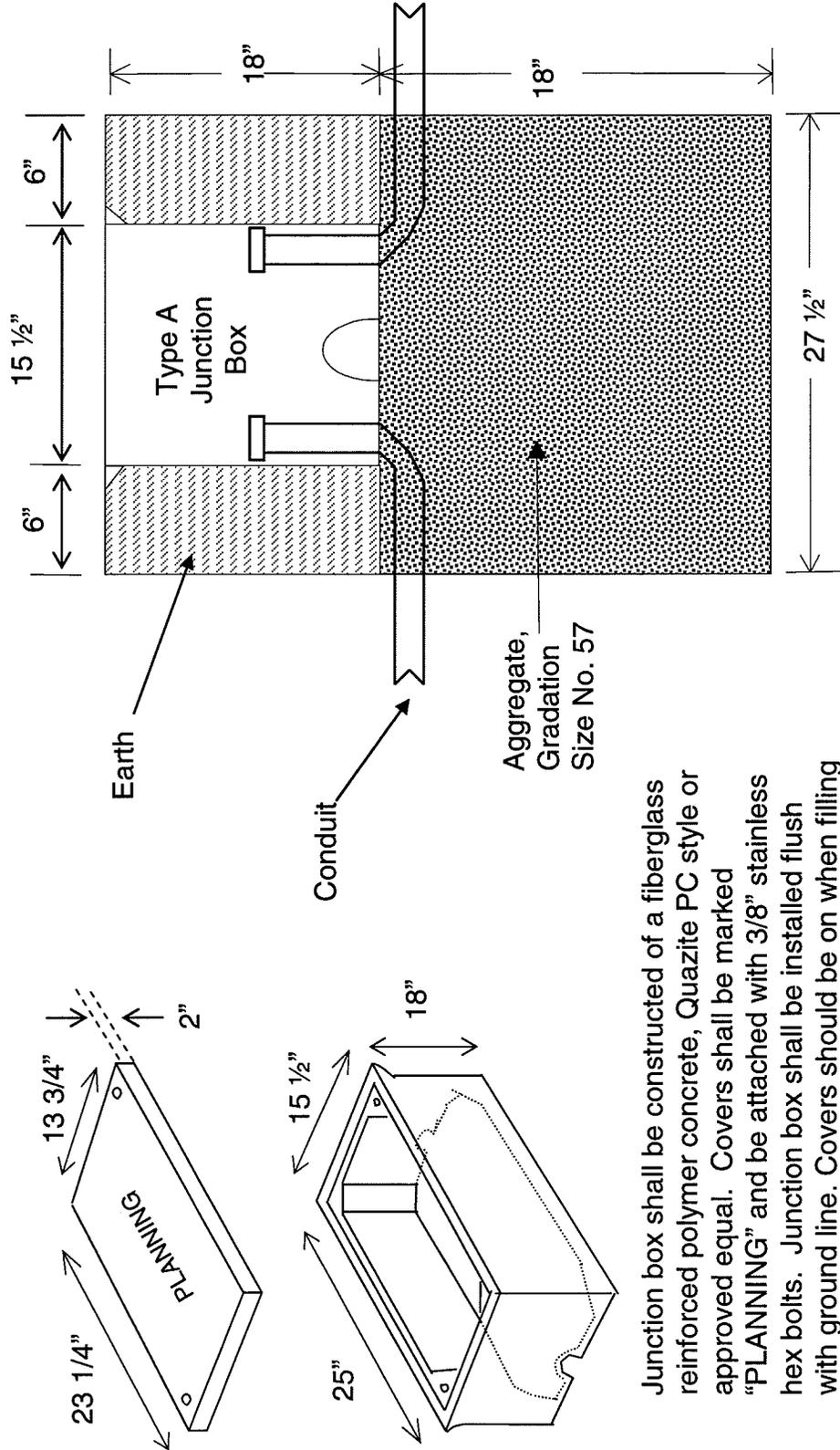
DRAWING NOT TO SCALE

Rigid Steel Conduit

04/21/06

Junction Box Type A Installation

Figure 3a



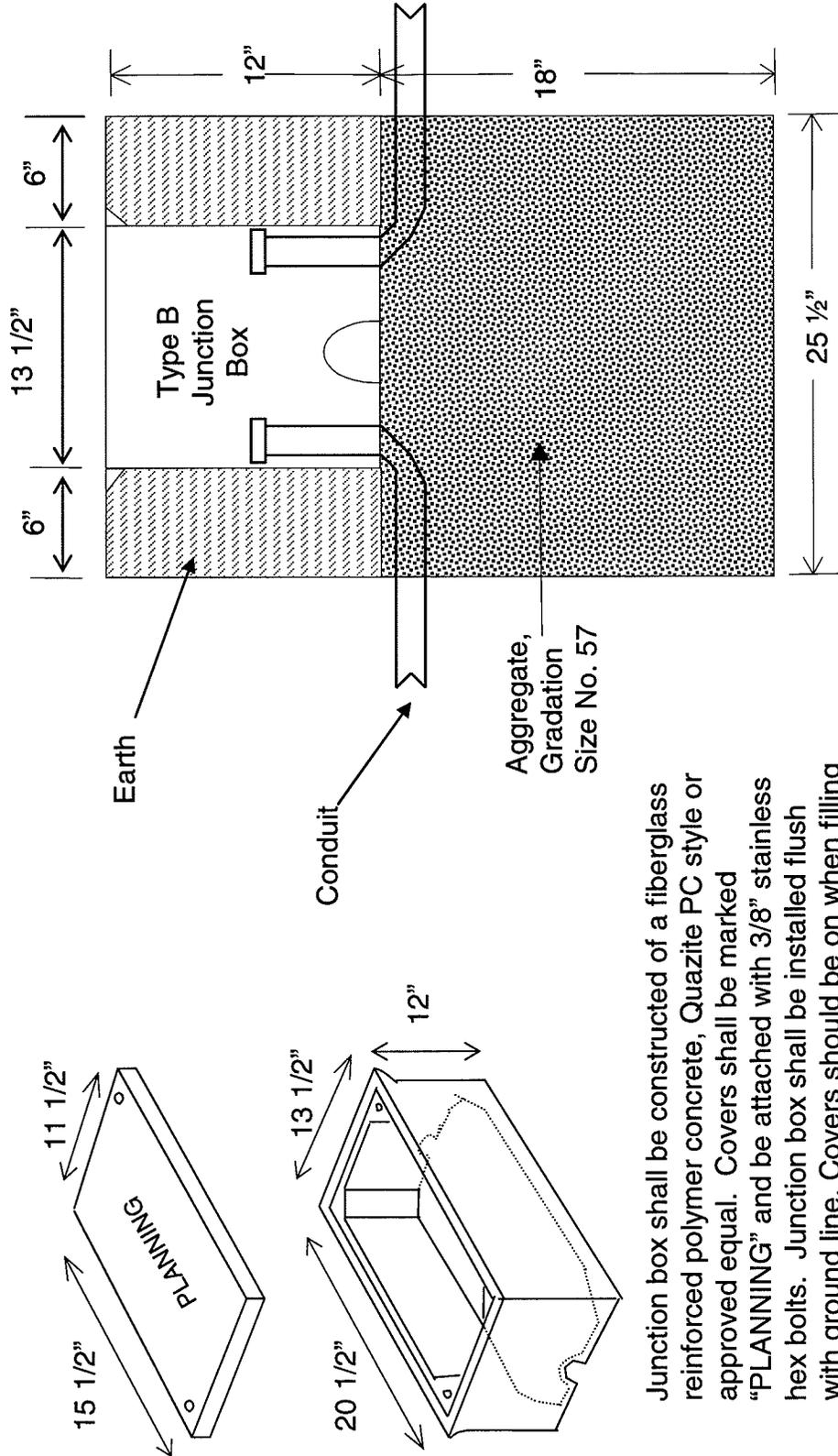
Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

DRAWING NOT TO SCALE

02/23/06

Junction Box Type B Installation

Figure 3b



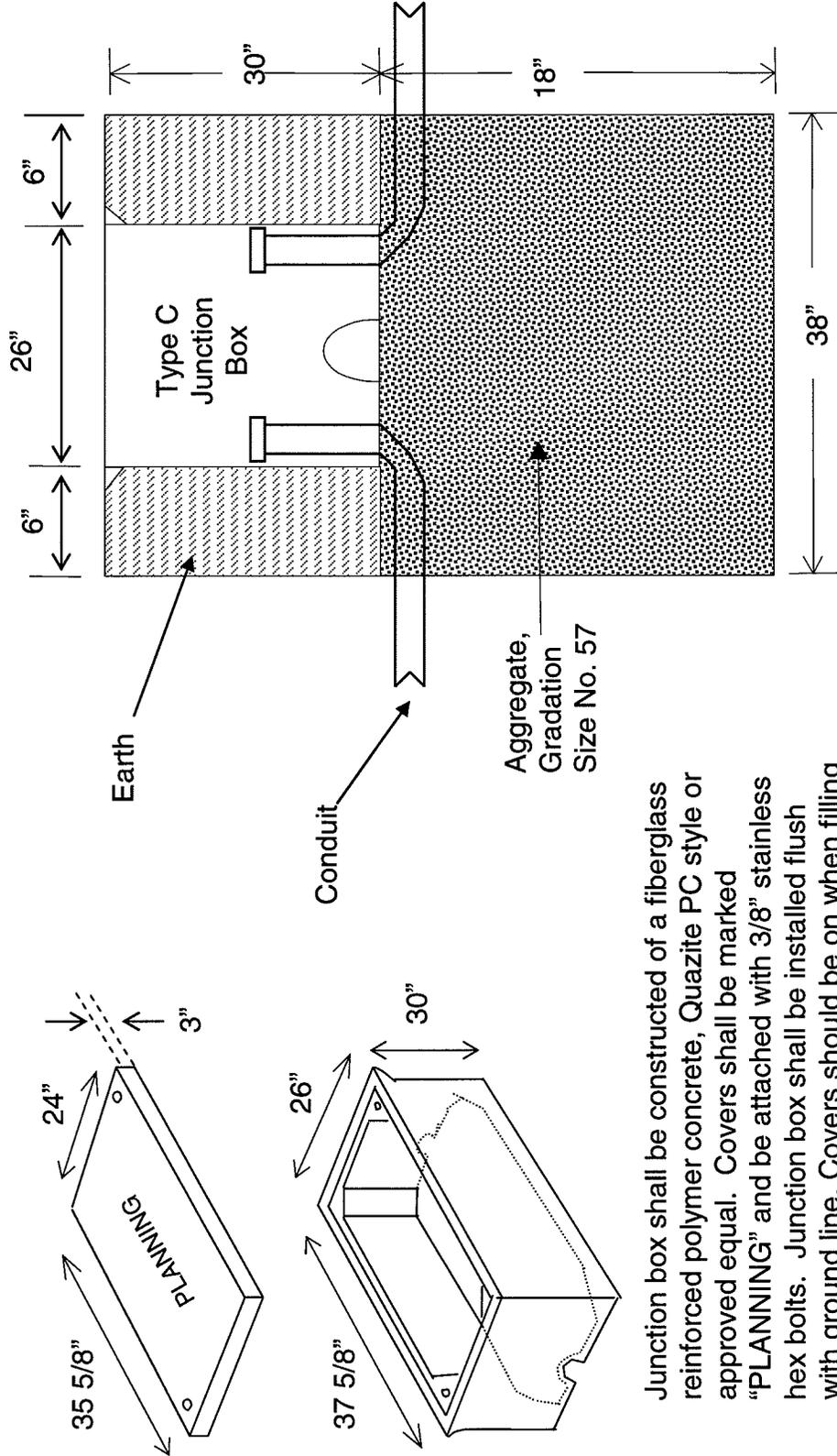
Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

DRAWING NOT TO SCALE

02/23/06

Junction Box Type C Installation

Figure 3c



Junction box shall be constructed of a fiberglass reinforced polymer concrete, Quazite PC style or approved equal. Covers shall be marked "PLANNING" and be attached with 3/8" stainless hex bolts. Junction box shall be installed flush with ground line. Covers should be on when filling in around the box.

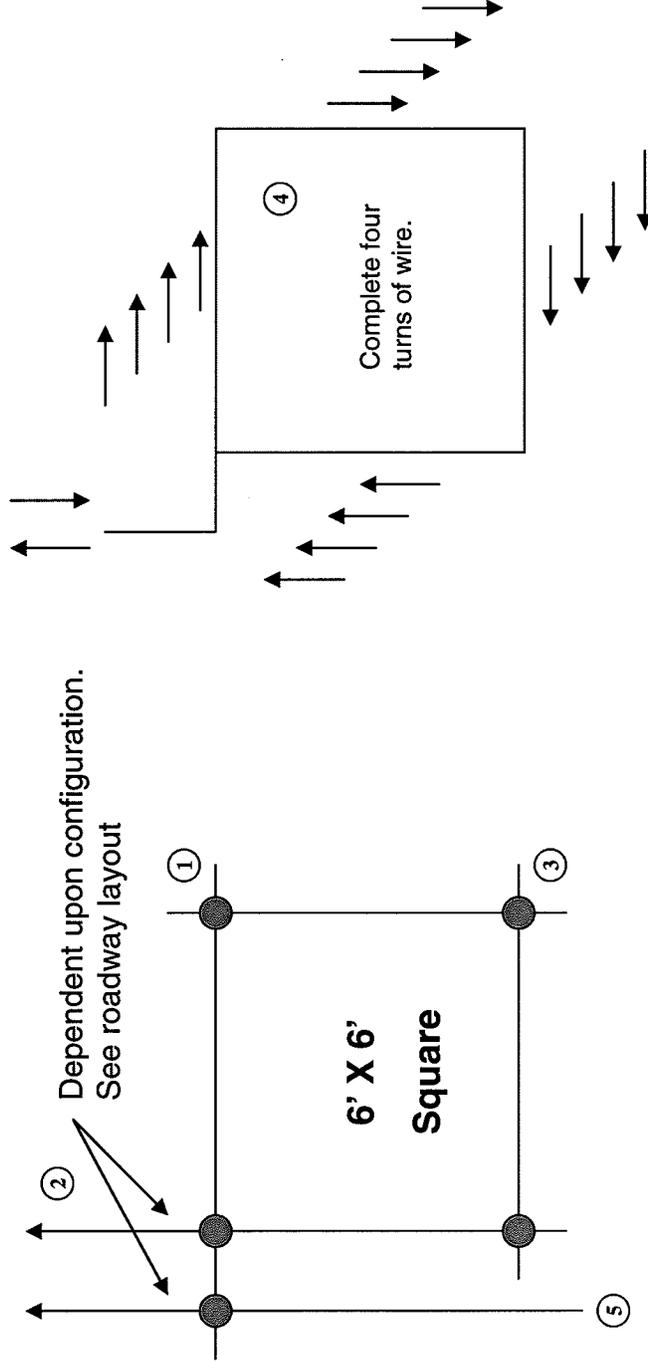
DRAWING NOT TO SCALE

02/23/06

Loop Installation Instructions

Loop Installation in Existing Roadways

Figure 4



Saw Slot Plan

Loop Wiring Plan

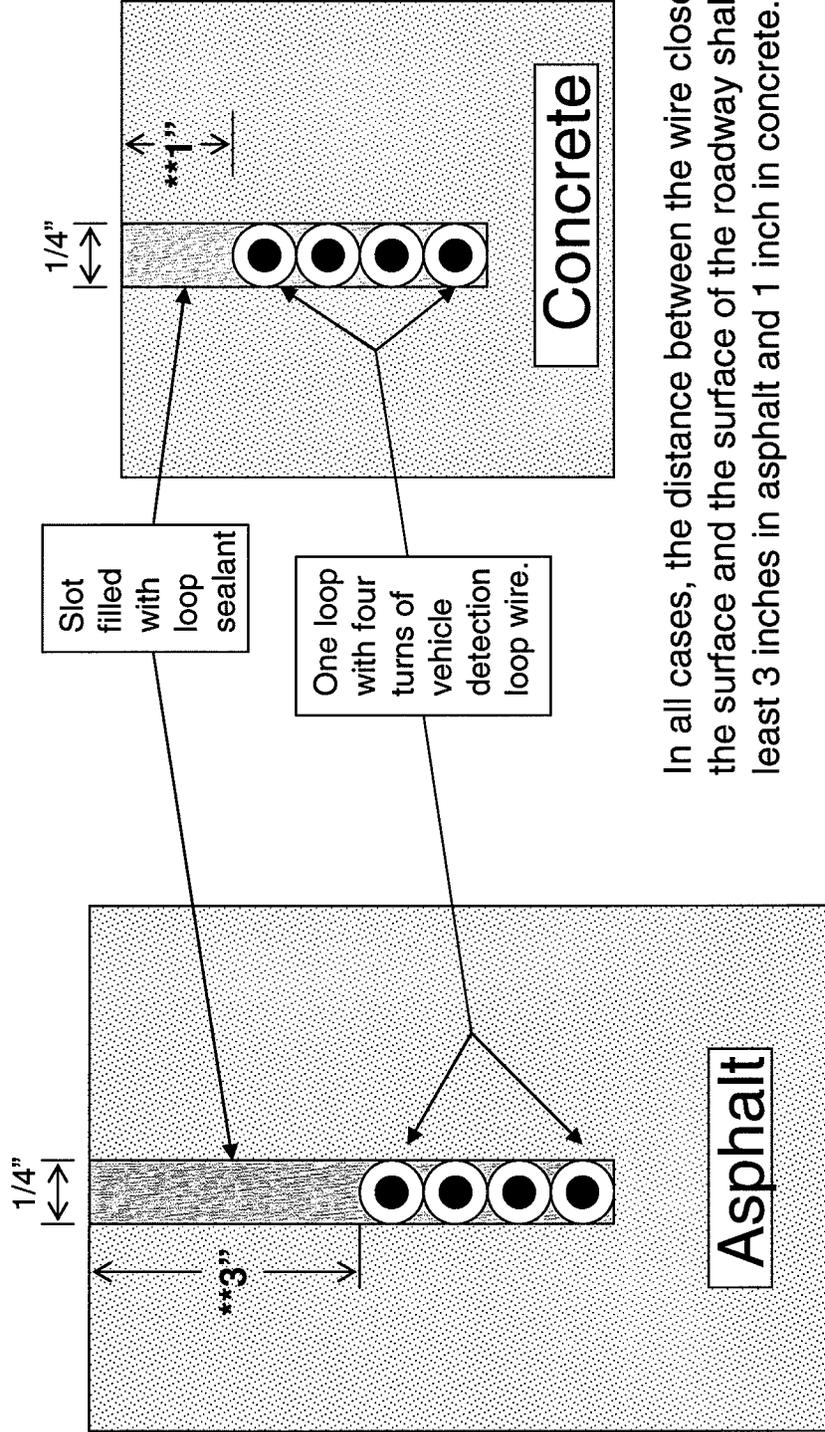
Notes:

- ① Overlap cuts so that slots are full depth at corners.
- ② Configuration is dependent upon loop layout.
- ③ Drill 1.5" hole in each corner to prevent sharp bends in the wire.
- ④ Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire.
- ⑤ The distance between adjacent loops is 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide.

04/12/05

Loop Installation in Existing Roadway

Figure 5



In all cases, the distance between the wire closest to the surface and the surface of the roadway shall be at least 3 inches in asphalt and 1 inch in concrete.

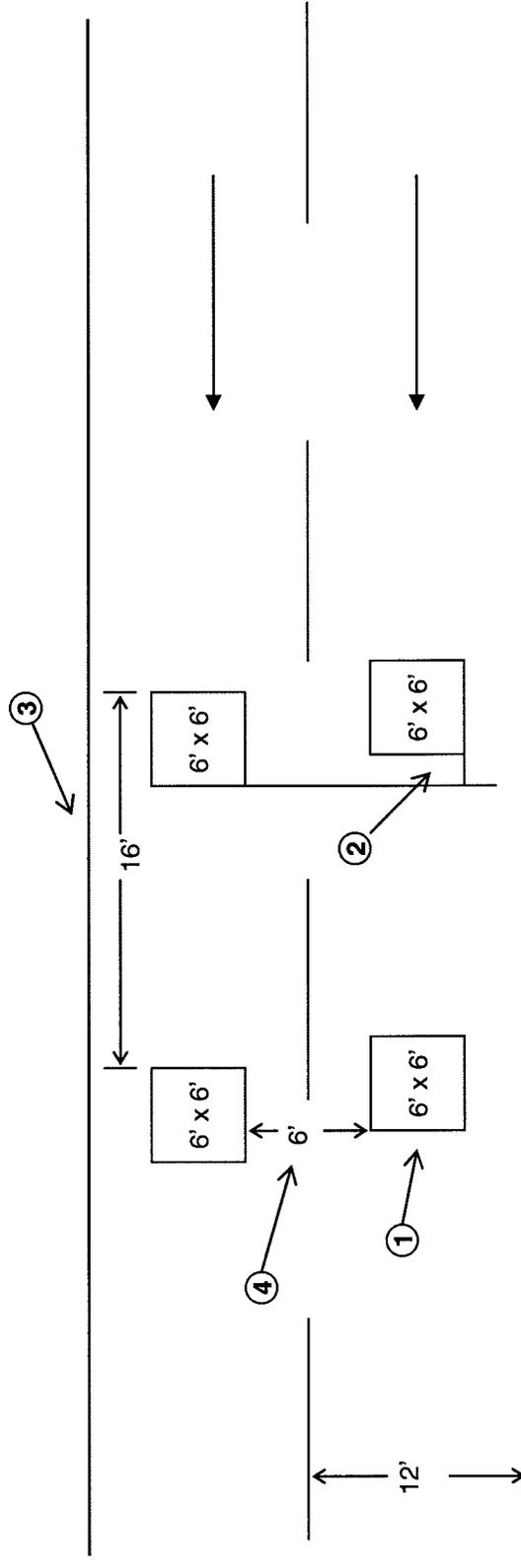
**Saw slot level shall be lowered at edge of roadway to meet the conduit level.

05/10/06

DRAWING NOT TO SCALE

Loop Characteristics

Figure 6

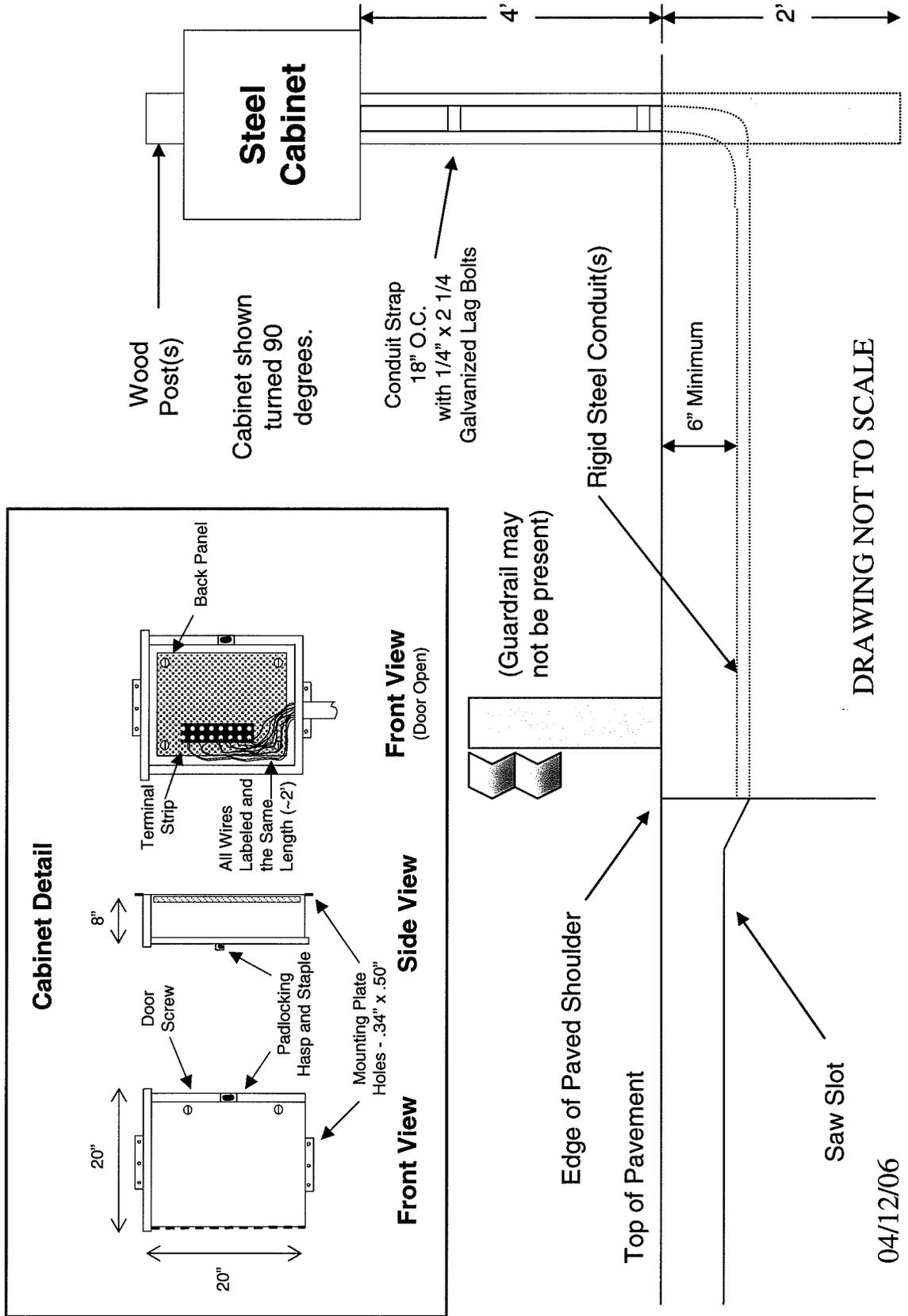


- ① Unless denoted otherwise, all loops are 6' x 6' square, positioned in center of lane with 4 turns of 14 AWG loop wire.
- ② Minimum 12" between loop and lead-ins. Lead-ins should be on the trailing edge of the loop.
- ③ If two loops are installed in a lane, space loops 16' from leading edge to leading edge unless denoted otherwise.
- ④ This distance is typically 6' for 12' lanes, 5.5' for 11' lanes, etc. It cannot be less than the loop is wide.

04/11/05

Galvanized Steel Cabinet and Post Installation

Figure 7a

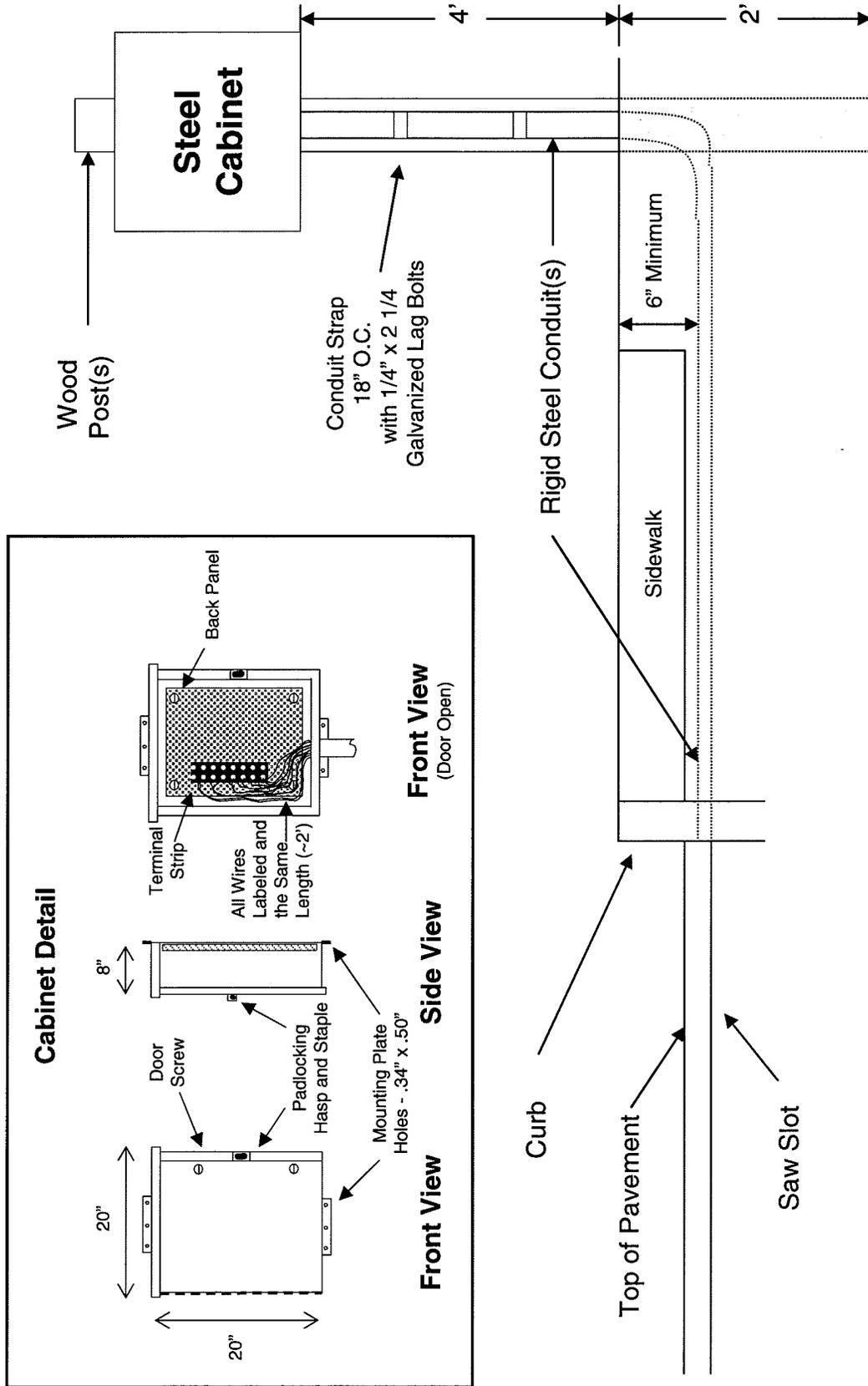


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04/12/06

Galvanized Steel Cabinet and Post Installation

Figure 7b

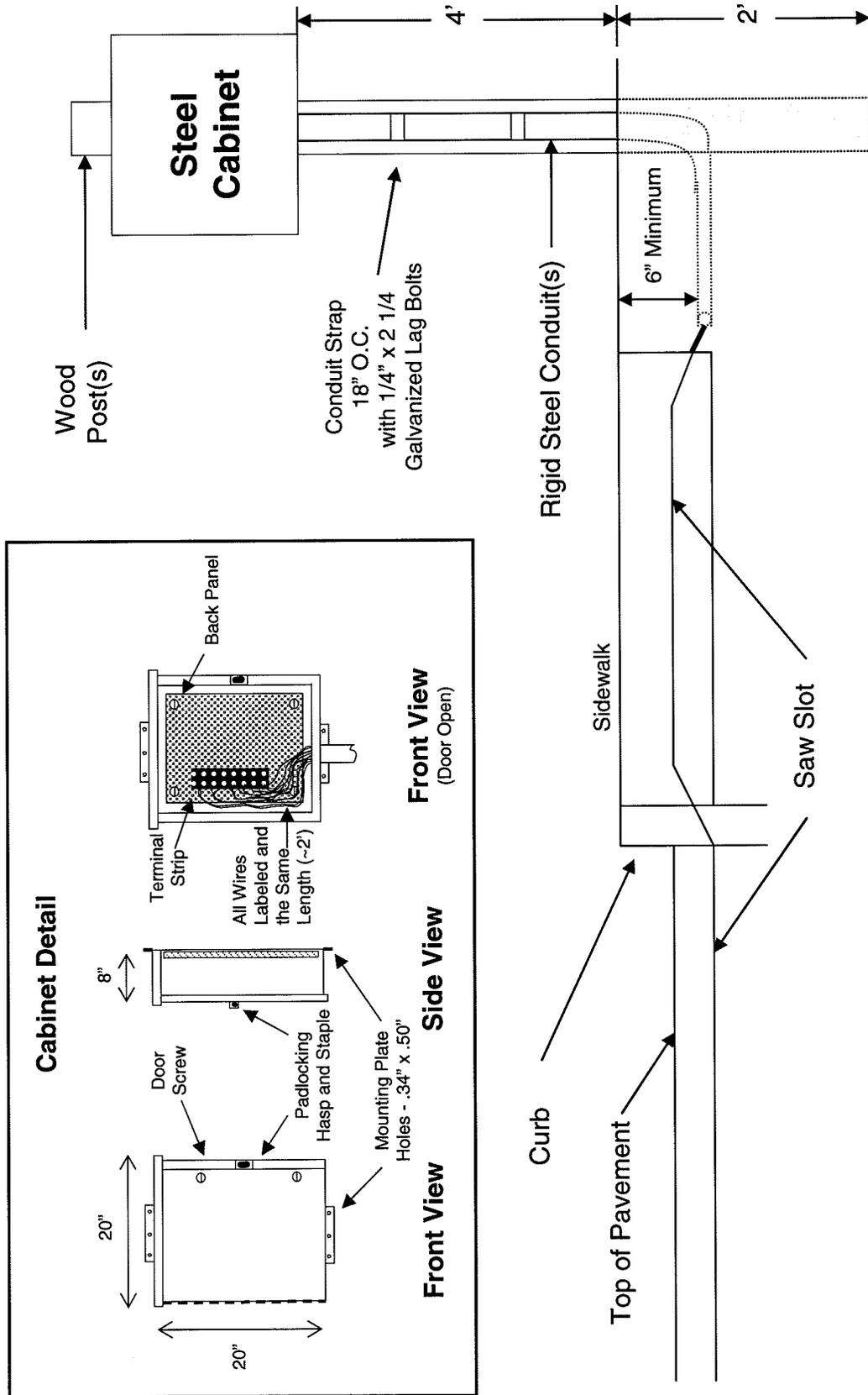


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02/25/05

Galvanized Steel Cabinet and Post Installation

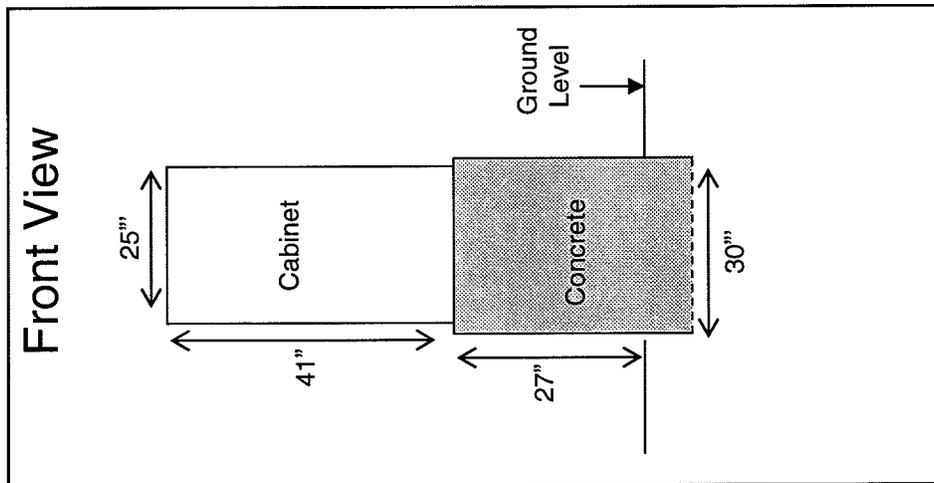
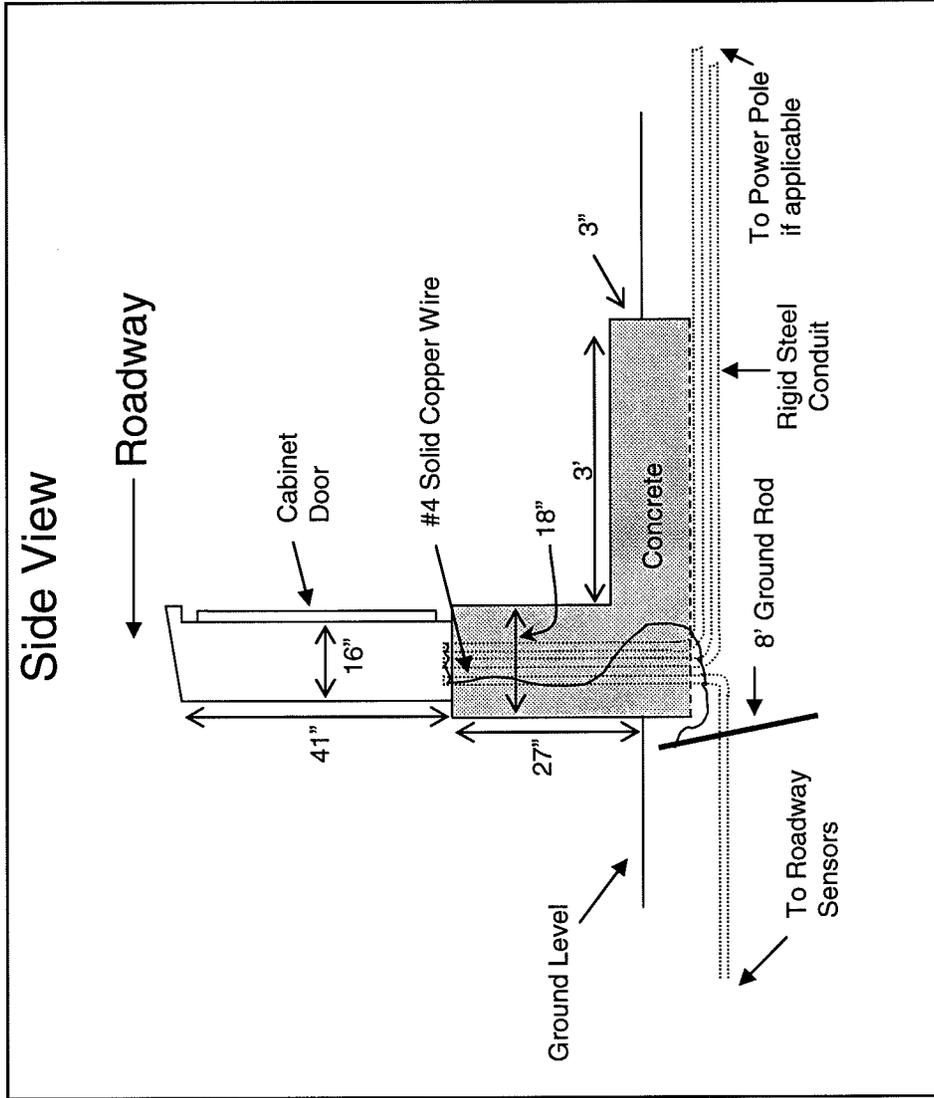
Figure 7c



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02/08/06

Cabinet Type G
Figure 8

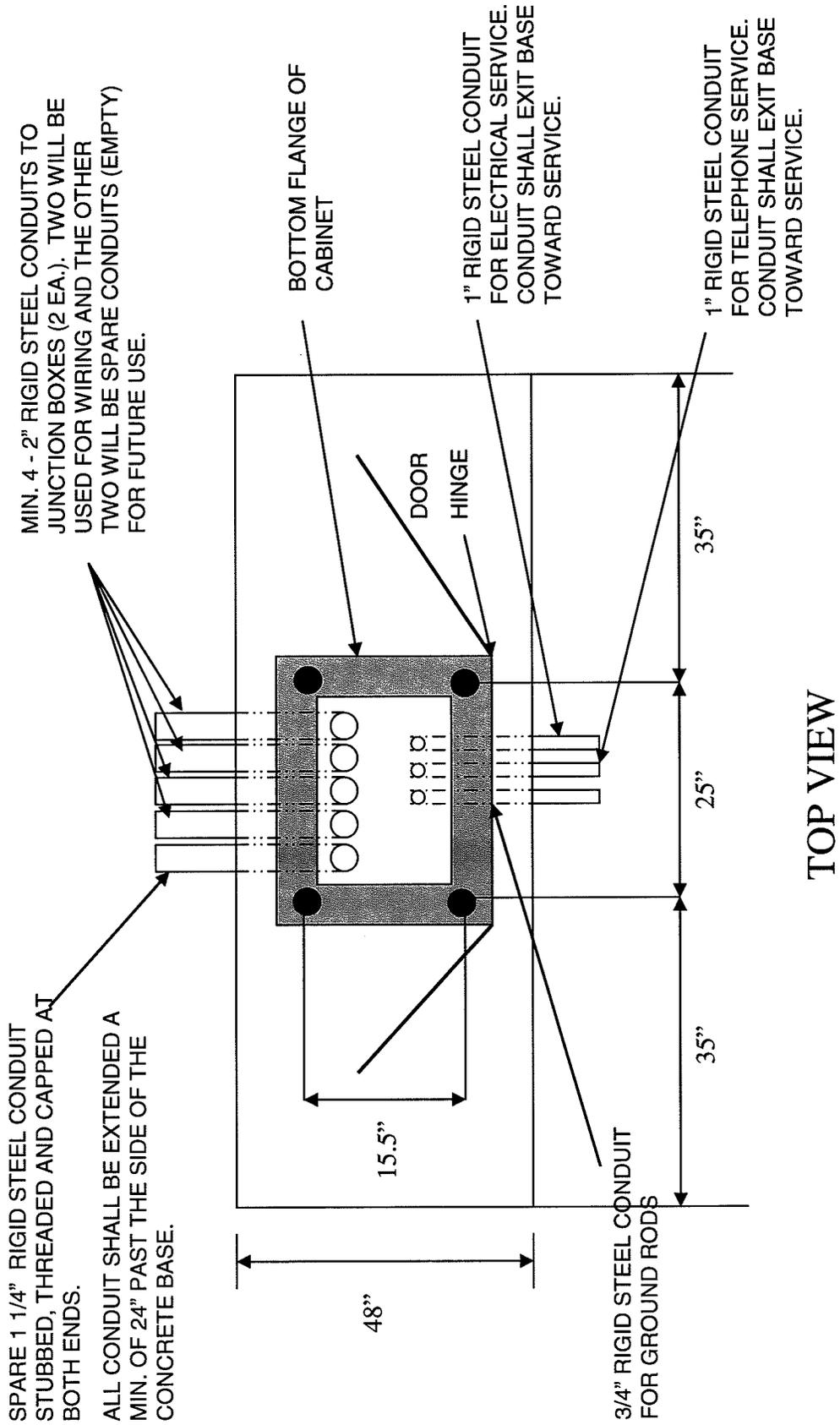


DRAWING NOT TO SCALE

02/15/05

Base Mounted 170 Cabinet Detail

Figure 9a



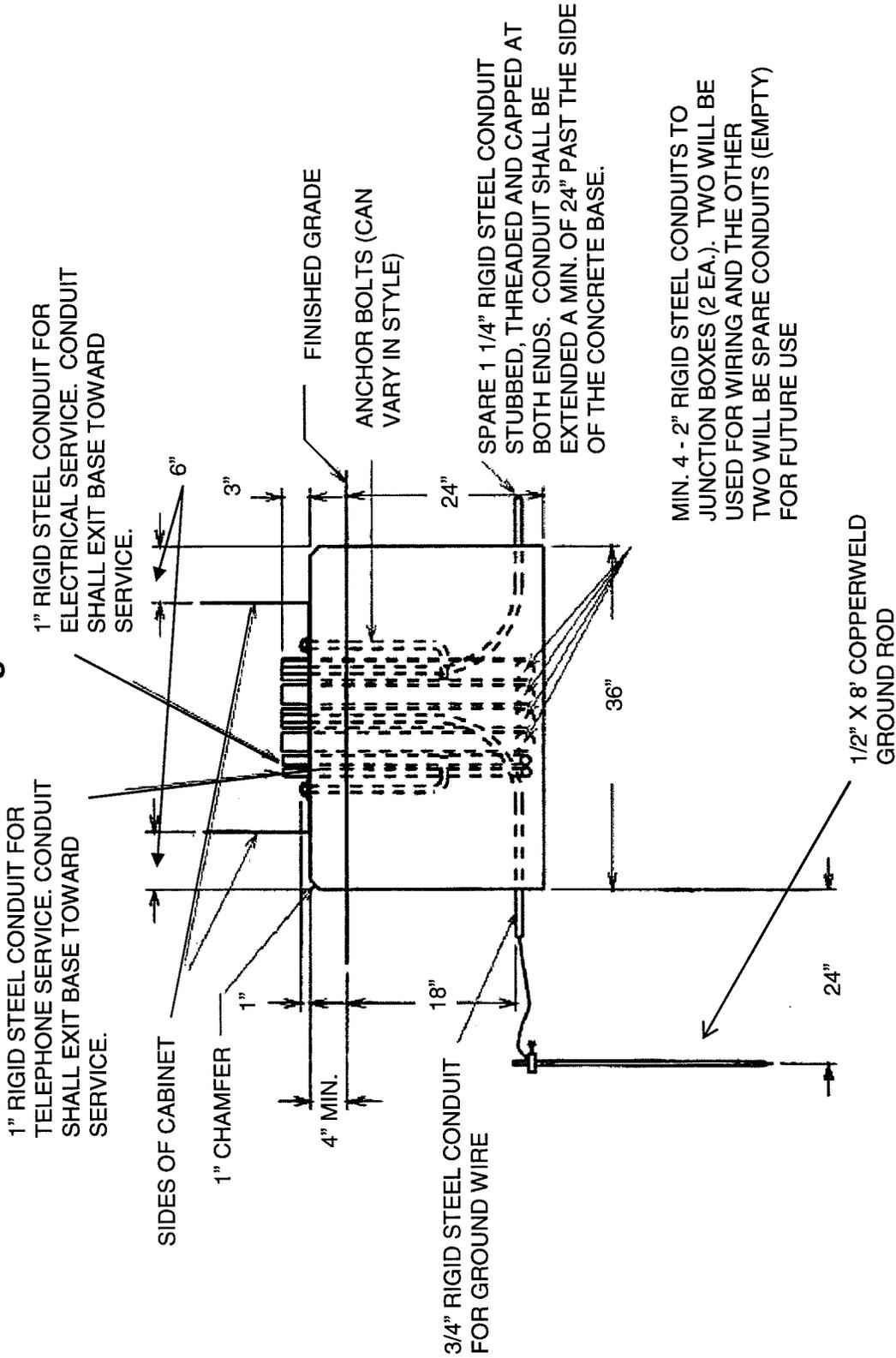
TOP VIEW

DRAWING NOT TO SCALE

02/15/05

Base Mounted 170 Cabinet Detail

Figure 9b



SIDE VIEW

DRAWING NOT TO SCALE

02/15/05

**BOONE COUNTY – I-275
DATA COLLECTION STATION
STN 767 (MP 12.4)**

GENERAL NOTES:

The Division of Planning needs to re-establish a traffic data collection station within the rehabilitation project in Boone County on I-275. Planning is requesting to have service replaced at a site with approximate mile point of 12.4 with the installation of traffic sensors once the new surfacing project is completed. Exact location will be determined in the field.

Contractor shall install a total of eight (8) loop sensors and eight (4) piezoelectric sensors in the roadway and run their lead-ins splice-free to junction boxes on the shoulder and on to a junction box on the side of the roadway as indicated on the attached drawing. The contractor will provide and use all new materials in this reconstruction.

Installation shall be coordinated with and approved by appropriate Division of Planning staff. Reference “Division of Planning - Special Notes for Installation of Traffic Counting Inductance Loops and Axle Sensors” for materials, construction and installation details. Also see the Division of Planning – Standard Details for Installation of Traffic Counting Inductance Loops and Axle Sensors” and the Estimate of Quantities, in regard to this specific project.

Note:

The Special Notes for Installation of Traffic Counting Inductance Loops are generic. Only the sections that pertain to the specified location and the bid items listed in this summary are applicable.

SPECIAL NOTES:

The location listed in the proposal is approximate only. The Engineer, in coordination with the Central Office Division of Planning, will designate the exact location at the time of construction.

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

LOCATION TABLE:

STATION	DESCRIPTION	LOOP STATION LIMITS	LOOP LOCATION	LANES	PIEZOS	LOOPS	PROJECT MP LIMITS
767	2 Loops & 1 Piezos/ Lane	11.431 – 13.858	12.4	4	4	8	11.000 – 13.562

LOOP STATION 767 is located on I-275 at approximately the 12.4 mile point (MP). This station has four lanes of traffic, two (2) Northbound lanes and two (2) Southbound lanes with a depressed grass median. The station is located north of the KY 20 Connector and south of the Indiana State Line. Each lane will have a loop-piezo-loop combination of sensors installed as depicted in Figure 1. The contractor shall install the sensors in each lane and run their lead-ins splice-free to a junction box on the shoulder. All piezos will be Type II, 6' in length, for weighing truck traffic. The piezo cable lead-ins will be run splice free to the cabinet on the shoulder as depicted in Figure 1. All new materials shall be utilized in this reconstruction.

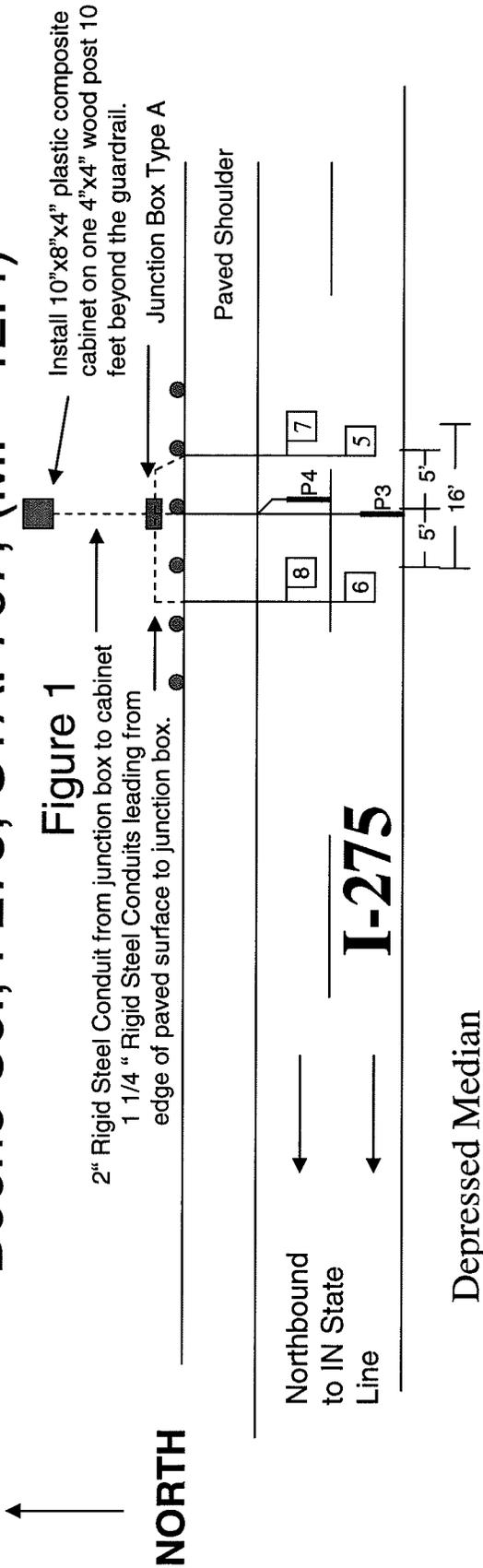
ESTIMATE OF QUANTITIES:

CODE	DESCRIPTION	UNIT	QUANTITY
2562	SIGNS	SQ FT	160
2650	MAINTAIN AND CONTROL TRAFFIC	LUMP SUM	1
2775	FLASHING ARROW	EACH	1
20468EC	JUNCTION BOX 10 x 8 x 4	EACH	2
4793	CONDUIT 1 1/4 INCH	LINEAR FEET	62
4795	CONDUIT 2 INCH	LINEAR FEET	24
20391ES835	JUNCTION BOX TYPE A	EACH	2
4820	TRENCHING AND BACKFILLING	LINEAR FEET	64
4829	PIEZOELECTRIC SENSOR	EACH	4*
4830	LOOP WIRE	LINEAR FEET	1448
4895	LOOP SAW SLOT AND FILL	LINEAR FEET	416

*Piezoelectric Sensor includes four Class II (6') sensors with the standard 100-foot lead-in.

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

Site Drawing Boone Co., I-275, STA. 767, (MP~12.4)



Exact site location will be determined in the field.
 All loops are 6' x 6' square.
 Loops are 16' from leading edge to leading edge.
 Run loop and piezo lead-in wires splice free to junction box on shoulder and to cabinet.
 Piezos are centered between loops.
 P1, P2, P3, P4, are Type II piezo cables, 6' in length.
 Install two Type A junction boxes.
 Locate cabinets 10 feet beyond the guardrail.
 In each junction box, label all wires and leave at least 2' of slack on each lead-in wire in the junction box and cabinet.

DRAWING NOT TO SCALE

12/02/05

Right-of-Way Certification Form

Federal Funded

State Funded

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

Date: July 2, 2007

Project #: 7963801 D

County: BOONE

Item #: 06-2028.00

Federal #: IM 275-9 (104)

Letting Date: July 27, 2007

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

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

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

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

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

Right-of-Way Certification Form



3. The acquisition or right of occupancy and use of a **few** remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with physical construction even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels at the start of construction. KYTC will fully meet all the requirements outlined in 23 CFR 309(c) (3) and 49 CFR 102(j) and will expedite completion of all acquisitions, relocations, and full payments after construction starts. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA consideration and approval. (See note.)

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

Approved: Henry C. Germann /s/ Henry C. Germann District ROW Supervisor
Printed Name Approved

Approved: Paul McCauley 7-9-07 Director of ROW & Utilities or Designee
Printed Name Approved

Approved: MARY G. MURRAY 7/10/07 12/23/06 for FHWA, Right-of-Way Officer
Printed Name Approved

Right-of-Way Certification Form

Date: July 2, 2007

Project #: 7963801 D County: BOONE
 Item #: 06-2028.00 Federal #: IM 275-9 (104)
 Letting Date: July 27, 2007

This project has 0 total number of parcels to be acquired, and 0 total number of individual or families to be relocated, as well as 0 total number of businesses to be relocated.

- Parcels were acquired by a signed fee simple deed and fair market value has been paid
- Parcels have been acquired through condemnation and IOJ granted by the court and fair market value has been deposited with the court
- Parcels have not been acquired at this time (*explain below for each parcel*)
- Parcels have been acquired but fair market value has not been paid or has not been deposited with the court (*explain below for each parcel*)(**used on Type 3 only**)
- Some displacees have not been relocated from all parcels: (*explain below for each parcel*)(**notes to plans may be required**)

Parcel #	Name/Station	Explanation for delayed acquisition, delayed relocation, or delayed payment of fair market value	Proposed date of payment or of relocation

There are 0 billboards and/or 0 cemeteries involved on this project.
 There are 0 water or monitoring wells on parcels 0 and 0. All have been acquired and are the responsibility of the project contractor to close/cap.

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

Boone County
FD52 008 79638
000IM 02759 104
Structural Overlay on I-275 From 0.5 Mile East
Of KY-8 Underpass To Ohio River Bridge
Item No. 06-2028.00

Duke Energy (Electric) has a utility line crossing I-275 0.2 mile west of the KY-8 (Petersburg) overpass. Duke Energy is currently working on plans and intends to raise this line to 25 plus feet over the existing I-275 pavement. This should be accomplished by April 1, 2007.

There are no other known utilities reported to be in conflict with this project.

PROTECTION OF UTILITIES

THE LOCATION OF UTILITIES PROVIDED IN THE CONTRACT DOCUMENTS HAS BEEN FURNISHED BY THE FACILITY OWNERS AND/OR BY REVIEWING RECORD DRAWINGS. THE INFORMATION MAY NOT BE EXACT NOR COMPLETE. IT WILL BE THE ROAD CONTRACTORS RESPONSIBILITY TO LOCATE UTILITIES BEFORE EXCAVATING BY CALLING THE VARIOUS UTILITY OWNERS AND BY EXAMINATING ANY SUPPLIMENTAL INFORMATION PROVIDED BY THE CABINET AND/OR UTILITY OWNER. THE ROAD CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES BY HAND DIGGING TO EXPOSE UTILITIES BEFORE HE EXCAVATES IN THE AREA OF A UTILITY. THE COST FOR REPAIR AND ANY OTHER ASSOCIATED COSTS FOR ANY DAMAGE TO UTILITIES CAUSED BY THE ROAD CONTRACTORS OPERATIONS SHALL BE BORNE BY THE ROAD CONTRACTOR.

THE CONTRACTOR IS ADVISED TO CONTACT THE B.U.D. ONE-CALL SYSTEM; HOWEVER, THE CONTRACTOR SHOULD BE AWARE THAT THE OWNERS OF THE UNDERGROUND FACILITIES ARE NOT REQUIRED TO BE MEMBERS OF THE B.U.D. ONE-CALL SYSTEM. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY COURT CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE PROJECT AREA.

THE CONTRACTOR IS ALSO ADVISED TO REVIEW THE PROJECT IN THE FIELD AND BE AWARE OF OVERHEAD LINES WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHOULD BE CAUTIOUS WHEN WORKING UNDER THESE LINES. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ARRANGEMENTS HE FEELS PRUDENT TO AVOID CONTACT WITH THESE OVERHEAD LINES.

KyTC BMP Plan for Project PCN ## - #####



Kentucky Transportation Cabinet

Highway District 6

And

_____ **(2), Construction**

Kentucky Pollutant Discharge Elimination System

Permit KYR10

Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Boone County

I-275 Pavement Rehab.

From MP 10.75 to MP 13.60

Project: PCN ## - #####

SYP Item 6-2028.00

KyTC BMP Plan for Project PCN ## - #####

Project information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District 6
2. Resident Engineer: (2)
3. Contractor name: (2)
Address: (2)

Phone number: (2)
Contact: (2)
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number (2)
5. Route (Address) I-275
6. Latitude/Longitude (project mid-point) dd/mm/ss, 39-05-00, 84-44-00
7. County (project mid-point) Boone
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KyTC BMP Plan for Project PCN ## - #####

A. Site description:

1. Nature of Construction Activity (from letting project description) Pavement Rehabilitation and Bridge Jacking Project
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved: 16,574 cu. Yd.
4. Estimate of total project area (acres) 69 acres (assumes 100' from centerline in each direction)
5. Estimate of area to be disturbed (acres): 7 acres
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition. No information for this item.
8. Data describing existing discharge water quality (if any). Not Available
9. Receiving water name: Ohio River
10. TMDLs and Pollutants of Concern in Receiving Waters: No TMDL's were involved on this project.
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing

KyTC BMP Plan for Project PCN ## -

and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be

KyTC BMP Plan for Project PCN ## -

inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

- Clearing and Grubbing – The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved
 - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - Brush and/or other barriers to slow and/or divert runoff.
 - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
 - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
 - Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to

KyTC BMP Plan for Project PCN ## -

control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.

- Permanent Seeding and Protection
 - Placing Sod
 - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are : Channel Lining, Erosion Control Blanket, and Seeding & Protection.

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

KyTC BMP Plan for Project PCN ## -

➤ **Good Housekeeping:**

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

➤ **Hazardous Products:**

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

➤ **Petroleum Products:**

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum

KyTC BMP Plan for Project PCN ## -

products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

➤ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

➤ **Paints:**

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

➤ **Concrete Truck Washout:**

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

➤ **Spill Control Practices**

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.

KyTC BMP Plan for Project PCN ## -

- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
 - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance.

F. Inspections

KyTC BMP Plan for Project PCN ## -

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.

KyTC BMP Plan for Project PCN ## -

- Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

- Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

_____ 2. (e) land treatment or land disposal of a pollutant;

_____ 2. (f) Storing, ..., or related handling of hazardous waste, solid waste or special waste, ..., in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

_____ 2. (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

_____ 2. (j) Storing or related handling of road oils, dust suppressants,, at a central location;

_____ 2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ 2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

KyTC BMP Plan for Project PCN ## - #####

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the

401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

KyTC BMP Plan for Project PCN ## - #####

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor

Name:
Address:
Address:

Phone:

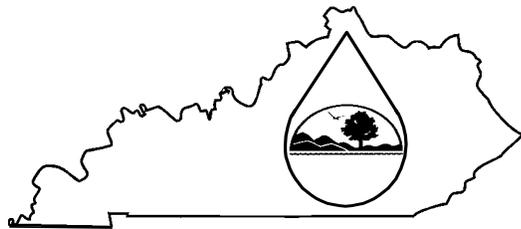
The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed _____ title _____, _____
Typed or printed name¹ signature

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

KPDES FORM NOI-SW



**Kentucky Pollutant Discharge Elimination System
(KPDES)
Notice of Intent (NOI)
for Storm Water Discharges
Associated with Industrial Activity Under the
KPDES General Permit**

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a KPDES permit issued for storm water discharges associated with industrial activity. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit.

ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM (See Instructions on back)

I. Facility Operator Information

Name:	KYTC District 6	Phone:	859-341-2700
Address:	421 Buttermilk Pike P.O. Box 17130	Status of Owner/Operator:	F
City, State, Zip Code:	Covington Ky. 41017-0130		

II. Facility/Site Location Information

Name:	PCN ##-####, for SYP 6-2028.00		
Address:	I-275		
City, State, Zip Code:	Covington, Ky. 41017		
County:	Boone		
Site Latitude: (degrees/minutes/seconds)	39-05-00	Site Longitude: (degrees/minutes/seconds)	84-44-00

III. Site Activity Information

MS4 Operator Name:	Roads with Drainage Systems				
Receiving Water Body:	Ohio River				
Are there existing quantitative data?	Yes <input type="checkbox"/> If Yes, submit with this form. No <input checked="" type="checkbox"/>				
SIC or Designated Activity Code Primary	1611	2nd	1622	3rd	4 th
If this facility is a member of a Group Application, enter Group Application Number:					
If you have other existing KPDES Permits, enter Permit Numbers:					

IV. Additional Information Required FOR CONSTRUCTION ACTIVITIES ONLY

Project Start Date:		Completion Date:	
Estimated Area to be disturbed (in acres):	7		
Is the Storm Water Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

V. Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed or Typed Name:	Tom Schomaker		
Signature:		Date:	

Instructions

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity
To Be Covered Under The KPDES General Permit

WHO MUST FILE A NOTICE OF INTENT (NOI) FORM

Federal law at 40 CFR Part 122 prohibits point source discharges of stormwater associated with industrial activity to a water body of the Commonwealth of Kentucky without a Kentucky Pollutant Discharge Elimination System (KPDES) permit. The operator of an industrial activity that has such a storm water discharge must submit a NOI to obtain coverage under the KPDES Storm Water General Permit. If you have questions about whether you need a permit under the KPDES Storm Water program, or if you need information as to whether a particular program is administered by the state agency, call the **Storm Water Contact, Industrial Section, Kentucky Division of Water at (502) 564-3410.**

WHERE TO FILE NOI FORM

NOIs must be sent to the following address:

Section Supervisor
Inventory & Data Management Section
KPDES Branch, Division of Water
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601

COMPLETING THE FORM

Type or print legibly in the appropriate areas only. If you have any questions regarding the completion of this form call the **Storm Water Contact, Industrial Section, at (502) 564-3410.**

SECTION I - FACILITY OPERATOR INFORMATION

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

F = Federal M = Public (other than federal or state)
S = State P = Private

SECTION II - FACILITY/SITE LOCATION INFORMATION

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code.

SECTION III - SITE ACTIVITY INFORMATION

If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying storm water.)

If the facility discharges storm water directly to receiving water(s), enter the name of the receiving water.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in storm water discharges. If data is available submit with this form.

List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

If the facility listed in Section II has participated in Part 1 of an approved storm water group application and a group number has been assigned, enter the group application number in the space provided.

If there are other KPDES permits presently issued for the facility or site listed in Section II, list the permit numbers.

SECTION IV - ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION ACTIVITIES ONLY

Construction activities must complete Section IV in addition of Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the storm water pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or storm water management plans.

SECTION V - CERTIFICATION

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.

LETTING February 2007

**KENTUCKY TRANSPORTATION CABINET
COMMUNICATING ALL PROMISES (CAP)**

BOONE COUNTY

6-2028.00

(NO CAPS INVOLVED IN PROJECT)

HD 21 PAINT SPEC WATERBORNE PAINT SPECIFICATIONS

MATERIALS

NOTE: The paint used for this project shall include **HD21** resin.

Select Materials for this project to meet the performance requirements detailed in SECTION 842 of the current STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION and additional requirements as listed in this document. The resin portion of the paints shall be composed of the Rohm and Haas HD21 Resin. Initial samples must be submitted for approval prior to initiation of the striping operation. The initial samples may be sent from the manufacturer of the paint. In addition to the initial samples, the Department will randomly sample paint delivered to the project for specification compliance.

<u>PAINTS</u>	YELLOW	WHITE
(1) RESIN	HD21	HD21
(2) COLOR	595B-38907	595B-37925
L*	80.80	94.92
a*	19.04	-2.18
b*	88.57	3.10

Test Methods to be used in the determination of these properties:

- (1) The use of HD21 resin will be verified by testing and manufacturer certification.
- (2) *Allowable variation of the color, measured in the laboratory, will be 2.0 ΔE_{cmc} from the referenced standard color. These values shall be obtained from a spectrophotometer utilizing a D65 illuminant at 45° illumination and 0° viewing with a 2° observer. Readings will be taken only over the black portion of the Leneta sheet on a 15 mil (wft) draw down.*

BEADS: Beads will only be evaluated as part of the system (through retroreflectivity readings). Testing of the coatings, gradation and initial quality of the product applied shall be the responsibility of the contractor.

APPLICATION OF STRIPING

All pavement markings shall be installed in accordance with Part III of the MUTCD and these specifications. The six-inch line shall not be less than six inches nor more than seven inches in width. All of the Interstate and Parkway system shall be marked with six-inch lines. Gore area markings shall be installed at twice the width of the normal line width on that portion of roadway. All lines shall have distinct, clean edges with proper bead distribution across the entire width and length of the line.

Passing zones and lane lines shall be installed as a 10' segment of paint with a 30' gap. The length of the 10' segment shall not be less than 10' nor longer than 10 feet 6

inches. The stripe-gap cycle shall not be less than 39 feet 6 inches nor longer than 40 feet 6 inches.

Paint shall be applied at a minimum rate of 29.5 gallons per mile of solid six-inch line to produce a minimum thickness of 18 mils. Glass beads shall be applied at a minimum rate of six pounds per gallon of paint.

If the Engineer determines that the quality of the striping applied by the Contractor is unsatisfactory with regard to retroreflectivity, bead distribution, paint thickness, overspray, accuracy of retracing, line width, consistency, tracking, etc., he may stop the striping operation immediately until the Contractor can demonstrate that the problem has been corrected.

Any striping error that requires removal of a line applied by the Contractor shall be removed, at the Contractor's expense, by a removal method approved by the Engineer. This removal process shall be done in a manner that shall not be detrimental to the pavement. Painting over the line with bituminous or other materials to obliterate the markings will not be allowed. Upon notification of a striping error by the Engineer, the Contractor shall be required to begin the process of correcting the striping error within five working days and shall work continuously to complete the corrective work prior to striping any other section of roadway included in this contract. Liquidated damages, as outlined in the Standard Specifications, shall apply for each day beyond the five working days that the Contractor has not begun to correct the striping error or continuously worked to complete the corrective work.

The Contractor shall be responsible for protecting the line from traffic until dry to eliminate tracking.

RETROREFLECTIVITY REQUIREMENTS

Although the paint used on this project will be tested by the Department for various compositional requirements and minimum acceptable application rates for paint and beads are specified elsewhere in this proposal, it shall be the responsibility of the Contractor to insure that all striping meets the retroreflectivity requirements specified in this contract.

Retroreflectivity readings will be taken using a mobile retroreflectometer. Mobile retroreflectometer readings will be taken using a 30M-geometry instrument by a Department approved vendor in accordance with KM203.

The minimum retroreflectivity values are as follows:

Minimum Retroreflectivity Values		
Color	Yellow –mcd/m ² /lux	White – mcd/m ² /lux
Mobile (30M-geometry)	150	225

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

**Supplemental Specifications to The Standard Specifications
for Road and Bridge Construction, 2004 Edition**
(Effective with the July 27, 2007 Letting)

SUBSECTION: 105.07 COOPERATION WITH UTILITIES. REVISION: In the last paragraph, replace “KRS 367 Sections 1 through 10” with “KRS 367.4901 through 367.4917”
SUBSECTION: 108.01 SUBCONTRACTING OF CONTRACT. REVISION: Replace the second and third sentence of the first paragraph with the following: When the Engineer gives such consent, the Engineer will allow the Contractor to subcontract a portion, but the Contractor must perform with his own organization work amounting to no less than 30 percent of the total Contract cost. The Department will not allow any subcontractor to exceed the percentage to be performed by the Contractor and will require the Contractor to maintain a supervisory role over the entire project.
SUBSECTION: 109.07 PRICE ADJUSTMENT. REVISION: Replace the section with the following: 109.07 PRICE ADJUSTMENTS. Due to the fluctuating costs of petroleum products, the Department will adjust the compensation of specified liquid asphalt items and diesel fuel in contracts when contract quantity thresholds are met. 109.07.01 Liquid Asphalt. The Department will compare the Kentucky Average Price Index (KAPI), for the month that the Contract is let, to the index for the month that the Contractor places the material on the project to determine the percent change. When the original contract quantity for asphalt items is equal to or greater than 3,000 tons and when the average price of the liquid asphalt products increases or decreases more than 5 percent, the Department will adjust the Contractor’s compensation. The KAPI is calculated monthly using the average price, per ton at the terminal, from the active suppliers of liquid asphalt. <u>Adjustable Contract Items:</u> <ul style="list-style-type: none">• Asphalt Curing Seal• Asphalt Material for Prime• Asphalt Base, All Classes• Asphalt Binder• Asphalt Surface, All Classes• Sand Asphalt Surface• Asphalt Open-Graded Surface• Asphalt Seal Coat• Asphalt Mixture for Leveling and Wedging• Drainage Blanket - Type II - Asphalt The Department will determine the price adjustment using the following formulas: <u>When PC is greater than PL</u> Asphalt Price Adjustment = $(Q \times A)/100 \times PL \times [(PC-PL)/PL - 0.05]$ <u>When PC is less than PL</u> Asphalt Price Adjustment = $(Q \times A)/100 \times PL \times [(PC-PL)/PL + 0.05]$ Where: Q = Tons of material or mixture placed each month. A = Percent of material or mixture that is asphalt. PL = KAPI for the month that the Contract is let. PC = KAPI for the month that the Contractor places the material or mixture. The job-mix formula for asphalt base, binder, and surface mixtures determines “A”, which is the percent of asphalt. For recycled mixtures, the Department will determine the adjustment for the new asphalt cement only. The Department will consider materials for prime and seal as 100 percent asphalt.

**Supplemental Specifications to The Standard Specifications
for Road and Bridge Construction, 2004 Edition**
(Effective with the July 27, 2007 Letting)

Revision
Continued

109.07.02 Fuel. The Department will adjust the Contractor's compensation when the average price of diesel fuel increases or decreases more than 5 percent and the original Contract quantity for the item on which the fuel is consumed is equal to or greater than the threshold quantities listed in the following table.

<u>Item</u>	<u>Threshold Quantity</u>	<u>Fuel/Work</u>
Roadway Excavation	10,000 cubic yards	0.25
Embankment-in-Place	10,000 cubic yards	0.25
Borrow Excavation	10,000 cubic yards	0.25
DGA Base or Crushed Stone Base	5,000 tons	0.52
Stabilized Aggregate Base	5,000 tons	0.52
Drainage Blanket, Cement Treated or Untreated	5,000 tons	0.52
Drainage Blanket, Asphalt Treated	5,000 tons	3.00
Crushed Sandstone Base (Cement Treated)	5,000 tons	0.52
Hot-Mixed Asphalt Mixtures for Pavements or Shoulders	3,000 tons ⁽¹⁾	3.00
PCC Pavement, Base, or Shoulders	2,000 square yards ⁽²⁾	0.14

⁽¹⁾Total of all hot mixed asphalt Contract items.

⁽²⁾Total of all JPC pavement, JPC shoulder, and PCC base, Contract items.

The Department will determine the price adjustment using the following formulas:

When PC is greater than PL

$$\text{Fuel Price Adjustment} = Q \times F \times PL \times [(PC-PL)/PL - 0.05]$$

When PC is less than PL

$$\text{Fuel Price Adjustment} = Q \times F \times PL \times [(PC-PL)/PL + 0.05]$$

Where:

Q = Quantity for applicable item placed or performed that month.

F = The fuel to work unit ratio for each applicable item.

PL = Average reseller price of diesel fuel, excluding taxes, discounts, and superfund line items, in the Kentucky region for the month that the Contract is let.

PC = Average reseller price of diesel fuel, excluding taxes, discounts, and superfund line items, in the Kentucky region for the month that the Contractor uses the fuel on the project.

109.07.03 Payments and Deductions. When thresholds are met, the Department will adjust the Contractor's compensation for each eligible pay item, paid or deducted, monthly.

If later price decreases indicate that the Department made an overpayment, the Department will withhold the overpayment from succeeding pay estimates on the project, or the Contractor shall immediately refund the over payment to the Department.

When the Contractor places materials during any month after the month that the Contract time (including all approved time extensions) expires, the Department will use the average price for the month that the Contractor places the material or the average price for the last month of the Contract time; whichever is least.

The Department will not grant a time extension for any overrun in the Contract amount due to payments made according to this section. The Department will not make any additional compensation due to adjustments made according to this section.

The Department will adjust the Contractor's compensation on the following months pay estimate and on the final pay estimate. The Department will make the final adjustment of the Contractor's compensation on the final estimate for the project.

**Supplemental Specifications to The Standard Specifications
for Road and Bridge Construction, 2004 Edition**
(Effective with the July 27, 2007 Letting)

<p>SUBSECTION: 110.01 MOBILIZATION. REVISION: Replace the third paragraph with the following:</p>	<p>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 bids in excess of this amount to 5 percent for bid comparisons. The Department will base the award on the maximum allowable bid of 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.</p>						
<p>SUBSECTION: 110.02 DEMOBILIZATION. REVISION: Replace the first sentence of the third paragraph with the following:</p>	<p>Do not bid an amount for Demobilization that is 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.</p>						
<p>SUBSECTION: 206.03.03 Compaction. REVISION: Replace "KM 64-412" with "KM 64-002"</p>							
<p>SUBSECTION: 206.04.01 Embankment-in-Place. REVISION: Replace the first sentence of the sixth paragraph with the following:</p>	<p>When payment is made for Embankment-in-Place, the Department will make payment for all embankment constructed on the project, including roadway embankment, refill in cuts, and embankment placed in embankment benches.</p>						
<p>SUBSECTION: 212.03.03 Permanent Seeding and Protection. PART: Delete Part C) and replace Parts A) and B) with the following: REVISION: A) Seed Mixtures for Permanent Seeding.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Seed Mix Type I:</td> <td style="padding-left: 20px;">30% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 20% Creeping Red Fescue (<i>Festuca rubra</i>) 35% Hard Fescue (<i>Festuca (Festuca longifolia)</i>) 10% Ryegrass, Perennial (<i>Lolium perenne</i>) 5% White Dutch Clover (<i>Trifolium repens</i>)</td> </tr> <tr> <td style="padding-left: 20px;">Seed Mix Type II:</td> <td style="padding-left: 20px;">55% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 15% Ryegrass, Perennial (<i>Lolium perenne</i>) 15% (based on pure live seed, PLS) Little Bluestem (<i>Schizachyrium scoparium</i>) 15% Crown Vetch (<i>coronilla varia</i>)</td> </tr> <tr> <td style="padding-left: 20px;">Seed Mix Type III:</td> <td style="padding-left: 20px;">40% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 15% Perennial Ryegrass <i>Lolium perenne</i>) 20% Sericea Lespedeza (<i>Lespedeza cuneata</i>) 25% (based on pure live seed, PLS) Little Bluestem (<i>Schizachyrium scoparium</i>)</td> </tr> </table> <p style="margin-left: 40px;">1) Permanent Seeding on Slopes 3:1 or Less. Apply seed mix Type I at a minimum application rate of 100 pounds per acre. 2) Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed mix Type II at a minimum application rate of 100 pounds per acre plus a nurse crop of either Cereal Rye or German Foxtail-Millet based on the time of year. During the months of June through August, apply 10 pounds of German Foxtail-Millet (<i>Setaria italica</i>). During the months of September through May, apply 56 pounds of Cereal Rye (<i>Secale cereale</i>). If adjacent to golf courses replace the crown vetch with Kentucky 31 Tall Fescue</p>	Seed Mix Type I:	30% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 20% Creeping Red Fescue (<i>Festuca rubra</i>) 35% Hard Fescue (<i>Festuca (Festuca longifolia)</i>) 10% Ryegrass, Perennial (<i>Lolium perenne</i>) 5% White Dutch Clover (<i>Trifolium repens</i>)	Seed Mix Type II:	55% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 15% Ryegrass, Perennial (<i>Lolium perenne</i>) 15% (based on pure live seed, PLS) Little Bluestem (<i>Schizachyrium scoparium</i>) 15% Crown Vetch (<i>coronilla varia</i>)	Seed Mix Type III:	40% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 15% Perennial Ryegrass <i>Lolium perenne</i>) 20% Sericea Lespedeza (<i>Lespedeza cuneata</i>) 25% (based on pure live seed, PLS) Little Bluestem (<i>Schizachyrium scoparium</i>)
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revision continued	<p>3) Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre plus a nurse crop of either Cereal Rye or German Foxtail-Millet based on the time of year. During the months of June through August, apply 10 pounds of German Foxtail-Millet (<i>Setaria italica</i>). During the months of September through May, apply 56 pounds of Cereal Rye (<i>Secale cereale</i>). If adjacent to crop land or golf course replace the <i>Sericea Lespedeza</i> with Kentucky 31 Tall Fescue.</p> <p>B) Procedures for Permanent Seeding. Include a seeding plan in the Best Management Practices plan (BMP) according to Section 213. Prepare a seedbed and incorporate fertilizer and agricultural limestone as needed. Do not apply dry agricultural Limestone when it may generate a traffic hazard. Remove all rock and dirt clods over 4 inches in diameter from the surface of the seedbed. Unless the Engineer directs otherwise, track all slopes 3:1 or greater. Ensure that tracking is performed up and down and not across. Native Grass seed should be calculated figuring seed on a pure live seed basis (PLS), using the least amount of inert matter available. Seed and mulch to produce a uniform vegetation cover using the seeding rates as indicated to each application. Mulch with clean, weed free straw. Place straw 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. For the periods of March 1 through May 15 and from September 1 through November 1, the Department will allow the option of using hydromulch at minimum rate of 1,500 pounds per acre in place of straw with tackifier. Regardless of materials used, ensure the protective cover holds until seeding is acceptably established according to part G) of this subsection.</p>
SUBSECTION: REVISION:	213.03.01 Best Management Practices (BMP). Replace the second and third sentence of the first paragraph with the following: Include erosion control for all off right of way work performed under a Department acquired permit. Ensure that the BMP provides storage for 3,600 cubic feet of water per surface acre disturbed.
SUBSECTION: REVISION:	213.03.02 Progress Requirements. Add the following after the first sentence of the third paragraph: Seed and mulch areas at final grade within 14 days. Temporary mulch areas not at final grade if work stops for longer than 21 days. Temporary mulch soil stock piles within 14 days of the last construction activity in that area.
SUBSECTION: REVISION:	213.03.03 Inspection and Maintenance Replace both "0.1-inch" references with "0.5-inch". Add the following sentence to the end of the second paragraph: Initiate corrective action within 24 hours of any reported deficiency.
SUBSECTION: PART: REVISION:	213.03.05 Temporary Control Measures. B) Silt Checks. B) Silt Checks. Use one of the following types: 1) Silt Check Type II - Crushed stone such as cyclopean stone riprap, quarry run stone, or other size material approved by the Engineer, dumped in place and shaped to the configuration required. 2) Silt Check Type III - Blasted or broken rock dumped in place and shaped to the configuration required. Remove and properly dispose of sediment deposited at silt checks as necessary. When no longer needed, remove the silt checks and dispose of surplus materials as excavated materials according to Section 204. Seed and protect the entire area disturbed, as directed. Do not leave silt checks in place after completion of the project unless allowed by the Engineer or specified in the Plans.

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<p>SUBSECTION: 213.03.05 Temporary Control Measures. PART: F) Temporary Seeding and Protection. REVISION: Replace the first sentence with the following:</p>	<p>Apply seed mix Type I at a minimum application rate of 100 pounds per acre plus a nurse crop of either Cereal Rye or German Foxtail-Millet based on the time of year. During the months of June through August, apply 10 pounds of German Foxtail-Millet (<i>Setaria italica</i>). During the months of September through May, apply 56 pounds of Cereal Rye (<i>Secale cereale</i>). Obtain the Engineer's approval for the seed before use.</p>
<p>SUBSECTION: 213.03.05 Temporary Control Measures. PART: G) Temporary Mulch. REVISION: Replace the last sentence with the following:</p>	<p>Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and apply tackifier.</p>
<p>SUBSECTION: 213.04.15 Temporary Silt Ditch. REVISION: Replace with the following:</p>	<p>The Department will measure the quantity in linear feet.</p>
<p>SUBSECTION: 213.04 MEASUREMENT. REVISION: Add the following Subsection:</p>	<p>213.04.24 Clean Temporary Silt Ditch. The Department will measure the quantity in linear feet along the ditch line.</p>
<p>SUBSECTION: 213.05 PAYMENT. REVISION: Add the following lines:</p>	<p>20594 Temporary Silt Ditch Linear Foot 20601 Clean Temporary Silt Ditch Linear Foot</p>
<p>SUBSECTION: 303.03.01 Mixture PART: C) Cement Treated Mixture. REVISION: Delete the "For asphalt pavements" from the second paragraph.</p>	
<p>SUBSECTION: 303.03.01 Mixture PART: C) Cement Treated Mixture. REVISION: Delete requirement "2".</p>	
<p>SUBSECTION: 401.02.01 All Asphalt Mixing Plants. REVISION: Replace the third paragraph and numbers 1) and 2) with the following:</p>	<p>When plants are in operation, the Department will require one computer on the site of operations for the purpose of recording and submitting test data. Ensure Microsoft Office 2003 Professional, full installation, is installed on the computer and used for data submittal.</p>
<p>SUBSECTION: 402.03.02 Acceptance. PART: D) Testing Responsibilities. NUMBER: 4) Density. REVISION: Replace the first sentence of the third paragraph with the following:</p>	<p>For surface mixtures placed on driving lanes and ramps, furnish 2 cores per subplot to the nearest laboratory facility (Contractor or Department lab) for density determination by the Engineer.</p>
<p>SUBSECTION: 402.03.02 Acceptance. PART: H) Unsatisfactory Work. NUMBER: 1) Based on Lab Data. REVISION: Replace the "AASHTO MP2" references in the second paragraph with "AASHTO M 323".</p>	
<p>SUBSECTION: 402.04 MEASUREMENT. REVISION: Replace the last sentence with the following:</p>	<p>The Department will not measure construction of rolled rumble strips or pavement wedge texturing for payment and will consider them incidental to the asphalt mixture.</p>

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SUBSECTION:	402.04.01 Weight.												
REVISION:	Replace first sentence of the second paragraph with the following: The Department will determine the bulk, oven-dry specific gravity for the fine and coarse aggregates according to KM64-605 and AASHTO T 85, respectively.												
SUBSECTION:	402.04.02 Thickness on New Construction.												
REVISION:	Delete the third paragraph and add the following at the end of the subsection: The Department will not measure initial thickness check coring or coring of corrective work for payment and will consider it incidental to the asphalt mixture.												
SUBSECTION:	402.05.02												
PARTS:	Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures Lot Pay Adjustment Schedule, Compaction Option B Mixtures												
REVISION:	Replace the VMA table with the following:												
<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">VMA</th> </tr> <tr> <th>Pay Value</th> <th>Deviation From Minimum</th> </tr> </thead> <tbody> <tr> <td align="center">1.00</td> <td align="center">≤ 0.5 below min. VMA</td> </tr> <tr> <td align="center">0.95</td> <td align="center">0.6-1.0 below min.</td> </tr> <tr> <td align="center">0.90⁽²⁾</td> <td align="center">1.1-1.5 below min.</td> </tr> <tr> <td align="center">⁽¹⁾/₍₂₎</td> <td align="center">> 1.5 below min.</td> </tr> </tbody> </table>		VMA		Pay Value	Deviation From Minimum	1.00	≤ 0.5 below min. VMA	0.95	0.6-1.0 below min.	0.90 ⁽²⁾	1.1-1.5 below min.	⁽¹⁾ / ₍₂₎	> 1.5 below min.
VMA													
Pay Value	Deviation From Minimum												
1.00	≤ 0.5 below min. VMA												
0.95	0.6-1.0 below min.												
0.90 ⁽²⁾	1.1-1.5 below min.												
⁽¹⁾ / ₍₂₎	> 1.5 below min.												
SUBSECTION:	403.03.03 Preparation of Mixture.												
PART:	A) Mixture Composition.												
REVISION:	Replace the “AASHTO MP2” reference in the first paragraph with “AASHTO M 323”. From the aggregate requirements list, delete 3) Type C.												
SUBSECTION:	403.03.03 Preparation of Mixture.												
PART:	C) Mix Design Criteria.												
REVISION:	Replace the “AASHTO MP2” references with “AASHTO M 323”. Replace the “AASHTO PP28” references in the second paragraph with “AASHTO R 35”.												
SUBSECTION:	403.03.03 Preparation of Mixture.												
PART:	C) Mix Design Criteria.												
NUMBER	1) Preliminary Mix Design.												
REVISION:	Add the following footnote to the table and associate it with the ESAL’s field “<0.3”: * For CL1 ASPH SURF 0.38D PG64-22 only.												
SUBSECTION:	403.03.06 Thickness Tolerances.												
PART:	B) New Construction.												
REVISION:	Replace the first paragraph with the following: Under the Engineer’s supervision, perform coring for thickness checks according to KM 64-420, as soon as practical after completion of all, or a major portion, of the asphalt base. The Engineer will measure the cores. Fill all core holes either with compacted asphalt mixture or non-shrink grout. Complete all remedial overlay work before placing the final course.												

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SUBSECTION: 403.03.08 Rumble Strips.
REVISION: Replace with the following:

403.03.08 Shoulder Rumble Strips and Pavement Wedge Texturing.

A) Shoulder Rumble Strips.

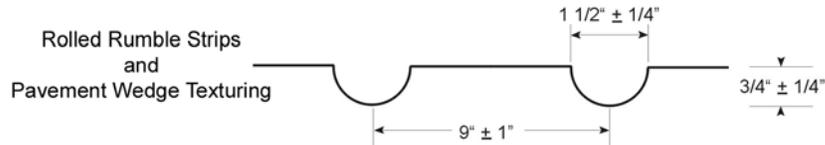
1) Interstates and Parkways. Construct sawed rumble strips on all mainline shoulders to the dimensions shown below. Do not place rumble strips on ramps.

2) Other Roads. Construct rolled rumble strips on shoulders of facilities with posted speed limits greater than 45 MPH. Unless specified in the plans or directed by the Engineer, do not construct rumble strips on facilities with posted speed limits of 45 MPH or less.

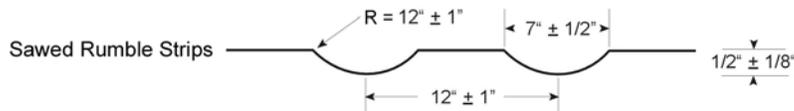
Construct rolled rumble strips on mainline shoulders to the dimensions shown below. On shoulders less than 3 feet wide, shorten the width and distance of the strips as the Engineer directs. Time the rolling operation so indentations are at the specified size and depth without causing unacceptable displacement of the asphalt mat. Correct unacceptable rolled rumble strips by sawing.

B) Pavement Wedge Texturing. Perform texturing on all pavement wedges constructed monolithically with the mainline or constructed using a surface mixture. When furnishing Asphalt Mixture for Pavement Wedge, binder, or a base mixture for the wedge, the Department will not require texturing.

Texture to the dimensions shown below. On wedges less than 3 feet, shorten the length and distance of the texturing as the Engineer directs. Time the rolling operation so indentations are at the specified size and depth without causing unacceptable displacement of the asphalt mat.



Place one foot out from the mainline pavement and to a width of 2 feet.



Place one foot out from the mainline pavement and to a width of 16 inches.

SUBSECTION: 403.04.03 Asphalt Mixtures.
REVISION: Replace the second sentence with the following:

The Department will not measure rolled rumble strips or pavement wedge texturing for payment and will consider them incidental to this bid item.

SUBSECTION: 403.04.07 Sawed Rumble Strips.
REVISION: Add the following subsection:

403.04.07 Sawed Rumble Strips. The Department will measure the quantity in linear feet. When rolled in rumble strips are specified, the Department will not measure sawed rumble strips for payment and will consider them incidental to the asphalt mixture.

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SUBSECTION:	403.05 PAYMENT						
REVISION:	Add the following bid item:						
	<table border="0"> <thead> <tr> <th align="left"><u>Code</u></th> <th align="left"><u>Pay Item</u></th> <th align="left"><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>20362</td> <td>Shoulder Rumble Strips – Sawed</td> <td>Linear Foot</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	20362	Shoulder Rumble Strips – Sawed	Linear Foot
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>					
20362	Shoulder Rumble Strips – Sawed	Linear Foot					
SUBSECTION:	501.03.20 Opening to Public Traffic.						
REVISION:	Delete the last sentence of the first paragraph.						
SUBSECTION:	501.03.21 Tolerance in Pavement Thickness.						
REVISION:	Add the following: Core the pavement as the Engineer directs.						
SUBSECTION:	501.04.06 Thickness.						
REVISION:	Add the following: The Department will not measure coring for payment and will consider it incidental to the concrete pay items.						
SUBSECTION:	502.03 CONSTRUCTION.						
PART:	C) Curing and Protecting Pavement.						
NUMBER:	3)						
REVISION:	Replace the last sentence with the following: The Department will allow permanent removal of the cover when the concrete attains the required opening strength of 3,000 psi.						
SUBSECTION:	502.03 CONSTRUCTION.						
PART:	D) Strength Testing and Opening to Traffic.						
NUMBER:	2) Testing.						
REVISION:	Replace the second paragraph with the following: When the average compressive strength is 3,000 psi, the Department will allow the pavement to be opened to traffic and will test the remaining sets of cylinders at the required age. When the average compressive strength is less than 3,000 psi at the required age, do not open the pavement to traffic until the pavement has been in place for 7 days. The Engineer may accept the pavement based on additional testing.						
SUBSECTION:	503.03.09 Ride Quality.						
REVISION:	Replace parts 5) and 6) with the following: 5) Perform corrective work to achieve the required IRI by regrinding the entire width of the traffic lane at areas having a high IRI. The Engineer may exclude pavement areas where grinding alone will not correct deficiency. 6) The Department will create a strip chart when the test results show that the IRI is greater than 60 or upon request for lower IRI values.						
SUBSECTION:	601.03.02 Concrete Producer Responsibilities.						
REVISION:	Replace the first sentence with the following: Use a concrete producer from the List of Approved Materials when the quantity of concrete delivered to the project in a plastic condition is 250 cubic yards or more. Ensure that the concrete producer complies with the following requirements:						

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<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: C) Quality Control. REVISION: Replace the first paragraph with the following:</p> <p>Take full responsibility for the batch weight calculations and quality control of concrete mixtures at the plant. 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 and unit weight tests, and monitoring the concrete temperature, all to provide concrete to the project conforming to specifications. A Level I concrete technician is responsible for testing production material for slump, entrained air, unit weight and temperature of the mixture. Ensure the technician performs all sampling and testing according to the appropriate Kentucky Methods.</p> <p>Delete the third paragraph.</p>
<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: F) Records. REVISION: Retain all concrete technician records, test results and batch tickets pertaining to concrete produced for a Department project for at least 3 years after formal acceptance of the project. Make all records available to the Engineer and the Contractor on the project for review upon request.</p>
<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. REVISION: Replace the last sentence of the first paragraph with the following:</p> <p>Before producing any concrete for the project, submit a proposed mixture design to the Engineer and obtain the District Materials engineer's or the Central Office Material's approval. Submit the mix design electronically using Microsoft Office 2003 Professional, full installation, and the Concrete Mix Design Spreadsheet located on the Division of Materials Website.</p>
<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. NUMBER: 1) New Mixture Designs. REVISION: Replace the first sentence with the following:</p> <p>Base the proposed mix design on standard Department methods unless the District Materials Engineer, or Central Office Materials approves otherwise.</p>
<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. NUMBER: 1) New Mixture Designs. LETTER: b)</p>
<p>REVISION: Replace the second sentence with the following:</p> <p>The District Materials Engineer or Central Office Materials will provide an average value of the specific gravity aggregate absorption.</p>
<p>SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. NUMBER: 1) New Mixture Designs. LETTER: g) REVISION: Replace the fourth and fifth sentence with the following:</p> <p>Central Office Materials will observe all phases of the trial batches. Have the producer submit a report containing mix proportions and test results for slump, air content, water/cement ratio, unit weight, and compressive strength for each trial batch to the Engineer for Central Office Materials review and approval.</p>

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SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. NUMBER: 2) Approval. REVISION: Replace the first sentence with the following: The District Materials Engineer or Central Office Materials will base approval of the mixture design on the following criteria:
SUBSECTION: 601.03.02 Concrete Producer Responsibilities. PART: G) Mix Designs. NUMBER: 3) Changes in Approved Mix Designs. REVISION: Replace the first sentence with the following: Do not change the source of supply of the mixture ingredients without the District Materials Engineer's or Central Office Materials written permission. Replace the third sentence with the following: Upon the District Materials Engineer's or Central Office Materials written approval, the Department will allow the use of aggregate from the new source.
SUBSECTION: 601.03.03 Proportioning and Requirements. PART: A) Concrete. TABLE: INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE REVISION: Under Class of Concrete replace "AAA ⁽⁹⁾ " with "AAA ⁽⁸⁾ "
SUBSECTION: 601.03.03 Proportioning and Requirements. PART: A) Concrete. FOOTNOTE: (6) REVISION: Add the following after the first sentence of the first paragraph: For products with voids, the slump may be increased to 7 inches. Replace the "0.3" requirement for Spring and Fall mix designs with "0.37".
SUBSECTION: 601.03.03 Proportioning and Requirements. PART: A) Concrete. FOOTNOTE: (7) REVISION: Replace with the following: The precast fabricator may increase the slump of Class A concrete to a maximum of 7 inches provided the fabricator uses a high range water reducer (Type F and G) and maximum water/cement ratio of 0.46.
SUBSECTION: 601.03.03 Proportioning and Requirements. PART: E) Measuring. NUMBER: 3) Water. REVISION: Delete the last sentence of the second paragraph.

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<p>SUBSECTION: 601.03.03 Proportioning and Requirements. PART: E) Measuring. NUMBER: 4) Measuring Admixtures. REVISION: Replace with the following:</p>	<p>4) Measuring Admixtures. Introduce liquid admixtures into the concrete batch along with, or as part of, the mixing water. Keep air-entraining admixtures completely separate from all other admixtures until introduction into the batch. Maintain and equip dispensing equipment to ensure no chlorides are introduced into any Department mix.</p> <p>Use approved dispensing equipment with a meter, gauge, or scale that can accurately be pre-set for the needed amount of admixture and can consistently deliver quantities of admixture to successive batches at any setting with satisfactory accuracy. The dispensing equipment must be visible to the batch operator if the actual dispensed amounts are not recorded on the computer batch ticket. Ensure admixture dispensers are inspected, calibrated and certified every 6 months.</p> <p>The Department may allow admixtures to be added, to the truck, at the project site provided the Engineer's approval is obtained first.</p>
<p>SUBSECTION: 601.03.04 Classes and Primary Uses. REVISION: Add the following part:</p>	<p>R) Dry Cast. Precast units.</p>
<p>SUBSECTION: 601.03.05 Admixtures. REVISION: Replace the last sentence of the fourth paragraph with the following:</p>	<p>Store admixtures where the liquid temperatures can be maintained between 32 and 110 °F.</p>
<p>SUBSECTION: 601.03.09 Placing Concrete. PART: D) Weather Limitations and Protection. REVISION: Delete the last sentence of paragraph two.</p>	
<p>SUBSECTION: 605.03 CONSTRUCTION. REVISION: Insert the following sentence after the first sentence:</p>	<p>Ensure all non-composite box beam concrete contains an approved corrosion inhibitor from the List of Approved Materials.</p>
<p>SUBSECTION: 605.03.03 Casting. REVISION: Delete the first sentence in the first paragraph.</p>	<p>Add the following after the first sentence of the third paragraph:</p> <p>Do not vibrate Self-Consolidating Concrete (SCC).</p>
<p>SUBSECTION: 605.03.04 Tack welding. REVISION: Replace the first sentence with the following:</p>	<p>When tack welding steel reinforcement, use ASTM A 706 steel and conform to the following conditions.</p>
<p>SUBSECTION: 605.03.04 Tack Welding. NUMBER: 3) REVISION: Replace the first sentence with the following:</p>	<p>Tack weld only at intersections of bars except do not tack weld in any bend or within 2 bar diameters of a bend.</p>
<p>SUBSECTION: 605.03.04 Tack Welding. NUMBER: 5) REVISION: Replace the last sentence with the following:</p>	<p>Each sample must meet the minimum requirement for elongation, ductility, tensile and yield strength of the bar stock.</p>

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SUBSECTION:	605.03.04 Tack Welding.
NUMBER:	6)
REVISION:	Delete the last sentence.
SUBSECTION:	605.03.04 Tack Welding.
REVISION:	Change footnote "(4) (d)" to "(5)"
SUBSECTION:	605.03.07 Removal of Forms and Surface Finish.
REVISION:	Add the following sentence before the last sentence of the paragraph: Finish dry cast products according to the Precast/Prestressed Concrete Manual.
SUBSECTION:	611.02.01 Concrete.
REVISION:	Replace with the following: Conform to Subsections 601.02 and 601.03 and the Precast/Prestress Concrete Manual.
SUBSECTION:	611.03.02 Precast Unit Construction.
REVISION:	Replace "AASHTO C 1433" with "ASTM C 1433"
SUBSECTION:	611.03.02 Precast Unit Construction.
NUMBER:	2)
REVISION:	Replace with the paragraph with the following: Mark all box culverts sections with the following information on the inside top of each section with letters no less than 2 inches high: <ul style="list-style-type: none"> a) Span, rise, maximum and minimum design earth cover, and KY Table 3. b) Date of manufacture. c) Name and trademark of the manufacturer. For entrance and exit box sections, indent the required information. Mark interior sections by indenting or with waterproof paint.
SUBSECTION:	701.02.05 Backfill Materials.
PART:	A) Granular Backfill.
NUMBER:	1)
REVISION:	Remove "A2" from the list of acceptable materials.
SUBSECTION:	701.03.03 Pipe Bedding.
REVISION:	Replace with the following: 701.03.03 Pipe Bedding. A) Reinforced Concrete Pipe. Construct bedding according to the Standard Drawings and this section. <ul style="list-style-type: none"> 1) Type 1 Installation. When working on a rock foundation, place bedding to a depth of 6 inches or equal to $B_c/12$, the pipe diameter in inches divided by 12, whichever is greater. For all other foundations, place a minimum of 4 inches of bedding. Shape the bedding to conform to the invert shape throughout the entire width and length of the proposed structure. Compact the bedding, but leave the center third of the pipe diameter ($B_c/3$) uncompacted. Place and compact additional bedding material in lifts 6 inches or less to an elevation of 0.30 the culvert diameter. 2) Type 4 Installation. When working on a rock foundation, place bedding to a depth of 6 inches or equal to $B_c/12$, the pipe diameter in inches divided by 12, whichever is greater. For all other foundations, place a minimum of 4 inches of bedding. B) Corrugated Metal, Thermoplastic, and Structural Plate Pipe. Place and compact bedding to provide 4 inches of bedding below the outside invert of the pipe after shaping. Shape the bedding to conform to the invert shape throughout the entire width and length of the proposed structure. Place and compact additional bedding material in lifts 6 inches or less to an elevation of 0.30 the culvert diameter.

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<p>SUBSECTION: 701.03.06 Initial Backfill. PART: A) Reinforced Concrete REVISION: Replace with the following:</p>	<p>A) Reinforced Concrete Pipe.</p> <ol style="list-style-type: none"> 1) Type 1 Installation. When the top of the pipe is not within one pipe diameter of the subgrade, backfill with granular backfill, additional bedding material, or flowable fill from the top of the bedding to an elevation equal to 1/2 the pipe diameter, and either granular backfill, flowable fill, or embankment material in 6-inch lifts to an elevation of one-foot above the pipe. 2) Type 4 Installation. Backfill from the top of the bedding with granular backfill, flowable fill, or embankment material in 6-inch lifts to an elevation of one-foot above the pipe. The Department will allow Type 4 installations for median drains and pipe installations located 35 feet or more from the edge of shoulder, back of curb, or any paved surface.
<p>SUBSECTION: 701.05 PAYMENT. REVISION: Replace bid item “2599 Fabric-Geotextile, Type IV Square Yard” with “21433ES214 Fabric-Geotextile, Type IV for Pipe Square Yard⁽²⁾”</p>	<p>Replace foot note “** The unit bid price is \$2.00 per square yard for Geotextile Fabric, Type III” with “⁽²⁾The unit price is \$2.00 per square yard for Fabric-Geotextile, Type IV for Pipe”</p>
<p>SUBSECTION: 710.02.15 Plastic Adjusting Rings. REVISION: Replace this section with:</p>	<p>710.02.15 Plastic or Rubber Adjusting Rings. Provide plastic or rubber adjusting rings that are on the Department’s List of Approved Materials.</p>
<p>SUBSECTION: 710.03.03 Adjusted Small Drainage Structures. REVISION: Replace the last sentence of the first paragraph:</p>	<p>For plastic or rubber adjusting rings, install and seal according to the manufacturer’s recommendations.</p>
<p>SUBSECTION: 711.02 MATERIALS. REVISION: Replace with the following:</p>	<p>Conform to the Contract requirements.</p>
<p>SUBSECTION: 713.03 CONSTRUCTION. REVISION: Add the following after the third paragraph:</p>	<p>Offset longitudinal lines at least 2 inches from longitudinal pavement construction joints. Offset longitudinal lane lines on multi-lane highways 2 inches towards the median.</p>
<p>SUBSECTION: 714.03.06 Proving Period for Durable Markings. PART: B) Failure. REVISION: Replace the first sentence with the following:</p>	<p>During the proving period, the Department will consider markings defective when the retroreflectivity falls below the minimum required or the material fails to meet the other requirements of A) above. Additionally, when more than 10 percent of any one-mile section or individual gore area is defective, the Department will consider the entire section defective.</p>
<p>SUBSECTION: 716.03.08 Testing. REVISION: Replace “10 megohms” with “100 megohms”</p>	
<p>SUBSECTION: 721.03 CONSTRUCTION. REVISION: Replace the third paragraph with the following:</p>	<p>Install fence 18 inches inside the right-of-way line or in other locations specifically indicated.</p>
<p>SUBSECTION: 723.03 CONSTRUCTION. REVISION: Replace the first sentence of the fourth paragraph with the following:</p>	<p>Set right-of-way markers within 12 inches of the right-of-way line.</p>

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SUBSECTION:	724.02.01 Plants.
REVISION:	Replace the reference “American Association of Nurserymen” with “American Nursery and Landscape Association”.
SUBSECTION:	801.01 REQUIREMENTS.
REVISION:	Add the following sentence after the third sentence of the first paragraph: Mills must request and be approved by the Department to supply cement with an SO ₃ content above the value in Table 1 of ASTM C 150.
SUBSECTION:	804.01.03 Conglomerate Sand.
REVISION:	Replace second sentence of the paragraph with the following: Conglomerate sand may include some material which has been produced by crushing larger pieces of the parent material.
SUBSECTION:	804.02 Approval.
REVISION:	Replace first sentence of the second paragraph with the following: The Department will consider a source for inclusion on the Aggregate Source List when the aggregate producer complies with KM 64-608 and provides the following:
SUBSECTION:	804.03 Concrete.
REVISION:	Second sentence in first paragraph should be a separate paragraph immediately following the first and should read as follows: Provide natural, crushed, or conglomerate sand. The Department will allow any combination of natural, crushed, or conglomerate sand when the combination is achieved in the concrete plant weigh hopper. The Engineer may allow other sands. Use natural or conglomerate sands as fine aggregates in concrete intended as a wearing surface for traffic. Conform to the following:
SUBSECTION:	804.04.03 Polish-Resistant Aggregate.
REVISION:	Add the following paragraph: Provide a signed certification from the aggregate producer for the manufactured polish-resistant fine aggregate stating that the aggregate is supplied from the approved parent material as found on the Department’s List of Approved Materials, Polish-Resistant Aggregate Source List and Guidelines on the Division of Materials’ webpage.
SUBSECTION:	804.04.04 Requirements for Combined Aggregates.
PART:	D) Absorption.
REVISION:	Delete the first sentence and replace the second sentence with the following: Provide total combined fine aggregates having a water absorption of no more than 4.0 percent.
SUBSECTION:	804.11 Sampling and Testing.
REVISION:	For Absorption (Fine Aggregate), replace method “AASHTO T 84” with “KM 64-605”
SUBSECTION:	805.02 Approval.
REVISION:	Replace first sentence of the second paragraph with the following: The Department will consider a source for inclusion on the Aggregate Source List when the aggregate producer complies with KM 64-608 and provides the following:

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SUBSECTION: REVISION:	805.04.01 JPC Base, JPC Pavement, JPC Shoulders, and Concrete for Bridge Decks. Replace the subsection heading and first sentence with the following: 805.04.01 JPC Base, JPC Pavement, JPC Shoulders, Concrete for Bridge Decks, and Precast Products. Add the following paragraph: Provide a signed certification from the aggregate producer for the approved freeze-thaw coarse aggregate stating that the aggregate is supplied from the approved parent material as found on the Department's List of Approved Materials and Concrete Aggregate Restriction List.
SUBSECTION: PART: REVISION:	805.04.01 JPC Base, JPC Shoulders, and Concrete for Bridge Decks. 3) Replace the "tests" with "test" in the last sentence.
SUBSECTION: REVISION:	805.05.05 Polish-Resistant Aggregate. Add the following paragraph: Provide a signed certification from the aggregate producer for the manufactured polish-resistant coarse aggregate stating that the aggregate is supplied from the approved parent material as found on the Department's List of Approved Materials, Polish-Resistant Aggregate Source List and Guidelines on the Division of Materials' webpage.
SUBSECTION: REVISION:	805.13.01 Cyclopean Stone Riprap and Channel Lining Class III. Replace the subsection with the following: 805.13.01 Cyclopean Stone Riprap and/or Channel Lining Class III. Provide material meeting the general requirements of Section 805. Ensure that 100 percent passes through a square opening of 16 inches by 16 inches, and no more than 20 percent passes through square openings of 8 inches by 8 inches. The Department may allow stones of smaller sizes for filling voids in the upper surface and dressing to the proper slope.
SUBSECTION: TEST: REVISION:	806.03.01 General Requirements. Dynamic Shear Replace the 100% pay range "5,000-5,500" with "0-5,500"
SUBSECTION: REVISION:	806.03.03 Modification. Replace the first sentence with the following: Use only styrene-butadiene (SB) or styrene-butadiene-styrene (SBS) modifiers.
SUBSECTION: REVISION:	810.02 APPROVAL. Replace reference "KM 114" with "KM 115".
SUBSECTION: REVISION:	810.03.06 Identification and Markings. Delete the following text from the first paragraph: "When the manufacturer has more than one plant, include the plant letter assigned by the Division of Materials after the date of manufacture as follows: L-Louisville N-London" Delete the following paragraph: "The Department will not require the certification on the shipment approval form to be notarized. The Department will not require the information under "Pipe Data" on the approval form when the manufacture's shipment ticket is attached and contains the necessary information."

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SUBSECTION: 811.02.01 Requirements. REVISION: Replace the subsection with the following: Furnish bar reinforcement for bridges, cast-in-place culverts, and cast-in-place retaining walls that conforms to ASTM A 615 (billet) or ASTM A 996 (rail). ASTM A 706 steel is acceptable with prior approval of the Division of Materials. Do not weld any steel bar reinforcement unless it is ASTM A 706 rebar. The Engineer will accept rail steel bar reinforcement in straight lengths only. Do not use rail steel reinforcement where field bending is allowed or required.
SUBSECTION: 811.09.02 Dowel Bars. REVISION: Replace the reference to "ASTM A 616" with "ASTM A 996" Insert the following sentence between the third and fourth sentence of the first paragraph: Broken or sheared ends are acceptable with prior approval of the Division of Materials.
SUBSECTION: 811.06 BAR MATS. REVISION: Replace the subsection with the following: Conform to ASTM A 184 and fabricate by welding deformed Grade 60 weldable bars.
SUBSECTION: 811.09.02 Dowel Bars. REVISION: Replace the first paragraph with the following: Furnish dowel bars that are plain round bars conforming to ASTM A 706, A 615, A 996, or A 617 with respect to mechanical properties only. Provide either Grade 40, 50 or 60 steel. Saw cut the free ends of the dowels and ensure that they are free of burrs or projections. Broken or sheared ends are acceptable with prior approval of the Division of Materials. Coat dowel bars according to AASHTO M 254 with the following exceptions for Type B coatings:
SUBSECTION: 811.10.02 Epoxy Coating Material. REVISION: Replace both the reference to "ASTM D 3963 Annex" and "ASTM D 3963" with "AASHTO M 284".
SUBSECTION: 812.01.02 Hot-Rolled Carbon Steel Sheets and Strip of Structural Quality, Grade 33 (Corrugated Steel Plank for Bridge Floors). REVISION: Replace the reference to "ASTM A 570" with "ASTM A 1011"

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SUBSECTION: 827.04 SEED.

REVISION: Replace with the following:

827.04 SEED. Conform to the requirements outlined in the “Kentucky Seed Law and Provisions for Seed Certification in Kentucky” and the “Regulations under the Kentucky Seed Law”, with following exceptions:

- 1) Obtain seed only through registered dealers that are permitted for labeling of seed.
- 2) Ensure all deliveries and shipments of premixed seed are accompanied with a master blend sheet.
- 3) Ensure all bags and containers have an acceptable seed tag attached.
- 4) The Department may sample the seed at the job site at any time.

Do not use seed (grasses, native grasses, and legumes) if the weed seed is over one percent, total germination (including hard seed) is less than 80 percent, if the seed test date is over 9 months old exclusive of the month tested, or if the limits of noxious weed seed is exceeded.

Ensure that noxious weed seeds contained in any seed or seed mixture does not exceed the maximum permitted rate of occurrence per pound.

<u>Name of Kind</u>	<u>Max. No. Seeds (per pound)*</u>
Balloon Vine (<i>Cardiospermum halicacabum</i>)	0
Purple Moonflower (<i>Ipomoea turbinata</i>)	0
Canada Thistle (<i>Cirsium Arvense</i>)	0
Johnsongrass (<i>Sorghum halepense</i> and <i>Sorghum almum</i> and perennial rhizomatous derivatives of these species)	0
Quackgrass (<i>Elytrigia Repens</i>)	0
Annual Bluegrass (<i>Poa annua</i>)	120
Buckhorn Plantain (<i>Plantago lanceolata</i>)	120
Corncockle (<i>Agrostemma githago</i>)	18
Dodder (<i>Cuscuta</i> spp.)	18
Giant Foxtail (<i>Setaria faberii</i>)	18
Oxeye Daisy (<i>Chrysanthemum leucanthemum</i>)	120
Sorrel (<i>Rumex acetosella</i>)	120
Wild Onion and Wild Garlic (<i>Allium</i> spp.)	18

* Seed or seed mixtures that contain in excess of 120 total noxious seeds per pound is prohibited

Wildflower seed shall not be planted until approved by the MCL.

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REQUIREMENTS FOR SEEDS			
	Purity (Min. %)	Germination (Min. %) Including Hard Seed and Dormant Seed	Hard Seed (Max. %) Allowed in Germination
Grasses			
Bentgrass (<i>Argrostis palustris</i>)	98	85	-
Bermudagrass, common (<i>Cynodon dactylon</i>)	97	85	-
Bluegrass, Kentucky (<i>Poa pratensis</i>)	98	85	-
Brome, smooth (<i>Bromus inermis</i>)	95	80	-
Canarygrass, reed (<i>Phalaris arundinacea</i>)	95	80	-
Fescue, chewings (<i>Festuca rubra</i> var. <i>commutata</i>)	97	85	-
Fescue, hard (<i>Festuca trachyphlla</i>)	97	85	-
Fescue, meadow (<i>Festuca elatior</i>)	97	85	-
Fescue, red (<i>Festuca rubra</i>)	97	85	-
Fescue, tall (<i>Festuca arundinacca</i>)	97	85	-
Orchardgrass (<i>Dactylis glomerata</i>)	97	85	-
Redtop (<i>Agrostic alba</i>)	95	80	-
Ryegrass, annual, common or Italian (<i>Lotium multiflorum</i>)	97	85	-
Ryegrass, perennial (<i>Lolium perenne</i>)	97	85	-
Lovegrass, Weeping (<i>Eragrostic curvula</i>)	96	80	-
Oat (<i>Avena Sativa</i>)	98	85	-
Rye (<i>Secale cereale</i>)	98	85	-
Timothy (<i>Phleum pratense</i>)	98	85	-
Wheat, common (<i>Triticum aestivum</i>)	98	85	-
Legumes			
Alfalfa (<i>Medicago sativa</i>)	98	85	25
Clover, alsike (<i>Trifolium hybridum</i>)	97	85	25
Clover, ladino (<i>Trifolium repens</i>)	98	85	25
Clover, white (<i>Trifolium repens</i>)	98	85	25
Crownvetch (<i>Coronilla varia</i>)	97	85	25
Lespedeza, Korean (<i>Lespedeza stipulacea</i>)	97	85	20
Lespedeza, Sericea (<i>Lespedeza cuneata</i>)	97	85	20
Sweetclover, white (<i>Melilotus alba</i>)	98	85	25
Sweetclover, yellow (<i>Melilotus officinalis</i>)	98	85	25
Trefoil, birdsfoot (<i>Lotus corniculatus</i>)	97	85	25
Native Grasses			
Little Bluestem (<i>Schizachyrium scoparium</i>)	85	80	-
Big Blustem (<i>Andropogon gerardii</i>)	85	80	-
Indian Grass (<i>Sorghastrum nutans</i>)	85	80	-
Switchgrass (<i>Panicum virgatum</i>)	85	80	-

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<p>SUBSECTION: 827.07 EROSION CONTROL BLANKET. REVISION: Replace the subsection with the following:</p> <p>827.07 EROSION CONTROL BLANKET. Use a blanket from the Department's List of Approved Materials. Blankets must be machine constructed with two-sided netting filled with curled wood fiber mat, straw, or a straw and coconut fiber combination. Ensure the blanket is smolder resistant without the use of chemical additives.</p> <p>A) Dimensions. Furnish in strips with a minimum width of 4 feet and length of 50 feet. B) Weight.</p> <p>1) Curled Wood Fiber. Ensure a minimum mass per unit area of 7.25 ounce per square yard according to ASTM D 6475. 2) Straw. Ensure a minimum mass per unit area of 7.5 ounce per square yard according to ASTM D 6475. 3) Straw/Coconut Fiber. Ensure a minimum mass per unit area of 6.75 pounds per square yard according to ASTM D 6475.</p> <p>C) Fill. Ensure the fill is evenly distributed throughout the blanket.</p> <p>1) Curled Wood Fiber. Use curled wood fiber of consistent thickness with at least 80 percent of its fibers 6 inches or longer in length. 2) Straw. Use only weed free agricultural straw. 3) Straw/Coconut Fiber. Conform to the straw requirements above and ensure the coconut fiber is evenly distributed throughout the blanket and accounts for 30% or more of the fill.</p> <p>D) Netting. Use photodegradable extruded plastic mesh or netting, with a maximum spacing width of one inch square, on both sides of the blanket. Secure the netting by stitching or other method to ensure the blanket retains its integrity. E) Staples. Use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch, and a minimum length of 6 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils. Provide staples with colored tops when requested by the Engineer. F) Performance.</p> <p>1) C-Factor. Ensure the ratio of soil loss from protected slope to ratio of soil loss from unprotected is ≤ 0.15 for a slope of 3:1 when tested according to ECTC method 2. 2) Shear Stress. Ensure the blanket can sustain a minimum shear stress of 1.75 pounds per square foot without physical damage or excess erosion (> 0.5 inches soil loss) when tested according to ECTC Method 3.</p>
<p>SUBSECTION: 828.02 APPROVAL. REVISION: Add the following:</p> <p>The Department will continue to include the masonry coatings on the list contingent upon receiving an annual certification containing the following information:</p> <p>1) A statement that the masonry coating to be furnished during the particular calendar year is of the same composition as that previously approved for inclusion on the approved list. 2) A statement that the masonry coating conforms to the appropriate requirements of the Kentucky Standard Specifications for Road and Bridge Construction. 3) A statement that notification will be made to the Division of Materials of any changes in composition for review and approval before furnishing the material to projects.</p>
<p>SUBSECTION: 843.01.02 Acceptance Procedures for Non-Specification Fabric. TABLE: GRAB STRENGTH PAYMENT REDUCTION REVISION: Add the following note:</p> <p>The Department will use the lowest value of MACHINE and CROSS for the reduction calculation.</p>

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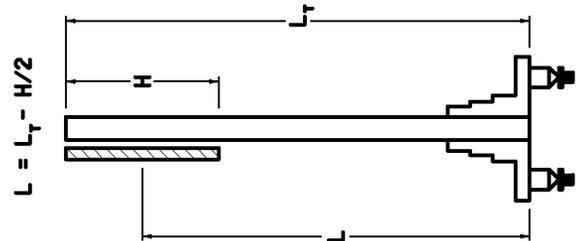
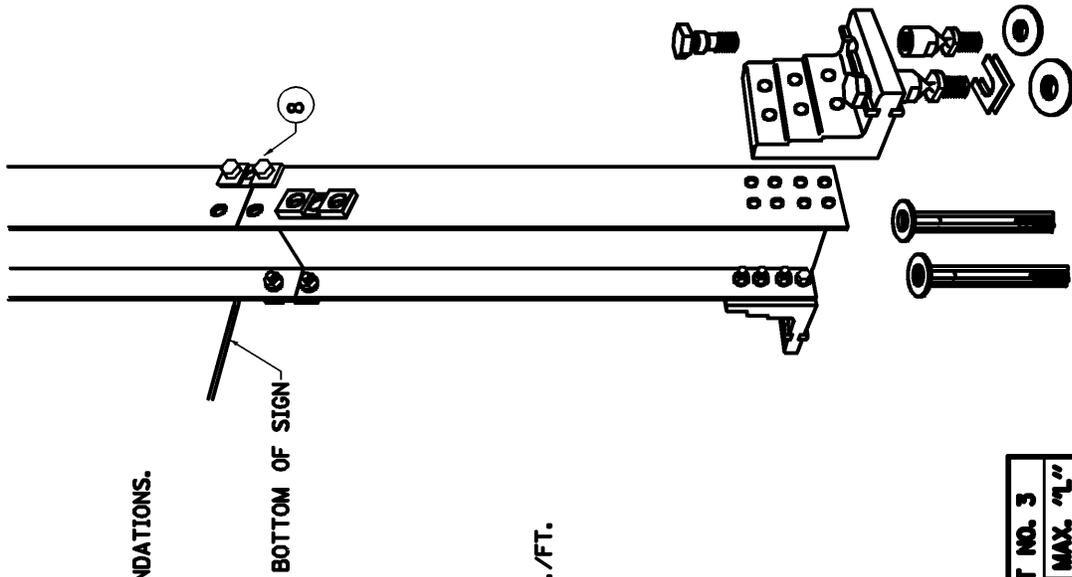
(Effective with the July 27, 2007 Letting)

SUBSECTION: 844.02.01 Fly Ash. PART: 1) REVISION: Delete the last sentence.
SUBSECTION: 844.02.01 Fly Ash. REVISION: Replace the subsection with the following: 844.02.01 Fly Ash. Select from the Department's List of Approved Materials for fly ash sources. To be placed on the list, furnish samples and ASTM C 618 test data developed over the previous 3 months, and confirm to the requirements in KM 64-325.

COUNTY OF	ITEM NO.	SHEET NO.
		106

~NOTES~

1. BREAKAWAY SIGN SUPPORT SYSTEM FOR TYPE C BEAM SHALL BE SELECTED FROM THE KENTUCKY DEPARTMENT OF HIGHWAYS APPROVED LIST FOR BREAKAWAY SIGN SUPPORT SYSTEMS OR AN APPROVED EQUAL. ACCEPTABLE ALTERNATE BREAKAWAY SIGN SUPPORT SYSTEMS SHALL BE APPROVED BY THE DIVISION OF HIGHWAY DESIGN AND FHWA PRIOR TO INSTALLATION.
2. SELECTION OF THE PROPER BRACKET NUMBER SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. ALL HARDWARE ITEMS SUPPLIED ARE AMERICAN STANDARD SIZES AND SHALL BE GALVANIZED AND CONFORM TO ASTM A153 OR ASTM B695.
4. FASTENERS, EXCEPT FOR SPECIAL BOLT AND COUPLINGS, ARE INSTALLED WITH LOCKWASHERS, AND DO NOT HAVE SPECIFIC TORQUE REQUIREMENTS. FASTENERS SHALL BE SECURED AS TIGHT AS POSSIBLE WITH CONVENTIONAL WRENCHES, UNLESS NOTED OTHERWISE.
5. SQUARE UP AND LEVEL INDIVIDUAL COMPONENTS, PARTICULARLY ANCHORS TO MINIMIZE THE NEED FOR SHIMMING BETWEEN THE COUPLINGS AND ANCHORS.
6. NO MORE THAN TWO SHIMS SHALL BE PLACED UNDER ANY ONE COUPLING.
7. NO MORE THAN THREE SHIMS UNDERNEATH ANY PAIR OF COUPLINGS.
8. THE CONTRACTOR SHALL FURNISH TWO (2) COMPLETE SETS OF SHOP PLANS FOR APPROVAL BY THE ENGINEER A MINIMUM OF TWO WEEKS PRIOR TO INSTALLATION.
9. THE HINGE SHOULD BE AT LEAST 7'-0" ABOVE THE GROUND.
10. A SINGLE POST IF 7'-0" OR MORE FROM ANOTHER POST, SHALL HAVE A WEIGHT LESS THAN 45 LB./FT. TOTAL WEIGHT BELOW THE HINGE, BUT ABOVE THE SHEAR PLATE OF THE BREAKAWAY BASE, SHOULD NOT EXCEED 600 LB.
11. FOR TWO POSTS SPACED LESS THAN 7'-0" APART, EACH POST SHOULD HAVE A WEIGHT LESS THAN 18 LB./FT. COUPLINGS SHALL NOT BE USED IN SIGN STRUCTURES WITH THREE SUPPORTS OR MORE IF POSTS ARE CLOSER THAN 7'-0" APART.
12. REFER TO DETAIL SHEET "FOOTING DETAILS FOR TYPE C BEAM" FOR FOOTER DETAILS.

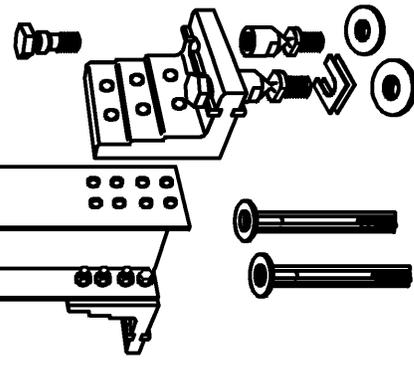


~ ELEVATION VIEW ~

BRACKET SELECTION TABLE

I-BEAM POST SIZE	BRACKET NO. 1		BRACKET NO. 2		BRACKET NO. 3	
	MIN. "L"	MAX. "L"	MIN. "L"	MAX. "L"	MIN. "L"	MAX. "L"
6"	12'-0"	29'-0"	9'-0"	12'-0"	0	9'-0"
8"	14'-0"	29'-0"	10'-0"	14'-0"	0	10'-0"
10"	16'-0"	29'-0"	11'-0"	16'-0"	0	11'-0"
12"	18'-0"	29'-0"	13'-0"	18'-0"	0	13'-0"
14"	19'-0"	29'-0"	14'-0"	19'-0"	0	14'-0"
16"	21'-0"	29'-0"	15'-0"	21'-0"	0	15'-0"
18"	23'-0"	29'-0"	16'-0"	23'-0"	0	16'-0"
21"	25'-0"	29'-0"	18'-0"	25'-0"	0	18'-0"

~ PICTORIAL VIEW ~



KENTUCKY
DEPARTMENT OF HIGHWAYS

**BREAKAWAY SIGN
SUPPORT SYSTEM
FOR TYPE C BEAM**

Contract ID 07042
5000056
6-6-2005
DA 156

SUBMITTED TO: DESIGN

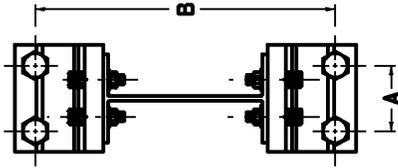
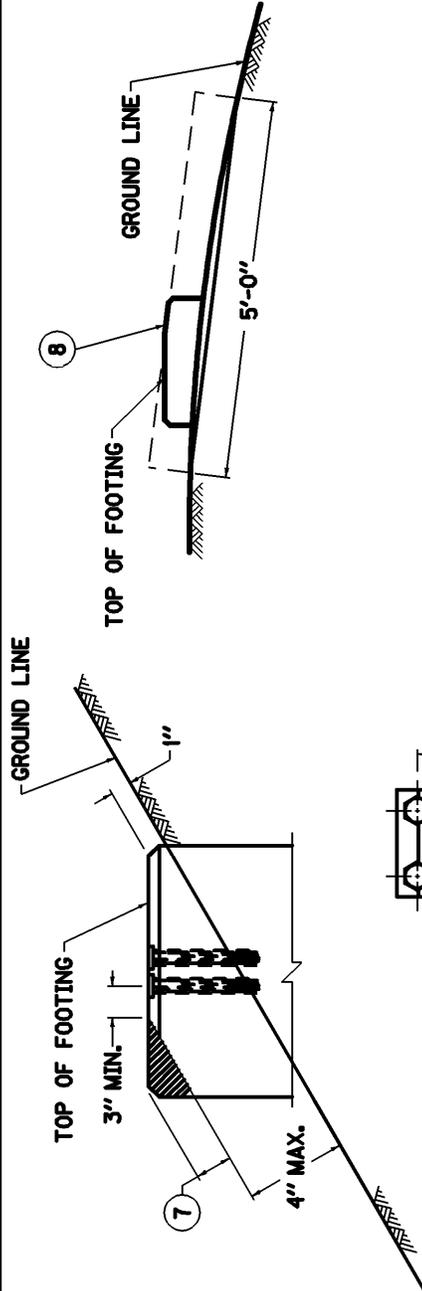
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FOOTING SELECTION TABLE

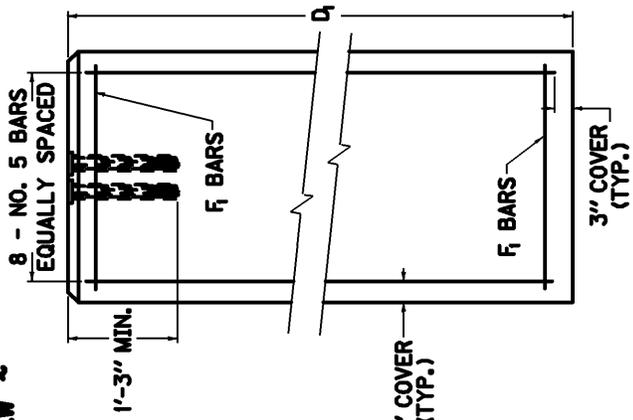
POST SIZE	L ₁ DIA.	D ₁ DEPTH	STEEL F. BARS		CONC. CUL YD.
			QTY	SIZE	
W6	2'-0"	5'-0"	5	#4	0.58
W8	2'-6"	7'-0"	7	#4	1.27
W10	3'-0"	8'-0"	8	#4	2.09
W12	3'-0"	8'-0"	8	#4	2.09
W14	3'-0"	9'-0"	9	#4	2.36
W16	3'-6"	9'-0"	9	#4	3.21
W18	3'-5"	9'-0"	9	#4	3.21
W21	4'-0"	9'-0"	9	#4	4.19

~NOTES~

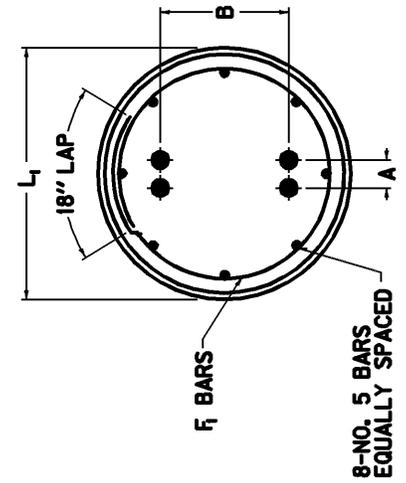
- ENTER FOOTING SELECTION TABLE WITH REQUIRED POST SIZE AND FIND REQUIRED FOOTING VALUES AS SHOWN IN DETAILS.
- THE ANCHOR SHALL BE 304 STAINLESS STEEL WITH 1053 STEEL ROD AND COIL.
- FORM TOP 1'-0" OF THE FOOTING.
- USE CLASS "A" CONCRETE IN ALL FOOTINGS.
- ACTUAL DIMENSIONS 'A' & 'B' SHOULD BE OBTAINED FROM THE MANUFACTURER OR MEASURED FROM THE ASSEMBLED BRACKET'S PRIOR TO PLACEMENT OF ANCHORS.
- TO INSURE PROPER SPACING AND ALIGNMENT OF ANCHORS, IT IS RECOMMENDED THAT ALL ANCHORS BE HELD IN PLACE BY A RIGID TEMPLATE WHILE THE CONCRETE IS PLACED AND CURED.
- FOOTING PROJECTIONS ABOVE GROUND LINE SHALL BE MINIMIZED. THE MAXIMUM PERMISSIBLE FOOTING PROJECTION SHALL BE 4" ON THE LOWER SLOPE SIDE. WHERE NECESSARY, THE SHADED AREA OF THE FOOTING SHALL BE REMOVED AND REINFORCEMENT SHALL BE BENT TO FIT.
- THE TOP OF THE FOOTING SHALL NOT PROJECT MORE THAN 4" ABOVE ANY 5'-0" CHORD ALIGNED PERPENDICULAR TO THE EDGE OF THE ROADWAY BETWEEN A POINT ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE OF THE SUPPORT.



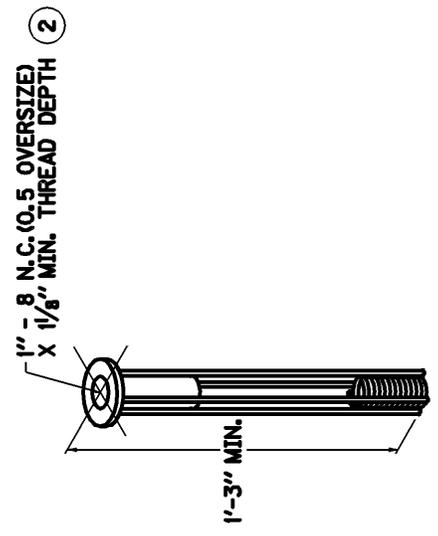
~ PLAN VIEW ~



~ SIDE VIEW ~



~ TOP VIEW ~



~ ANCHOR PICTORIAL VIEW ~

KENTUCKY
DEPARTMENT OF HIGHWAYS

**FOOTING DETAILS
FOR
TYPE C BEAM**

Contract ID 075042
Page 11 of 16
6-6-2005

TESTED APPROVED
SUBMITTED

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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ATTACHMENTS

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

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

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

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

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

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

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

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin,

age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

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

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

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

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

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics

shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

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

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

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

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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

a. Apprentices:

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

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

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable

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

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

b. Trainees:

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

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

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

c. Helpers:

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

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of

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

6. Withholding:

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

7. Overtime Requirements:

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

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any

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

V. STATEMENTS AND PAYROLLS

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

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

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

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

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

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

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

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

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

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

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which

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

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. Instructions for Certification - Lower Tier Covered Transactions:

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

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

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

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and

submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

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

**AN ACT OF THE KENTUCKY GENERAL ASSEMBLY
TO PREVENT DISCRIMINATION IN EMPLOYMENT**

**KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

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

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

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

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

provide apprenticeship or other training.

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

REVISED: 12-3-92

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (6) provides:

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

KRS 11A.040 (8) states:

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

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

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

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

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

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

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

LABORERS:

Pendleton County:

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

BASE RATE19.33
FRINGE BENEFITS9.18

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

BASE RATE19.58
FRINGE BENEFITS9.18

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

BASE RATE19.63
FRINGE BENEFITS9.18

GROUP 4 - Caisson Worker (free air), Cement Finisher, Environmental - Nuclear, Radiation, Toxic and Hazardous Waste - Levels A and B, Miner and Driller (free air), Tunnel Blaster and Tunnel Mucker (free air), Directional & Horizontal Boring, Air Track Driller (all types), Powderman & Blaster, Troxler & Concrete Tester if laborer is utilized.

BASE RATE20.23
FRINGE BENEFITS9.18

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

LABORERS: (continued)

Boone, Campbell and Kenton Counties:

Group 1

Asphalt Laborer, Carpenter Tender, Concrete Curing Applicator, Dump Man (Batch Truck), Guardrail And Fence Installer, Joint Setter, Laborer (Construction), Landscape Laborer, Highway Lighting Worker, Signalization Worker, Mesh Handlers And Placer, Right-Of-Way Laborer, Riprap Laborer And Grouter, Scaffold Erector, Seal Coating, Surface Treatment Or Road Mix Laborer, Sign Installer, Slurry Seal, Utility Man, Bridgeman, Handyman, Waterproofing Laborer, Flagperson, Hazardous Waste (Level D), Diver Tender, Zone Person & Traffic Control.

BASE RATE24.12
FRINGE BENEFITS6.70

GROUP 2

Skidsteer, Asphalt Raker, Concrete Puddler, Kettle Man (Pipeline), Machine Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Power Buggy or Power Wheelbarrow, Sheeting & Shoring Man, Surface Grinder Man, Plastic Fusing Machine Operator, Pug Mill Operator, & Vacuum Devices (wet or dry), Rodding Machine Operator, Diver, Screw Man or Paver, Screed Person, Water Blast, Hand Held Wand, Pumps 4" and under (gas, air or electric), Hazardous Waste (Level C), Air Track and Wagon Drill, Bottom Person, Cofferdam (below 25 ft. deep), Concrete Saw Person, cutting with Burning Torch, Form Setter, Hand Spiker (Railroad), Pipelayer, Tunnel Laborer (without air) & Caisson, Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning), Sandblaster Nozzleperson and Hazardous Waste (Level B).

BASE RATE24.29
FRINGE BENEFITS6.70

GROUP 3

Blaster, Mucker, Powder Person, Top Lander, Wrencher (Mechanical Joints and Utility Pipeline), Yarner, Hazardous Waste (Level A), Concrete Specialist, Concrete Crew in Tunnels (with air pressurized \$1.00 premium), Curb Setter & Cutter, Grade Checker, Utility Pipeline Tapper, Waterline, and Caulker.

BASE RATE24.62
FRINGE BENEFITS6.70

GROUP 4

Miner, Tunnel Laborer (with air-pressurized add \$1.00 to Base Rate) and Gunnite Nozzle Person.

BASE RATE25.07
FRINGE BENEFITS6.70

Signal person will receive the rate equal to the rate paid the labor classification for which he or she is signaling.

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

TEAMSTERS:

Drivers

BASE RATE15.85
FRINGE BENEFITS4.60

Euclid Wagon, End Dump, Low-Boy, Heavy Duty Equipment, Tractor-Trailer Combination & Drag.

BASE RATE16.29
FRINGE BENEFITS4.60

OPERATING ENGINEERS:

Master Mechanic

BASE RATE27.59
FRINGE BENEFITS 9.31

Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. Capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Horizontal Directional Drill (over 500,000 ft. lbs. thrust); Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; & Wheel Excavator

BASE RATE 27.34
FRINGE BENEFITS9.31

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

OPERATING ENGINEERS: (continued)

Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Hydro Milling Machine; Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications); Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); & Vermeer type Concrete Saw

BASE RATE27.22
FRINGE BENEFITS9.31

A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); & Welding Machines.

BASE RATE26.18
FRINGE BENEFITS 9.31

Backfiller; Ballast Re-locator; Bars, Joint & Mesh Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway) except Masonry); Finishing Machine; Fireperson, Floating Equipment (all types); Fork Lift (highway); Form Trencher; Hydro Hammer; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Power Brush Burner; Power Form Handling Equipment; Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Power Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); & Vibratory Compactor with Integral Power.

BASE RATE25.00
FRINGE BENEFITS 9.31

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

OPERATING ENGINEERS: (continued)

Compressor (Portable, Sewer, Heavy & Highway); Drum Fireperson (Asphalt); Generator; Masonry fork Lift; Inboard-Outboard Motor Boat Launch; Masonry Fork Lift; Oil Heater (asphalt plant); Oiler; Power Driven Heater; Power Sweeper & Scrubber; Pump (under 4" discharge); Signalperson; Tire Repairperson; & VAC/ALLS.

BASE RATE19.54
FRINGE BENEFITS9.31

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

These rates are listed pursuant to Kentucky Determination No. CR-05-IV HWY dated May 16, 2006 and/or Federal Decision No. KY20070028 dated February 9, 2007, modification #1 dated June 1, 2007 and modification #2 dated July 6, 2007.

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.

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.

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

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

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

OVERTIME:

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

Steve Waddle, Director
Division of Construction Procurement
Frankfort, Kentucky 40622

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

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
11.0%	6.9%

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

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

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

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

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

PART IV
INSURANCE

INSURANCE

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

1. Contractor's Public Liability Insurance not less than \$100,000.00 for damages arising out of bodily injuries to or death to one person. Not less than \$300,000.00 for damages arising out of bodily injuries to or death to two or more persons.
2. Contractor's Property Damages Liability Insurance. Not less than \$100,000.00 for all damages arising out of injury or destruction of property in any one accident. Not less than \$300,000.00 for all damages during the policy period.
3. Contractor's Protective Public Liability and Property Damage Insurance. The contractor shall furnish evidence with respect to operations performed for him by subcontractors that he carries in his own behalf for the above stipulated amounts.
4. The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a. "policy contains no deductible clauses."
 - b. "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
5. WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

PART V

STATEMENT OF INCOMPLETE WORK

STATEMENT OF INCOMPLETED WORK

All active prime contracts must be reported. This includes prime contracts with public and private owners and joint-ventured contracts. The names of the joint venturers must be shown when reporting these projects. A machine or typed listing reporting the status of each contract is acceptable when attached to this report; however, the total amounts on the itemized listing must be reported in the space provided below:

CONTRACT WITH	PROJECT IDENTIFICATION	PRIME CONTRACT AMOUNT	EARNINGS THROUGH LAST APPROVED ESTIMATE	TOTAL AMOUNT OF WORK REMAINING
TOTAL (Attach Summary if not itemized above)		\$	\$	\$

PART VI
BID ITEMS

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 1

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
		ROADWAY			.	.
0010	00001	DGA BASE	30,247.00	TON	.	.
0020	00001	DGA BASE	10,242.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0030	00078	CRUSHED AGGREGATE SIZE NO 2	10,781.00	TON	.	.
0040	00078	CRUSHED AGGREGATE SIZE NO 2	82.00	TON	.	.
		PERFORATED PIPE DRAINAGE				
0050	00100	ASPHALT SEAL AGGREGATE	388.00	TON	.	.
0060	00205	CL3 ASPH BASE 1.50D PG64-22	2,021.00	TON	.	.
0070	00205	CL3 ASPH BASE 1.50D PG64-22	26.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0080	00208	CL4 ASPH BASE 1.50D PG64-22	11,415.00	TON	.	.
0090	00208	CL4 ASPH BASE 1.50D PG64-22	45.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0100	00214	CL3 ASPH BASE 1.00D PG64-22	433.00	TON	.	.
0110	00214	CL3 ASPH BASE 1.00D PG64-22	12,627.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0120	00219	CL4 ASPH BASE 1.00D PG76-22	2,391.00	TON	.	.
0130	00219	CL4 ASPH BASE 1.00D PG76-22	59.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0140	00291	EMULSIFIED ASPHALT RS-2	46.00	TON	.	.
0150	00338	ASPHALT PLACEMENT WITH MTV	14,797.00	TON	.	.
0160	00339	CL3 ASPH SURF 0.38D PG64-22	5,068.00	TON	.	.
0170	00339	CL3 ASPH SURF 0.38D PG64-22	21.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0180	00342	CL4 ASPH SURF 0.38A PG76-22	992.00	TON	.	.
0190	00342	CL4 ASPH SURF 0.38A PG76-22	36.00	TON	.	.
		CROSSOVER AND SLIP RAMP				
0200	00462	CULVERT PIPE-18 INCH	68.00	LF	.	.
0210	01000	PERFORATED PIPE-4 INCH	18,061.00	LF	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 2

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
0220	01001	PERFORATED PIPE-6 INCH	19,968.00	LF	.	.
0230	01010	NON-PERFORATED PIPE-4 INCH	1,277.00	LF	.	.
0240	01011	NON-PERFORATED PIPE-6 INCH	1,695.00	LF	.	.
0250	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS	.	.
0260	01020	PERF PIPE HEADWALL TY 1-4 INCH	30.00	EACH	.	.
0270	01021	PERF PIPE HEADWALL TY 1-6 INCH	11.00	EACH	.	.
0280	01028	PERF PIPE HEADWALL TY 3-4 INCH	7.00	EACH	.	.
0290	01032	PERF PIPE HEADWALL TY 4-4 INCH	29.00	EACH	.	.
0300	01033	PERF PIPE HEADWALL TY 4-6 INCH	5.00	EACH	.	.
0310	01310	REMOVE PIPE	68.00	LF	.	.
0320	01433	SLOPED BOX OUTLET TYPE 1-18 IN	2.00	EACH	.	.
0330	01511	DROP BOX INLET TYPE 5D	1.00	EACH	.	.
0340	01630	REMOVE MEDIAN BOX INLET	1.00	EACH	.	.
0350	01633	RECONSTRUCT MEDIAN BOX INLET	2.00	EACH	.	.
0360	01691	FLUME INLET TYPE 2	1.00	EACH	.	.
0370	01719	ADJUST INLET	2.00	EACH	.	.
0380	01741	CORED HOLE DRAINAGE BOX CON-6 INCH	30.00	EACH	.	.
0390	01845	ISLAND INTEGRAL CURB	576.00	LF	.	.
0400	01982	DELINEATOR FOR GUARDRAIL-WHITE	255.00	EACH	.	.
0410	01983	DELINEATOR FOR GUARDRAIL-YELLOW	10.00	EACH	.	.
0420	01984	DELINEATOR FOR BARRIER-WHITE	16.00	EACH	.	.
0430	01985	DELINEATOR FOR BARRIER-YELLOW	78.00	EACH	.	.
0440	02003	RELOCATE TEMP CONC MED BARRIER	4,440.00	LF	.	.
0450	02014	BARRICADE-TYPE III	10.00	EACH	.	.
0460	02058	REMOVE PCC PAVEMENT	34,749.00	SQYD	.	.
0470	02071	JPC PAVEMENT-11 INCH	82,283.00	SQYD	.	.
0480	02072	JPC PAVEMENT-11 INCH SHLD	41,291.00	SQYD	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 3

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
0490	02091	REMOVE PAVEMENT	864.00	SQYD	.	.
0500	02165	REMOVE PAVED DITCH	1,706.00	SQYD	.	.
0510	02200	ROADWAY EXCAVATION	15,560.00	CUYD	.	.
0520	02237	DITCHING	10,000.00	LF	.	.
0530	02351	GUARDRAIL-STEEL W BEAM-S FACE	12,212.50	LF	.	.
0540	02352	GUARDRAIL-STEEL W BEAM-D FACE	275.00	LF	.	.
0550	02360	GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH	.	.
0560	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	5.00	EACH	.	.
0570	02365	CRASH CUSHION TYPE IX-A	2.00	EACH	.	.
0580	02367	GUARDRAIL END TREATMENT TYPE 1	8.00	EACH	.	.
0590	02369	GUARDRAIL END TREATMENT TYPE 2A	9.00	EACH	.	.
0600	02373	GUARDRAIL END TREATMENT TYPE 3	1.00	EACH	.	.
0610	02381	REMOVE GUARDRAIL	13,044.00	LF	.	.
0620	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A	3.00	EACH	.	.
0630	02482	CHANNEL LINING CLASS IA	232.00	TON	.	.
0640	02484	CHANNEL LINING CLASS III	4,579.00	TON	.	.
0650	02562	SIGNS	3,160.00	SQFT	.	.
0660	02599	FABRIC-GEOTEXTILE TYPE IV	43,815.00	SQYD	.	.
0670	02625	REMOVE HEADWALL	2.00	EACH	.	.
0680	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS	.	.
0690	02653	LANE CLOSURE	8.00	EACH	.	.
0700	02654	TRUCK MOUNTED ATTENUATOR	2.00	EACH	.	.
0710	02671	VAR MESSAGE SIGN-PORT 3 LINE	4.00	EACH	.	.
0720	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS	.	.
0730	02677	ASPH PAVE MILLING & TEXTURING	2,675.00	TON	.	.
0740	02677	ASPH PAVE MILLING & TEXTURING	277.00	TON	.	.
		CROSSOVER AND SLIP RAMP				

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 4

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
0750	02695	RUMBLE STRIPS TYPE 3	2,096.00	LF	.	.
0760	02701	TEMPORARY SILT FENCE	3,000.00	LF	.	.
0770	02704	SILT TRAP TYPE B	10.00	EACH	.	.
0780	02707	CLEAN SILT TRAP TYPE B	10.00	EACH	.	.
0790	02709	CLEAN TEMPORARY SILT FENCE	3,000.00	LF	.	.
0800	02726	STAKING	1.00	LS	.	.
0810	02775	FLASHING ARROW	5.00	EACH	.	.
0820	02929	CRASH CUSHION TYPE IX	1.00	EACH	.	.
0830	04793	CONDUIT-1 1/4 INCH	62.00	LF	.	.
0840	04795	CONDUIT-2 INCH	24.00	LF	.	.
0850	04820	TRENCHING AND BACKFILLING	64.00	LF	.	.
0860	04829	PIEZOELECTRIC SENSOR	4.00	EACH	.	.
0870	04830	LOOP WIRE	1,448.00	LF	.	.
0880	04895	LOOP SAW SLOT AND FILL	416.00	LF	.	.
0890	05950	EROSION CONTROL BLANKET	75,270.00	SQYD	.	.
0900	05952	TEMPORARY MULCH	15,000.00	SQYD	.	.
0910	05985	SEEDING AND PROTECTION	70,850.00	SQYD	.	.
0920	06417	FLEXIBLE DELINEATOR POST-W	188.00	EACH	.	.
0930	06418	FLEXIBLE DELINEATOR POST-Y	87.00	EACH	.	.
0940	06511	PAVE STRIPING-TEMP PAINT-6 IN	84,700.00	LF	.	.
0950	06549	PAVE STRIPING-TEMP REM TAPE-B	5,000.00	LF	.	.
0960	06550	PAVE STRIPING-TEMP REM TAPE-W	13,547.00	LF	.	.
0970	06551	PAVE STRIPING-TEMP REM TAPE-Y	13,547.00	LF	.	.
0980	06556	PAVE STRIPING-DUR TY 1-6 IN W	37,962.00	LF	.	.
0990	06557	PAVE STRIPING-DUR TY 1-6 IN Y	28,628.00	LF	.	.
1000	06568	PAVE MARKING-THERMO STOP BAR-24IN	68.00	LF	.	.
1010	06585	PAVEMENT MARKER TY IVA-MW TEMP	3,100.00	EACH	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 5

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
1020	06586	PAVEMENT MARKER TY IVA-MY TEMP	200.00	EACH	.	.
1030	06592	PAVEMENT MARKER TYPE V-B W/R	396.00	EACH	.	.
1040	06593	PAVEMENT MARKER TYPE V-B Y/R	127.00	EACH	.	.
1050	06600	REMOVE PAVEMENT MARKER TYPE V	151.00	EACH	.	.
1060	08100	CONCRETE-CLASS A	4.35	CUYD	.	.
1070	08150	STEEL REINFORCEMENT	8.00	LB	.	.
1080	10000NS	LOT PAY ADJUSTMENT	79,528.00	DOLL	1.0000	79,528.00
1090	10020NS	FUEL ADJUSTMENT	49,572.00	DOLL	1.0000	49,572.00
1100	10030NS	ASPHALT ADJUSTMENT	71,575.00	DOLL	1.0000	71,575.00
1110	20192ED	REM ASPHALT WEDGE CURB	1,629.00	LF	.	.
1120	20195ED	REMOVE FLUME	4.00	EACH	.	.
1130	20259ED	TEMPORARY MEDIAN CROSSOVER #1	1.00	EACH	.	.
1140	20259ED	TEMPORARY MEDIAN CROSSOVER #2	1.00	EACH	.	.
1150	20259ED	TEMPORARY MEDIAN CROSSOVER #3	1.00	EACH	.	.
1160	20259ED	TEMPORARY MEDIAN CROSSOVER #4	1.00	EACH	.	.
1170	20362ES403	SHOULDER RUMBLE STRIPS-SAWED	7,068.00	LF	.	.
1180	20391ES835	JUNCTION BOX TYPE A	2.00	EACH	.	.
1190	20409ED	SLIP RAMP 1	1.00	LS	.	.
1200	20409ED	SLIP RAMP 2	1.00	LS	.	.
1210	20409ED	SLIP RAMP 3	1.00	LS	.	.
1220	20409ED	SLIP RAMP 4	1.00	LS	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 6

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
1230	20468EC	JUNCTION BOX-10 X 8 X 4	2.00	EACH	.	.
1240	20469ES403	CL3 ASPH SURF 0.38B PG76-22	4,630.00	TON	.	.
1250	20496NS843	SILT TRAP TYPE C	35.00	EACH	.	.
1260	20497NS843	CLEAN SILT TRAP TYPE C	35.00	EACH	.	.
1270	20550ND	SAWCUT PAVEMENT	79,864.00	LF	.	.
1280	21132NC	INSTALL PROJECT ID SIGN (72 IN X 120 IN)	2.00	EACH	.	.
1290	21339ED	PAVE STRIPING PERM-6 IN HD21A-WHITE	4,816.00	LF	.	.
1300	21340ED	PAVE STRIPING PERM-6 IN HD21A-YELLOW	3,533.00	LF	.	.
1310	21433ES214	FABRIC GEOTEXTILE TY IV FOR PIPE	118.00	SQYD	2.0000	236.00
1320	21870EN	DISPOSE OF TY 9M TEMP CONC BARRIER WALL	26,010.00	LF	.	.
1330	22402EN	MOVEABLE CONCRETE TRAFFIC BARRIER	13,440.00	LF	.	.
1340	22632NN	TEMPORARY IMPACT ATTENUATOR	2.00	EACH	.	.
		BRIDGE			.	.
1350	02220	FLOWABLE FILL	1,860.00	CUYD	.	.
1360	03299	ARMORED EDGE FOR CONCRETE	164.00	LF	.	.
1370	08435	JACK & SUPPORT BRIDGE SPAN EASTBOUND	1.00	LS	.	.
1380	08435	JACK & SUPPORT BRIDGE SPAN WESTBOUND	1.00	LS	.	.
1390	08469	EXPANSION DAM-1.5 IN NEOPRENE	92.00	LF	.	.
1400	08470	EXPANSION DAM-2 INCH NEOPRENE	81.00	LF	.	.
1410	08510	REM EPOXY BIT FOREIGN OVERLAY	1,707.00	SQYD	.	.
1420	08534	CONCRETE OVERLAY-LATEX	44.70	CUYD	.	.
1430	08549	BLAST CLEANING	1,074.00	SQYD	.	.
1440	08550	HYDRODEMOLITION	1,074.00	SQYD	.	.
1450	20172ED	CONCRETE BARRIER	451.00	LF	.	.
1460	20185ED	REPLACE WING BARRIER	394.00	LF	.	.

TRANSPORTATION CABINET

Department of Highways

FRANKFORT, KY 40622

Sheet No: 7

Contract ID: 07-1042

BOONE COUNTY

IM 275-9 (106)

Letting: 7/27/07

THE BIDDER MUST MAKE THE EXTENSIONS AND ADDITIONS
SHOWING TOTAL AMOUNT BID USING FIGURES ONLY

Item No.	Code No.	Item	Approximate Quantity	Unit	Unit Price Dollars	Amount Dollars
1470	20186ED	REINFORCED CONCRETE SLAB	633.00	SQYD	.	.
		MOBILIZATION AND DEMOBILIZATION			.	.
1480	02568	MOBILIZATION	1.00	LS	.	.
1490	02569	DEMOBILIZATION	1.00	LS	.	.
TOTAL BID						\$.

PART VII
CERTIFICATIONS

PROVISIONS RELATIVE TO SENATE BILL 258 (1994)

During the performance of the contract, the contractor agrees to comply with applicable provisions of:

1. KRS 136 Corporation and Utility Taxes
2. KRS 139 Sale and Use Taxes
3. KRS 141 Income Taxes
4. KRS 337 Wages and Hours
5. KRS 338 Occupational Safety and Health of Employees
6. KRS 341 Unemployment Compensation
7. KRS 342 Workers Compensation

Any final determinations of a violation by the contractor within the previous five (5) years pursuant to the applicable statutes above are revealed as follows:

NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY

COUNTY _____

PROJECT NO. _____

I, _____, _____, under
(Name of officer signing certification) (Title)

penalty of perjury under the laws of the United States, do hereby certify that

(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

REVISED: 8-23-89

NON-COLLUSION CERTIFICATION

COMMONWEALTH OF KENTUCKY

COUNTY _____

PROJECT NO. _____

I, _____, _____, under
(Name of officer signing certification) (Title)

penalty of perjury under the laws of the United States, do hereby certify that

(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

REVISED: 8-23-89

CERTIFICATION OF ORGANIZATION(S)

COMMONWEALTH OF KENTUCKY

COUNTY _____

PROJECT NO. _____

I, _____, _____, under penalty
(President or Authorized Official of Bidder) (Title)

perjury under the laws of the United States, do hereby certify that, except as noted below,

(Insert name of individual, Joint Venture, Co-Partnership or Corporation Submitting Bid)

any person associated therewith in the capacity of (owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the Administration of Federal Funds): is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgement rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

Please list below any exceptions to the foregoing, to whom it applies, initiating agency and dates of action.

Exceptions: _____

(Signature)

(Title)

CERTIFICATION OF PERFORMANCE

Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports.

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the Former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(Company)

By: _____

(Title)

Date: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with the contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders of their implementing regulation.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

CERTIFICATION FOR FEDERAL-AID CONTRACT

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agent.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

(Insert name of Individual, Joint Venture, Co-partnership, or Corporation submitting bid)

(Signature)

(Title)

CERTIFICATION OF BID PROPOSAL / DBE

We (I) propose to furnish all labor, equipment and materials necessary to construct and/or improve the subject project in accordance with the plans, the Transportation Cabinet's Standard Specifications for Road and Bridge Construction, current edition, special provisions, notes applicable to the project as indicated herein and all addenda issued on this project subsequent to purchase of proposal.

We (I) attach a bid proposal guaranty as provided in the special provisions in an amount not less than 5% of the total bid. We agree to execute a contract in accordance with this bid proposal within 15 calendar days after the receipt of the notice of award for the project.

We (I) have examined the site of proposed work, project plans, specifications, special provisions, and notes applicable to the project referred to herein. We understand that the quantities shown herein are estimated quantities subject to increase or decrease as provided in the specifications.

We (I) acknowledge receipt of all addendum(s) (if applicable) and have made the necessary revisions to the bid proposal. We have considered all addendum(s) in the calculation of the submitted bid and applied the updated bid items, which are included.

- No Addendum(s) have been posted

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

Name of Contracting Firm

BY: _____
Authorized Agent (Signature) Title

Address City State Zip Code

Telephone Number

When two or more organizations bid as a joint venture, enter names of each organization and an authorized agent for each organization must sign above.