CALL NO. 201

CONTRACT ID. 091038

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER 056GR09D015

DESCRIPTION WARNOCK INTERCHANGE (I-65) AND EASTERN PARKWAY (US 60A)

WORK TYPE GRADE & DRAIN WITH ASPHALT SURFACE

PRIMARY COMPLETION DATE 12/31/2009

LETTING DATE: July 24, 2009

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 24, 2009. Bids will be publicly opened and read at 10:00 AM EASTERN DAYLIGHT TIME.

ROAD AND BRIDGE PLANS

DBE CERTIFICATION REQUIRED - 4.90%

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

TABLE OF CONTENTS

PART I

SCOPE OF WORK

CONTRACT ID - 091038 ADMINISTRATIVE DISTRICT - 05

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - JEFFERSON
056GR09D015 WARNOCK INTERCHANGE (I-65) AND EASTERN PARKWAY (US 60A)

COUNTY - JEFFERSON PES - DE05600650938
HSIP 3001(269)
WARNOCK INTERCHANGE (I-65) NORTHBOUND I-65/WARNOCK RAMP MODIFICATIONS. GRADE & DRAIN WITH ASPHALT SURFACE. SYP NO. 05-00964.10.
GEOGRAPHIC COORDINATES LATITUDE 38^12'51" LONGITUDE 85^45'08"

COUNTY - JEFFERSON PES - DE056060A0938
BRO 8800(005)
EASTERN PARKWAY (US 60A) BRIDGE REHAB ON US 60A EASTERN PKWY. OVER CSX RR AND FLOYD STREET NEAR U OF L 0.1 MILE WEST OF I-65 UNDERPASS. BRIDGE REPLACEMENT. SYP NO. 05-01050.00.
GEOGRAPHIC COORDINATES LATITUDE 38^12'47" LONGITUDE 85^45'21"

COUNTY - JEFFERSON PES - DE056060A0939
TE ARRA 3001(339)
EASTERN PARKWAY (US 60A) TRAFFIC AND SAFTEY IMPROVEMENTS FOR THE EASTERN PARKWAY CORRIDOR NEAR THIRD STREET. ASPHALT PAVEMENT & ROADWAY REHABILITATIO. SYP NO. 05-00397.00.
GEOGRAPHIC COORDINATES LATITUDE 38^12'05" LONGITUDE 85^45'05"

COMPLETION DATE(S):
COMPLETION DATE - December 31, 2009
APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

01/01/2009

FEDERAL CONTRACT NOTES

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

102.02 Current Capacity Rating
102.08 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.

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

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

1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
2. Description of the work each is to perform including the work item , unit, quantity, unit price and total amount of the work to be performed by the individual DBE;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows;
    a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
        - The entire expenditure paid to a DBE manufacturer;
        - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
        - the amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel,

facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;

4. Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

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

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

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

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

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

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

9. Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
10. Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal; and
11. Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

- Disallow credit toward the DBE goal;
- Withholding progress payments;

- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

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

CONTRACTOR REPORTING

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

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

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at:
http://transportation.ky.gov/construction/forms/DBEcheck.xls

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

DEFAULT OR DECERTIFICATION OF THE DBE

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

Kentucky Transportation Cabinet
General DBE Participation Plan*

06/13/2005

Letting Date: _____ Contract ID Number _____ Project Number: _____

Designated DBE Goal % _____

Prime Contractor _____ DBE Company Name _____

Address _____

City, State, Zip _____

Federal Tax ID _____

Type of DBE Work: (all applicable)

_____ Supplier _____ Subcontractor _____ Manufacturer _____ Engineering _____ Other _____

Itemized worked to be performed by DBE Company:

Supplier 60% Y/N	Item Number	Description of Participation Item	Unit of Measure	Quantity to be Performed by DBE	DBE Unit Price **	Dollar Amount (based on DBE
					Total other Page	

**Note: 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment

Total This DBE

Total Bid

% Credited toward Goal, this DBE

Prime Contractor's Signature: _____ Title: _____ Date: _____

DBE Participant Signature: _____ Title: _____ Date: _____

***This form must be completed for each DBE participant**

KYTC
DBE Payments

updated 2/28/08

Prime Contractor	Cont-ID

DBE Contractor	CHECK #

PAYMENT DATE	Amount of Payment

Use the section below to show multiple payments using the same check

Cont-ID	Amount	Cont-ID	Amount

Comments:

attach copy of check here

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

to be Submitted within 7 days of receipt of payment from KYTC

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.

OPTION A

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

OPTION B

The Contractor is advised that the compaction of asphalt mixtures furnished to this project will be accepted by OPTION B in accordance with Section 402 and Section 403 of the current Standard Specification.

5.397.00

SUPPLEMENTARY SPECIFICATIONS

KTC - EASTERN PARKWAY ROAD IMPROVEMENTS
LWC PROJECT 09941-15

PROJECT SUMMARY

The referenced project consists of the relocation of *two (2) fire hydrants*, relocation of an *8-inch fire service*, relocation of a *4-inch domestic service*, and installation of a new *4-inch domestic service*.

SCOPE OF WORK

A. Relocate two (2) fire hydrants located at approximate stations 11+00 and 17+25 of the Plans.

B. Relocate an 8-inch fire service meter vault along the south side of Eastern Parkway in front on Ernst Hall at approximate station 17+35 of the plans. This work includes installation of a new meter vault, a new detector check valve, and installing +/- 40 lineal feet of DPW water main to tie in the supply and discharge side of the new meter.

C. Relocate and install a new 4-inch domestic service meter vault along the north side of Eastern Parkway in front of the Natural Science building to the south side in front of Ernst hall at approximate station 17+50 of the plans. This work includes removal of the existing meter vault, cutting and plugging the existing 6-inch cast iron service line, installing one (1) 6"x6" tee on an existing main, one (1) 6-inch gate valve, +/- 90 lineal feet of 6-inch DPW water main, a 4-inch domestic service meter vault, and tie in to existing 6-inch plumbing on the discharge side of the new meter.

D. Install new 4-inch domestic service meter vault in front of the Natural Science building at approximate station 17+47 of the plans. This work includes installing one (1) 6"x6" tee on an existing main, one (1) 6-inch gate valve, a 4-inch domestic service meter vault, +/- 40 lineal feet of 6-inch DPW water main, +/- 40 lineal feet of 2-inch copper service line, tie in to the existing 6-inch domestic service line and tie in to the existing 2-inch copper service line.

GENERAL INFORMATION

C. Unless otherwise indicated on the project drawings or modified by these supplementary specifications, all applicable provisions of the "Louisville Water

Company Technical Specifications and Standard Drawings for Pipeline Construction" (2008 Edition) shall govern work on this project.

Excavation on this project shall be unclassified.

Rock shall be removed using mechanical methods (backhoe, hoe ram, or rock trenching machine). Blasting shall not be permitted.

All pipe and appurtenances will be supplied by the Louisville Water Co. Contractor shall provide labor for installation.

GATE VALVES

D. Attached to these Supplementary Specifications is a list of existing valves that may need to be used for shut-offs or as back-up for shut-offs. A copy of the valve summary report, which displays valve location and other valve information, is also provided.

In accordance with Section 1.1 of the Technical Specifications, the designated valves shall be located and inspected by the contractor prior to the start of the project, and appropriate action taken to correct the problem(s) prior to start of the construction work. Unit costs shall be as submitted by the Contractor in the BIDDERS PROPOSAL form. Except in cases of emergency, the Contractor shall not operate any valve without direct supervision of the LWC Project Manager or Company Inspector.

TRAFFIC CONTROL

E. Traffic control shall be provided by the Contractor in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).

F. The Contractor shall submit a traffic control plan to the KTC. Unless specifically approved by the permitting agencies, all roadways (including side streets) shall remain open, with traffic maintained and controlled in a safe manner.

G. Outside the designated work hours, all travel lanes shall be temporarily restored and reopened to traffic, and all construction vehicles, equipment, and personnel removed from the roadway or as permitted by KTC specifications.

H. Refer to KTC specifications regarding specific traffic control signage referencing lane blockages, flaggers, etc.

WORK SCHEDULE

I. LWC observes the following holidays; New Years Day, Martin Luther King Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving (Thursday and Friday), Christmas Eve, and Christmas Day. Work shall not be performed on any of these holidays without prior approval from the LWC.

J. Work hours shall be per Kentucky Transportation Cabinet permit requirements.

K. The Contractor shall anticipate the need to work on weekends and nights to complete tie-ins. All such work will be considered incidental to the project and no additional compensation will be provided. As with holidays and any work planned for weekends, this shall be pre-approved by the LWC.

L. In the case of an emergency, the Contractor shall immediately notify the LWC Construction Inspector, Radio Room, and Customer Service. Prior to the actual shut-off, an attempt shall also be made to contact each customer (door-to-door) to alert customers of the emergency situation and the need to shut-off the main.

PIPELINE CONSTRUCTION

M. Prior to the start of any work at the site (including saw-cutting), the Contractor and LWC Construction Inspector shall review the proposed pipeline alignment with respect to the utility locations marked by BUD, and other existing site improvements.

Field modifications to the proposed pipeline alignment may be necessary to avoid or minimize the effects of these potential conflicts. To avoid potential conflicts with existing utilities located perpendicular and/or parallel to the proposed main, the Contractor should anticipate the need to use offsets, bends and fittings when installing the new main, and for large service connections. The Contractor will be compensated in accordance with the supplementary unit prices for any additional pipeline footage (horizontal or vertical) installed to avoid obstructions, or other site improvements.

N. Standard burial depth for new water mains is 42 inches, as measured from the top of ground to the top of the newly installed pipe. While the Contractor is expected to adhere to this standard burial depth requirement at all times, it is understood that revisions to the burial depth will be necessary when the installation of mains and large services conflict with existing utilities and other site improvements. With prior notification and approval from the LWC Construction Inspector, the depth of burial may be reduced to a minimum of 30 inches, or increased to a maximum of 72 inches, for short durations (20 feet or less) to avoid these conflicts. A situation

requiring a depth of burial outside these maximum and minimum limits or of a longer duration shall be approved by the Chief Engineer of the Louisville Water Co.

The Contractor is cautioned that OSHA trench safety standards apply to all excavations on this project.

O. Unless otherwise specified or approved by the Project Manager or the LWC Construction Inspector, all other pipe replacement work in this project scope shall be constructed with LWC-supplied Pressure Class 350 ductile iron pipe using traditional trenching techniques. All new ductile iron pipe and fittings shall be encapsulated in two layers of blue polywrap.

Care shall be exercised while handling pipe during wrapping to ensure that the asphalt coating or cement lining on the pipe is not damaged or disturbed. Forklifts or other material handling equipment shall not be inserted into the pipe unless the inserted equipment is protected with a non-abrasive material (cardboard tubing, etc).

Polywrap shall be thoroughly inspected for cuts, rips or tears prior to burial. Small defects may be repaired with polytape. Larger tears and imperfections shall be covered with an additional layer of polywrap.

P. The type, size and condition of the existing pipe shall be verified prior to completing tie-ins. When the existing pipe is other than indicated on the Project Plans, the LWC Construction Inspector or Project Manager shall be contacted immediately to assess the need for revising the tie-in location. The Contractor shall be compensated in accordance with the supplementary unit prices for any additional pipeline installed to revise the tie-in location.

TRENCH CONSTRUCTION

Q. Pipeline bedding and initial backfill shall consist of DGA, pit-run sand or Manufactured sand selected, placed, and compacted in accordance with Section 7 of the Technical Specifications and Standard Drawing No. 4300 – Common Backfill and Lawn Restoration.

R. When under *pavement in Eastern Parkway*, the final backfill material shall be selected, placed and compacted in accordance with section 7 of the Technical Specifications and Standard Drawing No. 4000 – State of Kentucky Backfill and Paving Restoration

When under *grassed areas*, the final backfill may consist of on-site excavated material, provided the material is free of objectionable constituents such as large rock, asphalt, concrete, organic material, and demolition debris.

ACCEPTANCE TESTING

S. Filling and disinfecting of all new water mains shall be accomplished in accordance with Section 8.2 of the Technical Specifications.

T. Disinfection of all new mains shall be accomplished in accordance with Section 8.2.2 of the Technical Specifications. The contractor shall supply granular calcium hypochlorite (HTH) or sodium hypochlorite as needed.

Filling of the water main shall be done in accordance with Section 8.2.1 of the Technical Specifications.

U. A sanitary sewer system is in place within the project area for the discharge of hyperchlorinated and potable water associated with these operations. Refer to Section 8.4 of the Technical Specifications. An Unusual Discharge Request (UDR) will be requested from MSD by the Project Manager for this project. Discharge into the MSD system shall comply with the flow requirements established by MSD. A copy of the approved UDR will be distributed to the LWC Construction Inspector and Contractor prior to commencing construction.

V. Pressure and leakage testing of the new water main shall be performed in accordance with Section 8.5 of the Technical Specifications.

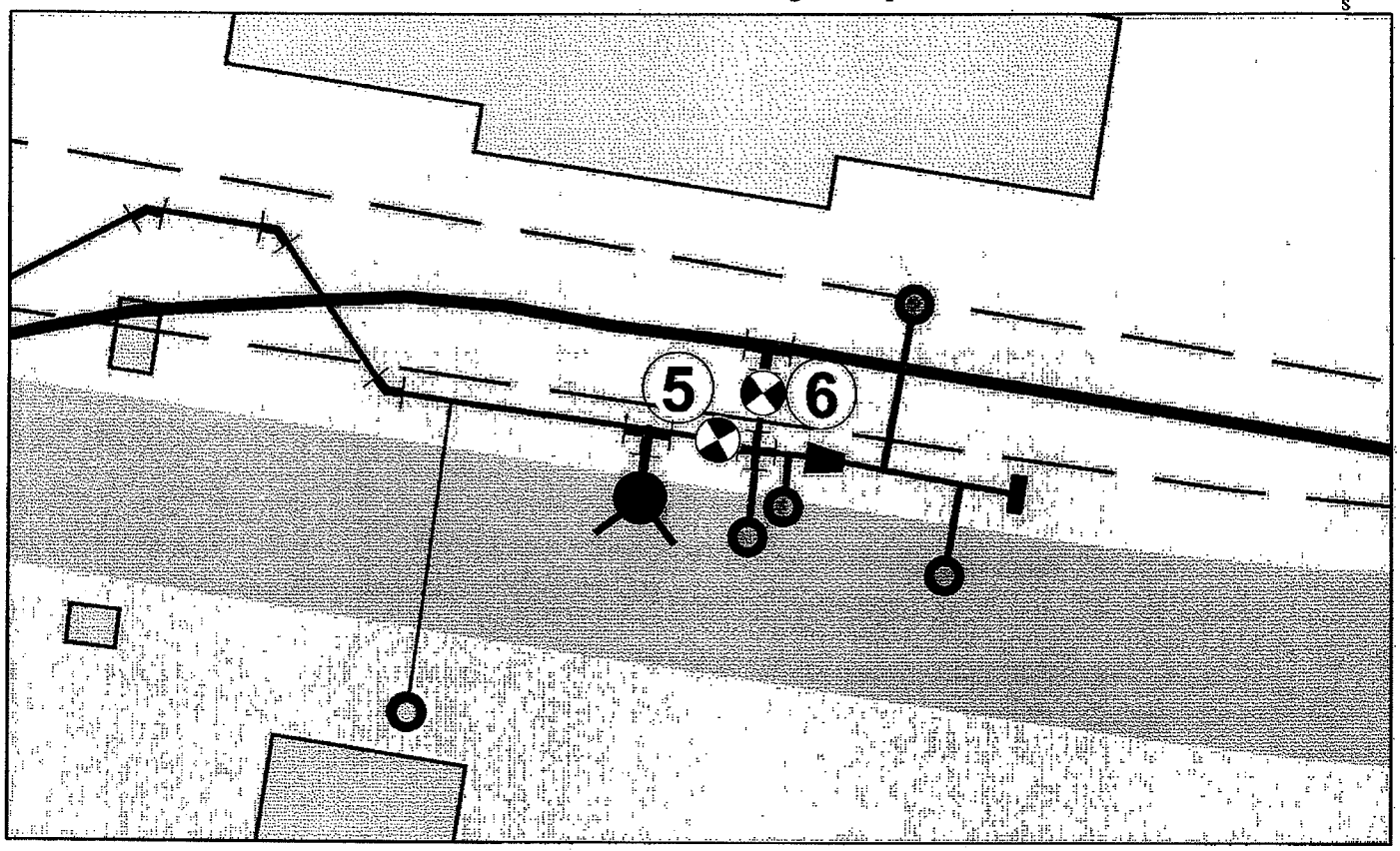
RESTORATION

W. Refer to KTC specifications for roadway restoration.

POST CONSTRUCTION

X. All in-line and service valves installed and/or operated during the completion of this project shall be inspected after construction to verify that all valves used by the Contractor are left in the proper operating position. Unless otherwise noted, or directed, all gates shall be left open.

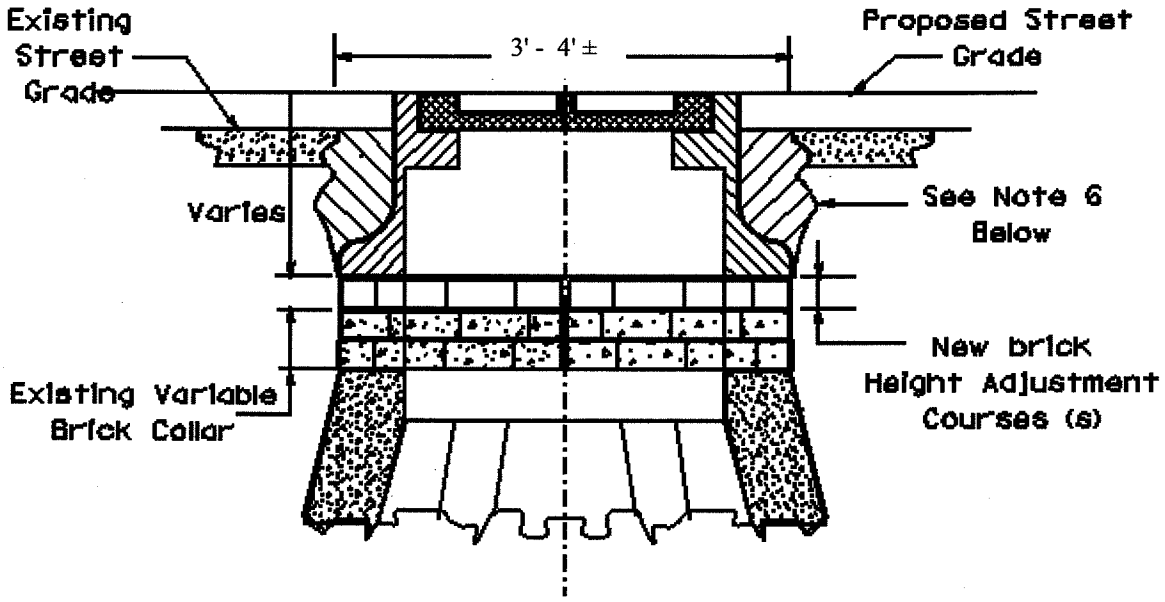
Louisville Water Company
Valve Summary Report



System Valve

#	E-W Street	N-S Street	Measurement1	Measurement2	Facility Id	Valve Key	Size	Type	Turns	Valve Mfg
5	Eastern Pkwy	Bet 3Rd St & Brook St	53' N-C/L Eastern Pkwy	16' E-C/L Ent To Ul Speed Sch	Sv000001642	035175001	12	G	40	American Darling
6	Eastern Pkwy	Bet 3Rd St & Brook St	32' N-Ncl Eastern Pkwy	662' W-Wcl Brook St	Sv000035021	035175002	8	G		

SPECIAL NOTE FOR MANHOLE ADJUSTMENT
LOUISVILLE MSD



NOT TO SCALE

CONSTRUCTION NOTES:

1. All manhole frame or catch basin frame height adjustment shall be subject to field inspection by MSD and shall be subject to correction as directed by the Engineer at no additional cost to the Kentucky Transportation Cabinet.

2. Any damaged frame, grate or cover discovered by the contractor shall be reported to MSD's inspector and replaced. Replacement hardware items shall be obtained by the Contractor from MSD's Yard, 151 Cabel Street, upon presentation of an MSD inspector validated Stores Requisition and exchange of the damaged hardware items.

3. All materials shall conform to MSD Technical Specifications, which are on file available to the Contractor at MSD's Engineering Division Office, 400 South Sixth Street, Louisville, KY 40202.

4. All workmanship shall be first class and in conformity with MSD Technical Specifications.

5. No wood shims or blocks shall be used to adjust or reset the frame height.

6. Cross-hatch area to be filled with concrete having a minimum 28-day compressive strength of 2000 psi.

7. Frame and grate to be raised with brick and mortar as directed by the Engineer.

SPECIAL NOTE
For

JEFFERSON COUNTY
Traffic and Safety Improvements for the Eastern Parkway Corridor near Third Street
ITEM NO. 5-397.00
And
Rehab Bridge at CSX Railroad and Floyd Street
ITEM NO. 05-1050.00

WATERBLASTING STRIPING REMOVAL

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

1.0 Description. Remove pavement striping, temporary or permanent, from asphalt or concrete pavement using ultra-high pressure water.

2.0 Materials and Equipment.

2.1 Truck Mounted Ultra-high Pressure Pump and Water Tank. Use a truck having a separate hydrostatic transmission capable of speed increments of ± 1 foot per minute at operator's discretion. Use a pump capable of delivering a minimum of 30,000 psi to a bumper mounted deck containing an operator controlled rotating manifold that is speed variable up to at least 3,000 rpm and accepts interchangeable waterjet nozzles. Provide all necessary waterjet nozzle setups and patterns to ensure clean sufficient removal. Ensure the deck's discharge directs the water and removal material in a manner that it is not hazardous to vehicles or pedestrians.

2.2 Water. Conform to Section 803.

3.0 Construction. Before starting work, provide the Engineer with a contractor work history of 2 projects where striping removal was completed acceptably for a similar type of pavement. If no history is available, complete 1,000 linear feet of striping removal and obtain the Engineer's approval before continuing.
Conduct striping removal under lane closures meeting the conditions of the MUTCD and Kentucky Standard Drawings and Specifications. Waterblast to remove temporary or permanent striping completely as the Engineer directs. Do not damage the pavement in any way and protect all joint seals. If damage is observed, stop the removal process until the operator can make changes and demonstrate acceptable striping removal. Repair any damage to the pavement. Vacuum all marking material and removal debris concurrently with the blasting operation.

4.0 Measurement. The Department will measure the quantity in linear feet. When the removal area's width exceeds 8 inches and a second pass is required, the Department will measure the length of the additional pass for Payment. The Department will not measure for payment additional passes for widths of 8 inches or less or passes to further eradicate markings. The Department will not measure repair of damaged pavement for payment and will consider it incidental to this item of work.

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

Code	Pay Item	Pay Unit
22664EN	Water Blasting Existing Stripe	Linear Foot

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

JEFFERSON 05-397
SN-XXXX

BUS SHELTERS

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

1.1 DESCRIPTION

The work specified shall consist of the design, fabrication, and delivery and installation of Bus Shelters to include structural aluminum frame with glazed rear, side, front wall modules, glazed roof assembly, and all required hardware for installation.

Shelters shall be structurally engineered.

The shelter frame shall be designed to be stable with or without wall and roof glazing. All connections and glazing containment shall be tamper proof. Shelters shall be prefabricated in 4 or more modular sections complete and ready for field erection.

Shelter(s) shall be MODEL SL814-W as manufactured by Brasco International, Inc.

1.2 COORDINATION

Coordinate this work with other work including installation of segmental retaining walls, pedestrian underpass modifications, lighting, landscaping and construction of sidewalks. Note that this project requires staged construction and the installation of the shelters will need to be coordinated with the planned construction phasing including a temporary bus stop located at the intersection of Eastern Parkway and the Speed School parking lot.

Any work which would impact accommodations for transit patrons shall be coordinated with the Transit Authority of River City (TARC) and the Engineer.

2.0 MATERIALS

Manufacturer shall be the following or approved equal:

Address:
Brasco International, Inc.
1000 Mt. Elliot
Detroit, MI 48207
Phone: (800) 893-3665
Fax: (313) 393-0499

Requests for approved equals shall be supported by complete technical documentation;

which shall include descriptive literature, assembly instructions, and detail drawings which clearly show dimensions, joining details, alloy, temper, finish, and thickness of all members. Detailed specifications shall also accompany such request.

2.1 STANDARDS

2.1.1 Performance

All aluminum shall conform to the standards of the Aluminum Association.All glazing shall conform to the American National Standards Institute (ANSI) Safety Standard for Architectural Glazing Materials Z97.1-1975.

Shelter shall be designed to withstand minimum vertical and horizontal windload of 20 PSF. Roof shall be designed to withstand minimum deadload of 40 PSF.

Shelter size shall be: 8’ deep by 14’ wide by 7’ 6” high (all dimensions +/- 2")

Shelter shall be constructed of modular interchangeable components. All structural framing members and mullions shall be 1 (one) piece seamless extruded aluminum tubes of 6063-T5 alloy. SNAP TOGETHER OR 2 (TWO) PIECE MEMBERS ARE NOT ACCEPTABLE.

All roof and glazing frame extruded aluminum sections shall be 6063-T5 alloy.
All structural connector channels, roof corner key angles, and base anchor boots shall be extruded aluminum sections of 6061-T5 alloy.

2.1.2 COMPONENTS

A. Framing members
All vertical support posts and top and bottom horizontal beams shall be 2 1/2" x 2 1/2" x 1/8" thick square tube. All mullions shall be 1 1/2" x 2 1/2" x 1/8" thick rectangular tube.

B. Structural connections

All structural connector clips shall be factory applied and shall be concealed when field assembly is complete. FIELD ATTACHMENT OF CONNECTOR CLIPS IS NOT ACCEPTABLE.

Connector clips shall be extruded aluminum as specified in Section 2.1 and shall be 2 1/4" x 2 1/4" x 1/4" thick or 1 1/4" x 2 1/4" x 1/4" thick with tapered edges. Connector clips shall be attached to frame at main structural joints with 2 (two) stainless steel hex bolts 1/4 - 20 x 3/4" with flat washers, lock washers, and nuts. Mullion clips shall be attached to frame with 2 (two) 1/4" diameter stainless steel flush break rivets.

C. Field connections
All field connections to join modular wall sections shall be concealed with shelter complete and upright. Connection to structural clips shall be with 2 (two) 1/4"

countersunk aluminum and stainless steel drive rivets. Finished joint shall be flush.

D. Fasteners
All fasteners shall be aluminum or stainless steel or a combination thereof and shall be tamper proof. Zinc, carbon steel, plated , or any other "non-corrosive" fasteners will not be acceptable. SELF-TAPPING OR SELF-DRILLING FASTENERS ARE NOT ACCEPTABLE.

Exposed fasteners shall be finished to match shelter finish.

E. Window framing
Window frames shall be special "F" shaped aluminum extrusion with integral alignment lip and corner key slot. All corners shall be mitered and reinforced with internal corner keys. Window frames shall be affixed to shelter frame with 3/16" diameter aluminum flush break rivets approximately 13" on center. NO WINDOW FRAMES SHALL BE SHIPPED LOOSE OR UNATTACHED TO A WALL MODULE. Window frame shall provide minimum 3/4" engagement of glazing material on all sides. Attachment shall be from exterior of shelter for maximum replacement accessibility.

F. Glazing
All glazing material shall be 1/4" thick clear tempered safety glass.
All wall glazing shall be gasketed with continuous extruded PVC dry-set splines.

G. *Roof Assembly*

1. Fascia
Fascia shall be 1 (one) piece 6" high extruded aluminum with mitered corners, integral self-aligning attachment lip, 2 (two) corner key slots at each corner, internal gutter, and top and bottom edges rounded for safety. Mitered corners shall be connected at outside corner with a 1/4" thick aluminum angle and 2 (two) stainless steel allen head set screws, and at inside corner with 2 (two) 1/8" thick aluminum angle keys and concealed fasteners to prevent twist prior to installation. The completed roof assembly shall be attached to shelter frame through self-alignment lip into header with aluminum and stainless steel tamper proof fasteners in shear. SELF-DRILLING OR SELF TAPPING FASTENERS IN TENSION (OR PULL OUT CONDITION) SHALL NOT BE AN ACCEPTABLE METHOD OF SECURING ROOF ASSEMBLY TO FRAME.

2. Standing Seam Metal Hip Roof – Patina Green
Roof shall be serviceable without removing fascia. Drainage shall be directed to rear of shelter and away from shelter walls.

H. *Finishes*
All exposed aluminum components including brackets and anchor boots shall be Black powder coat painted (RAL 8022)

I. *Bench*
Powder Coat Painted -Black Brown (RAL 8022)Aluminum Bench with Backrest – Wall Mounted (bench for back wall and benches for both side walls)

J. *Options*
White Powder Coat Painted Decorative 1" x 1" Aluminum Tube Muntin Style Grillwork
Bottom Perimeter Windskirt – Black Brown (RAL 8022)

2.2 QUALITY ASSURANCE

Experience
Manufacturer shall have a minimum of 15 years experience in the design and manufacture of Aluminum Passenger Waiting Shelters.

3.0 CONSTRUCTION

Assemble and erect the shelters at the location as shown in the plans or as directed by the Engineer. The Shelter shall be securely fastened to the sidewalk per the manufacturers instructions.

Signage for the bus stop shall be salvaged and relocated as directed by the engineer or replaced with signage provided by others.

See attached drawing for additional information.

The existing bus shelters shall be removed and disposed of by the contractor.

3.1 DELIVERY AND STORAGE

Shelter shall be delivered to destination in clearly labeled modular assemblies. Each shelter shall include a boxed hardware kit complete with installation instructions.

4.0 MEASUREMENT

The Department will measure the quantity of segmental Bus Shelters as 'EACH"

JEFFERSON 05-397
SN-XXXX

5.0 PAYMENT

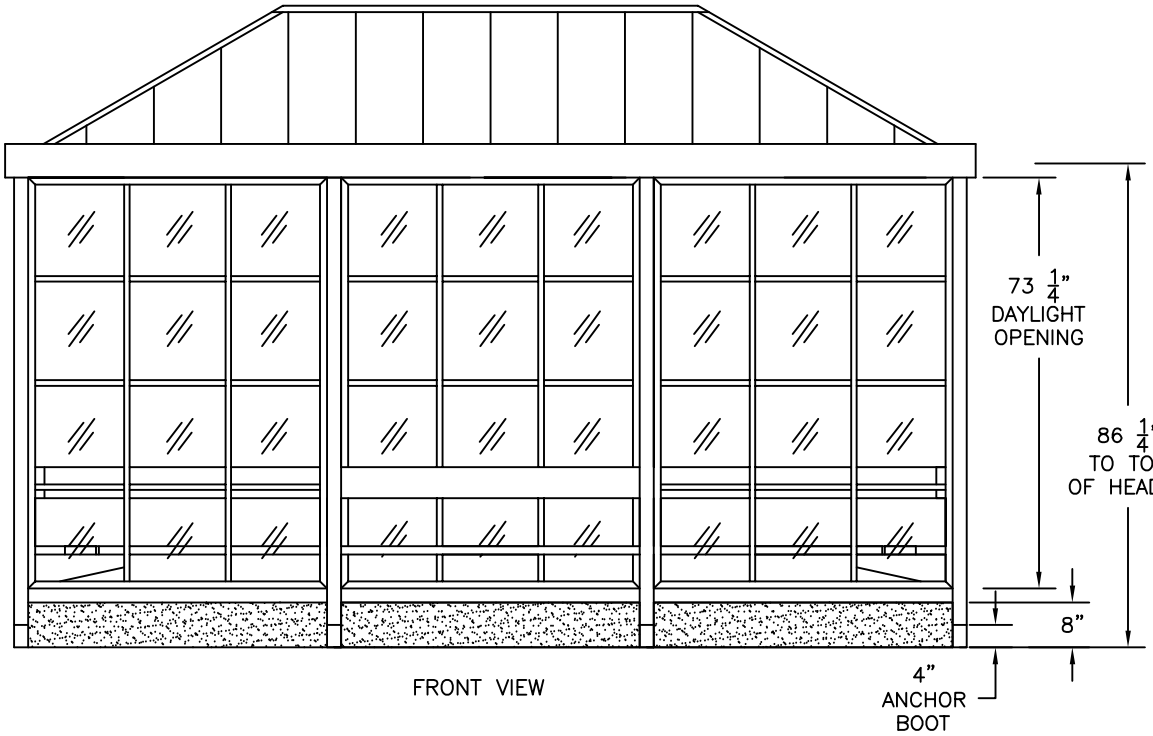
The Department will make payment for the completed and accepted quantities under the following:

Code Pay Item Pay Unit
Bus Shelters –Each

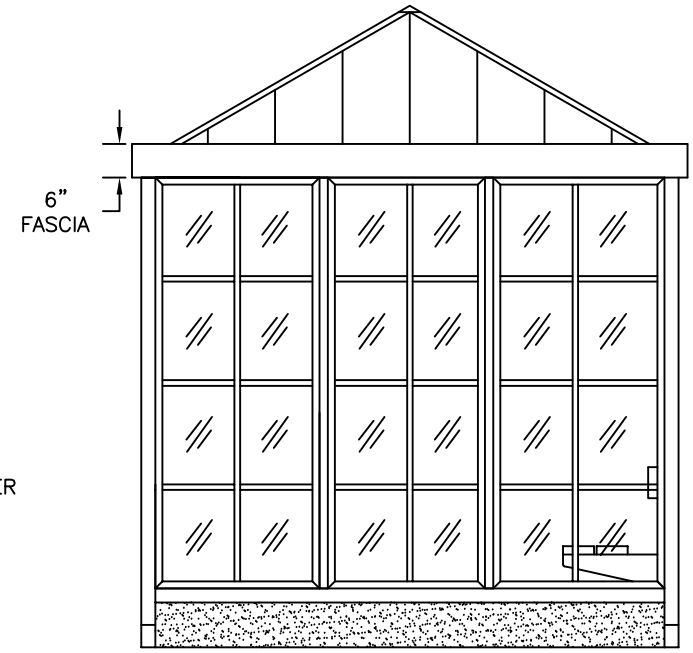
The Department will consider payment as full compensation for all work required in this provision.

SEE ATTACHED DRAWING FOR ADDITIONAL INFORMATION

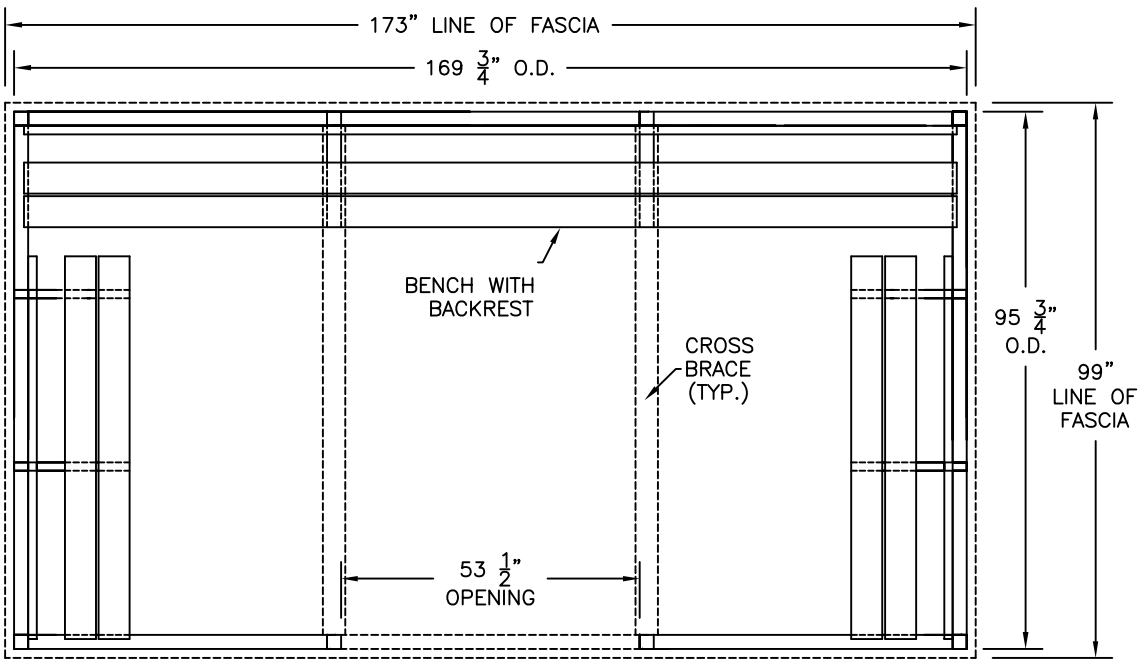
END OF NOTE



FRONT VIEW



SIDE VIEW



FLOOR PLAN

SPECIFICATIONS:
POWDER COAT PAINTED ALUMINUM STRUCTURE - RAL 8022
1/4" CLEAR TEMPERED SAFETY GLASS WITH
POWDER COAT PAINTED SASH - WHITE
PATINA GREEN STANDING SEAM HIP ROOF WITH FASCIA/GUTTER SYSTEM
(1) FULL LENGTH POWDER COAT PAINTED ALUMINUM BENCH
WITH BACKREST - RAL 8022
(2) PARTIAL LENGTH POWDER COAT PAINTED ALUMINUM BENCHES
WITH BACKRESTS - RAL 8022
POWDER COAT PAINTED DECORATIVE MUNTIN WINDOW GRILLWORK - WHI
POWDER COAT PAINTED ALUMINUM PERIMETER WINDSKIRTS - RAL 8022

BRASCO INTERNATIONAL, INC.
1000 MT. ELLIOTT
DETROIT, MICHIGAN 48207
1-800-893-3665 WWW.BRASCO.COM

CUSTOMER	UNIVERSITY OF LOUISVILLE		
PROJECT	SLIMLINE SERIES		
MODEL	SL814-3LSW		
DRAWN BY	SER	DATE	10/31/07 SHEET
APPROVED BY		DATE	
SCALE	NONE	REV.	11/1/07

BRASCO SHELTERS

JEFFERSON 05-397
SN-XXXX

TRAFFIC SIGNAL POLE

1.0 DESCRIPTION

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

The unit contract price for "Traffic Signal Pole" shall be full compensation for furnishing all labor, materials tools and equipment necessary or incidental to furnish and install the traffic signal pole, mast arms, foundations and other appurtenances to the pole at the locations shown on the plans or where directed by the Engineer.:

The traffic signal pole, mast arms, and decorative base will be as shown on the attached Drawing No. 50606-B6 "Ornamental Traffic Standards for Louisville, Kentucky" by Union Metal Corporation and as shown in the plans.

Unless otherwise noted on the plans or within this special note the traffic signal poles shall comply with Section 716 of the Standard Specifications.

1.1 COORDINATION

Coordinate this work with other work including installation of segmental retaining walls, Olmsted Walls, light poles, landscaping, overheight warning system and construction of sidewalks and pavement . Note that this project requires staged construction and the installation of the traffic signal poles will need to be coordinated with the planned construction phasing including installation and maintenance of a temporary traffic signal at the intersection of Eastern Parkway and the Speed School parking lot until the new permanent traffic signals are fully functional. Two poles will support variable dynamic message warning signs as shown in the plans. See the special provision for Over Height Warning System for additional information. .

2.0 MATERIALS

2.1 Manufacturer

The manufacturer of the traffic signal pole shall be the following or approved equal

Union Metal Corporation
1432 Maple Ave., NE
PO Box 9920
Canton, OH 44705
Phone: (330) 456-7653
Fax: (330) 456-0628
www.unionmetal.com

GENERAL: The steel Officials (AASHTO), specifically the Standard Specifications of Structural Supports for Highway Signs, Luminaires and Traffic Signals.

ANCHORAGE: Included for each pole shall be a minimum of four steel anchor bolts, complete with double hex nuts and washers. Nuts, washers and threaded areas of anchor bolts shall be hot-dip galvanized to ASTM - A153. Anchor bolts shall have a 55,000 psi minimum yield strength. Anchor bolts and bolt template shall be delivered on site to the contractor within two (2) weeks of receipt of a purchase order.

PACKAGING: Each pole shall be wrapped in ripple kraft paper and packaged in corrugated cardboard prior to shipment. When required, each luminaire shall be individually bagged and secured by protective foam in cardboard containers. A packing list and assembly instruction sheet shall be included.

WIND RESISTANCE: Entire, pole and arm assembly to be rated to withstand AASHTO requirements for 90 mile an hour wind load with a 30% gust factor.

WELDS: All welds shall meet the requirements of AWS D1.1.

MATERIAL CERTIFICATION: Material certifications shall be provided for all ASTM numbers referred to in this special note.

FACTORY CERTIFICATION: In order to insure proper procedures are followed in the manufacture of all structural members, the fabrication of the traffic mast arm and pole assemblies shall be done in a plant certified to the American Institute of Steel Construction (AISC) category 1.

MATERIAL AVAILABILITY: Manufacturer shall certify to the Department that the accepted pole, arm, luminaire and decorative shroud is or will become a stock item, readily available with replacement parts for a minimum ten year period.

WARRANTY: All materials supplied shall be warranted by the manufacturer for one year after delivery against faulty materials and workmanship. Traffic signal poles shall be Union Metal Corporation Muncie Family series or approved equal.

DESIGN: The traffic pole unit and all materials used in its manufacture shall meet the requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 4th Edition

2.1.1 TRAFFIC POLE:

The pole shaft shall be fabricated from a minimum of 7 or 3 gauge hot rolled commercial steel. The shaft shall have only one (1) longitudinal, automatically, electrically welded joint, and shall have no intermediate horizontal joints nor welds. Only one (1) length of steel sheet shall be used, which shall be formed into a continuously tapered shaft, having a taper of approximately 14" per foot.

After forming and welding, the tapered shaft shall be longitudinally cold rolled over a hardened steel mandrel under sufficient hydraulic pressure to flatten the weld and increase the physical characteristics of the shaft. The shaft shall meet the chemical and physical properties of ASTM-A595 grade A, having a minimum yield strength of 55,000 psi. The cold rolling process shall also form a 16 flute shaft (as specified). The 16-flute shaft shall have sixteen (16) equally spaced Doric flutes, sharp and clear-cut throughout the entire length of the shaft. The radius of the flutes crest shall not exceed the thickness of the metal in the shaft. Shaft dimensions shall be equivalent in strength for the loads shown in the plans.

Individually rolled flutes or round poles with a separate fluted sheathing will not be acceptable.

Pole flutes must be over the entire length of the pole. The base plate must have a fluted opening to accept the fluted pole. No portion of the pole will be allowed to have a round cross section.

The base plate shall conform to ASTM-A36. It shall telescope the shaft and be attached by means of two continuous welds, one on the inside of the base at the end of the shaft, the other one the outside at the top of base. The base plate shall be arranged to accept (4) 1.5” diameter anchor bolts on a 17” bolt circle.

The pole shaft shall be furnished with a 4" x 8" reinforcing handhole frame and a 1/2" - 13 UNC grounding provision.

Each pole shall be provided with a ornamental pole top. The multi casting stacked pole top shall be mechanically attached to the top of the shaft to provide access for wiring signals secured by a J-hook wire support; also provided. Material shall conform to the requirements of AA-319.OF aluminum.

2.1.2 MAST ARM:

The mast arm shall be fabricated from a minimum 11or 7 guage hot rolled commercial steel. It shall be fabricated and formed into a round or octaflute shape using the same cold rolling process as the pole shaft. The octaflute shaft shall have eight (8) equally spaced Doric flutes, sharp and clear-cut throughout the entire length of the shaft. The radius of the flutes crest shall not exceed the thickness of the metal in the shaft. Arm dimensions shall be equivalent in strength for the loads shown in the plans.

Mast arm shall be monocurve clamp-on style and shall include a steel arm plate, with (1) each front and back clamps. Plates and clamps shall conform to the requirements of ASTM-A36 steel.

All mast arms shall be interchangeable with the minimum 7 or 3 gauge think shaft.

The arms shall be drilled in the field at required signal or warning sign locations. Two rubber grommets shall be furnished with each arm.

Signal hanger clamps shall be supplied by the signal & warning sign supplier or manufacturer, as required.

2.1.3 ORNAMENTAL BASE ASSEMBLY

The base shall be Union Metal, base 726 and shall conform to the requirements of AA-319-O.F, aluminum. It shall be a 2-piece split (clam shell) design with two (2) removable doors at 180 degrees. These doors must include the City of Louisville city seal cast into each door.

The base shall be a minimum of 45 inches in height and 30 inches in diameter at the bottom.

The base halves shall be split equally and fitted to provide a hairline seam when assembled. The decorative base must have a fluted opening at the top of the base to match the shape of the 16 flute pole.

The base halves shall be factory assembled before shipment by means of internal lugs cast into the base bottom and stainless steel connecting pins at the top.

The base casting shall fit securely around the fluted pole and shall be connected internally by stainless steel pins, bolts, nuts and washers, as required. The base opening shall match the contour of the fluted pole or round pole, as required.

The foundation surface must be level in order to accept the base assembly.

Decorative base must be provided by the pole manufacturer to insure capability with the pole shaft. The pole manufacturer must be able to proved certified proof of ownership of patterns used to cast the bases.

2.1.4 FINISH

Abrasive blast pole if galvanized to an SSPC-SP-7 brush blast. If carbon steel it will be blasted to an SSPC-SP-6 Commercial blast.

Apply one coat of UNI-1 Moisture Cured Zinc Rich Urethane primer 2.0 – 5.0 mils dry film t thickness (D.F.T.). The zinc content in the dry film must be 86% (+ or – 2%).

Finish one coat of Union Metal Pole Shield finish coat Aliphatic Fast Cure Polyurethane 2.0 mils D.F.T. minimum that meet the following criteria.

a. Hardness	H-2H
b. Direct Impact	>320 inch/lbs
c. Reverse Impact	>160 inch/lbs
d. Gravel-O-Meter	5+
e. Salt Spray	Over 3.5 mils D.F.T. primer > 10,000 hrs.

A three (3) year limited warranty is provided on loss of more than 50% of original gloss, delamination of the finish of a total affected area greater than 16 square inches. For complete details of the limited warranty please contact Union Metal.

Finish product must meet SSPC Paint Spec No. 36 QUV-A Level 3 for weathering performance.

2.2 SUBMITALS

Obtain the Engineer's approval for all materials before installation. Submit for material approval 5 copies of descriptive literature, drawings, and any requested design data. Do not make substitutions for approved materials without written permission as described above. The submittal shall include drawings illustrating the specific dimensions and configuration of the poles for the project showing mast arm lengths and mounting heights as well as provisions for decorative pole top luminaires where specified.

3.0 CONSTRUCTION

The traffic signal poles shall be installed at the locations shown on the plans. Traffic Signal Poles shall be installed on foundations as shown in the plans. Anchor bolts shall be cast with traffic signal pole base.

The traffic signal poles shall be checked for vertical alignment and shall be plumb in all directions. . The traffic signal pole shall be placed on the traffic signal pole base with sufficient care to protect the exterior of the pole and the surface of the foundation. The pole shall be plumbed and tightened as shown on the drawings and as indicated in the field by the Engineer. The contractor may use stainless steel or other approved corrosion resistant shims to plum the traffic signal pole as needed prior to installation of decorative base.

All holes and grommets required for electrical and communications connections to traffic signal heads, pedestrian signals and actuator buttons or overheight warning system components shall be incidental to the cost of the Traffic Signal Pole and will not be measured separately for payment by the Department.

4.0 MEASUREMENT

The Department will measure the quantity of Traffic Signal Poles -Each

JEFFERSON 05-397
SN-XXXX

5.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit

XXXXX Traffic Signal Pole- Each

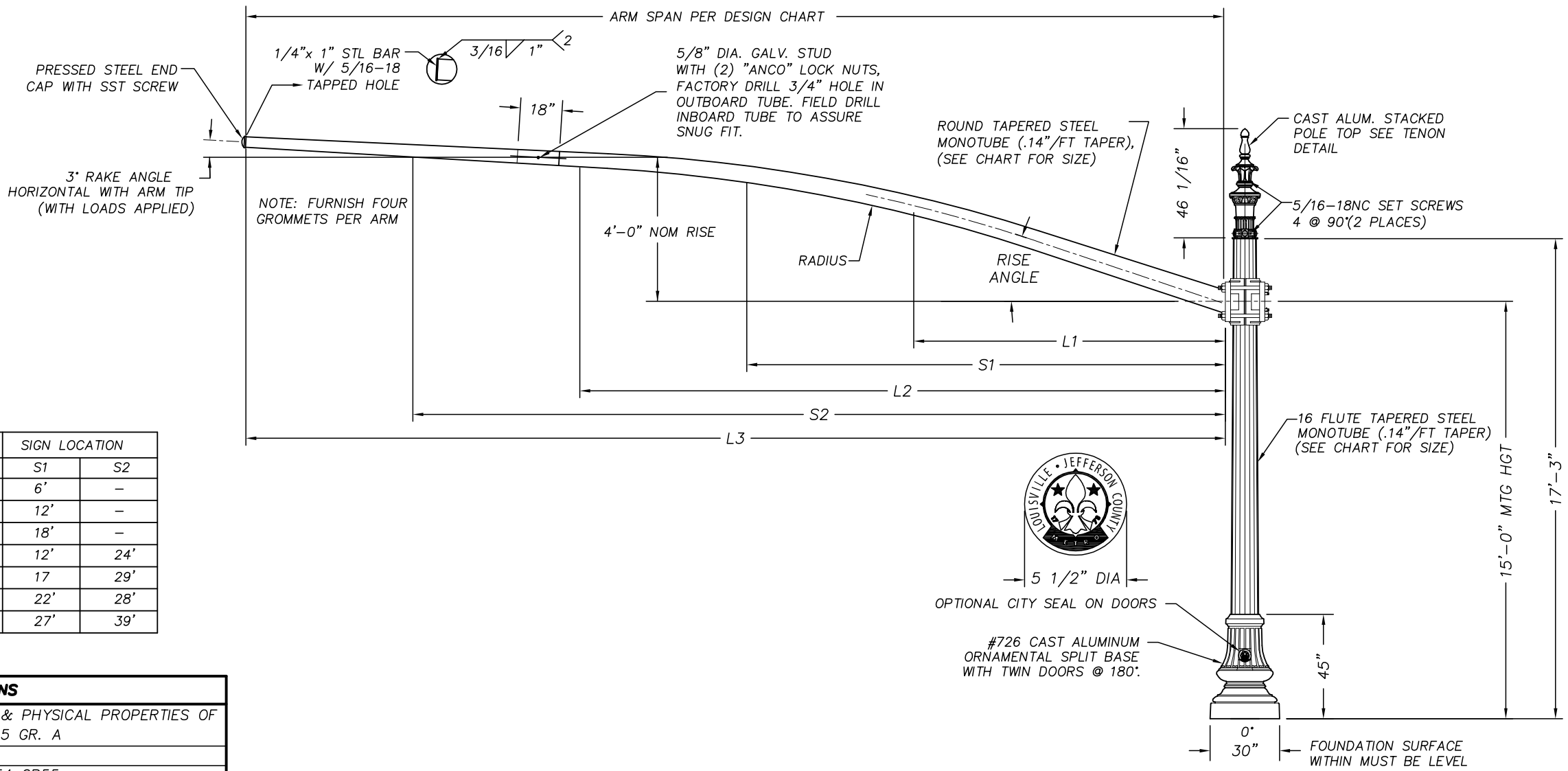
The Department will consider payment as full compensation for all work required in this provision.

SEE ATTACHED DRAWINGS

END OF NOTE

U.M.C. DESIGN No.	ARM SPAN	MAST ARM TUBE SIZE	RISE ANGLE	ARM RADIUS	POLE SIZE	ARM CONNECTION DATA									BASE PLATE CONNECTION					
						W	H	X	Y	H2	G	P1	P2	BOLT DIA.	BC	SQ	T	F	P	ANCHOR BOLT
50606-B6-Y1	12'-0"	11E-5.0x3.18x13'-0"	39°	10'	7F-10.0x7.59x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/4"	11 5/16"	6"	1 1/2" X 54" X 6"
50606-B6-Y2	18'-0"	11E-6.0x3.38x18'-9"	26°	16'	7F-10.0x7.59x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/4"	11 5/16"	6"	1 1/2" X 54" X 6"
50606-B6-Y3	24'-0"	11E-7.0x3.57x24'-6"	21°	21'	7F-10.0x7.59x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/4"	11 5/16"	6"	1 1/2" X 54" X 6"
50606-B6-Y4	30'-0"	7E-7.5x3.23x30'-6"	18°	26'	7F-11.0x8.59x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/4"	11 5/16"	6"	1 1/2" X 54" X 6"
50606-B6-Y5	35'-0"	7E-8.5x3.57x35'-3"	18°	26'	7F-12.0x9.59x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/4"	11 5/16"	6"	1 1/2" X 54" X 6"
50606-B6-Y6	40'-0"	7E-9.5x3.87x40'-3"	18°	26'	3F-12.25x9.84x17'-3"	–	–	–	–	–	–	–	–	–	16"	17"	1 1/2"	11 5/16"	6 1/4"	1 1/2" X 54" X 6"
50606-B6-Y7	45'-0"	7E-10.5x7.0x25'-0" 11E-7.49x4.45x21'-9"	18°	44'	3F-12.25x9.84x17'-3"	17"	17"	13 1/2"	13 1/2"	19"	9 1/2"	1 1/2"	1"	1"	16"	17"	1 1/2"	11 5/16"	6 1/4"	1 1/2" X 54" X 6"

3F = .250" WALL THICKNESS
7F & 7E = .179" WALL THICKNESS
11E = .120" WALL THICKNESS
F = .14 IN/FT TAPER 16 FLUTE TUBE
E = .14 IN/FT TAPER ROUND TUBE



DESIGN CRITERIA

DESIGNED IN ACCORDANCE WITH 1994 AASHTO "STANDARD SPECIFICATIONS FOR STURUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" FOR 90 MPH WIND ZONE STRUCTURES ARE DESIGNED FOR PLAN LOADS.

U.M.C. DESIGN No.	ARM SPAN	SIGNAL LOCATION			SIGN LOCATION	
		L1	L2	L3	S1	S2
50606-B6-Y1	12'-0"	1'	–	12'	6'	–
50606-B6-Y2	18'-0"	6'	–	18'	12'	–
50606-B6-Y3	24'-0"	12'	–	24'	18'	–
50606-B6-Y4	30'-0"	6'	18'	30'	12'	24'
50606-B6-Y5	35'-0"	11'	23'	35'	17	29'
50606-B6-Y6	40'-0"	16'	28'	40'	22'	28'
50606-B6-Y7	45'-0"	21'	33'	45'	27'	39'

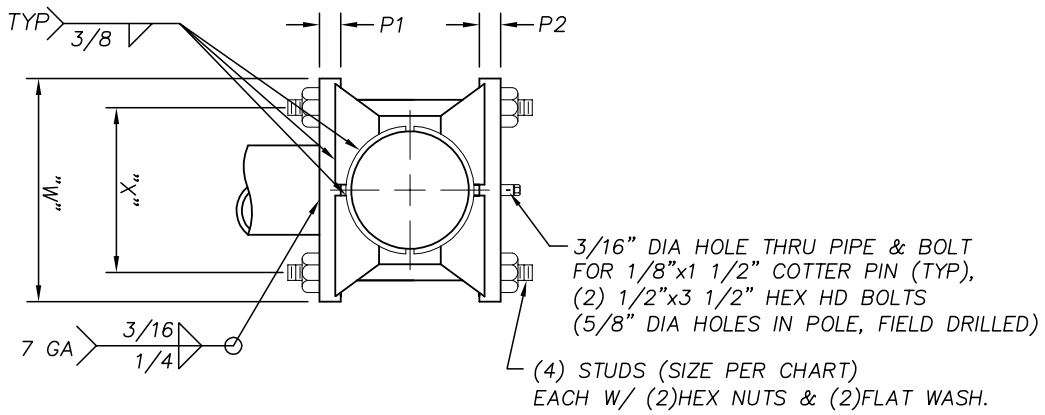
MATERIAL SPECIFICATIONS	
MONOTUBE POLES & ARMS	CHEMICAL & PHYSICAL PROPERTIES OF ASTM-A595 GR. A
PLATES	ASTM-A36
ANCHOR BOLTS	ASTM F1554 GR55
ANCHOR BOLT NUTS	ASTM-A563 GR. A
ARM CONN. BOLTS	ASTM-A325
FLAT WASHERS	ASTM-F436
ARM CONN. STUDS	ASTM-A449
ARM CONN. NUTS	ASTM-A563 GR DH
ST. STEEL HARDWARE	AISI-300 SERIES (18-8)
ORNAMENTAL BASE & POLE TOP	CAST ALUMINUM AA319F
HANDHOLE FRAME	ASTM-A576
HANDHOLE COVER	C1010 STL
STEEL PIPE	ASTM-A501
CLAMP	ASTM-A715 GR 50
HARDWARE FINISH	H.D. GALV TO ASTM-A153
STRUCTURE FINISH	FINISH PAINT PER SALES ORDER

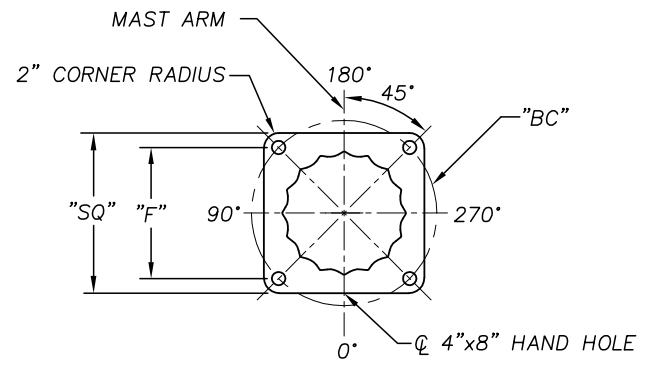
STATE: KENTUCKY	REQ# / SO# : NKY10800-1	REV	DESCRIPTION	DATE	REV BY / CHK BY
PROJECT NAME: CITY OF LOUISVILLE			REVISIONS		

ORNAMENTAL TRAFFIC STANDARDS
FOR LOUISVILLE, KENTUCKY

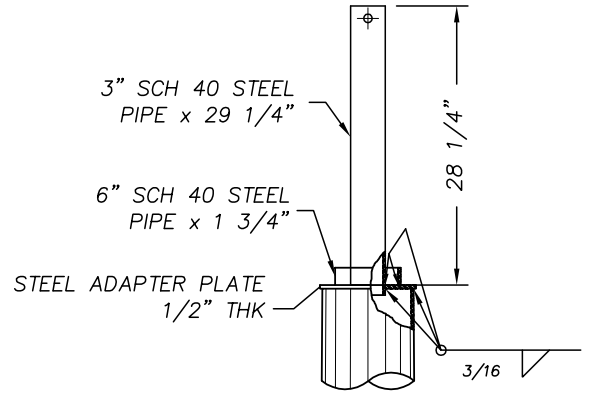
Union Metal Corporation

DESIGNED BY	CHECKED BY	DATE	SCALE	ENG REF
KLS	gm	10/5/05	1:54	10606-B5
50606-B6			REVISION 0	SHEET 1 OF 2

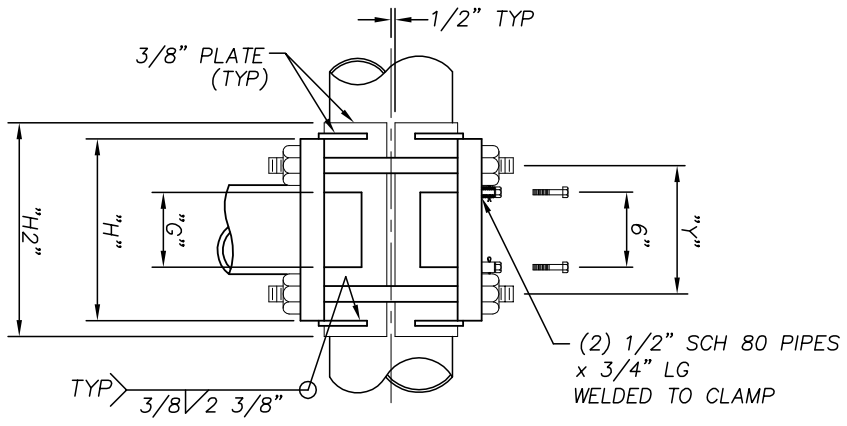




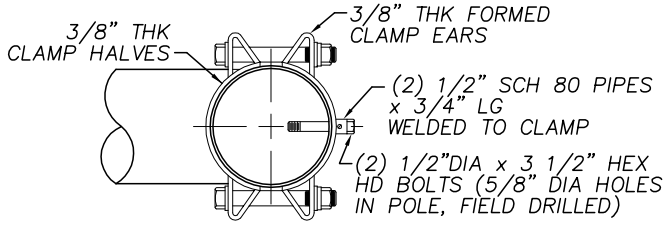
TOP VIEW ORIENTATION

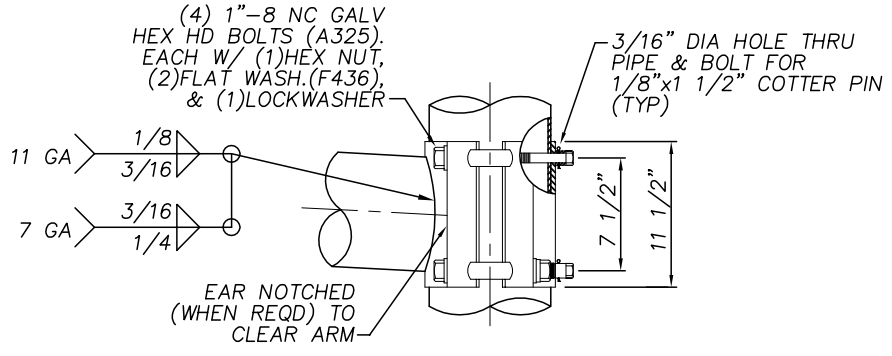


TENON DETAIL

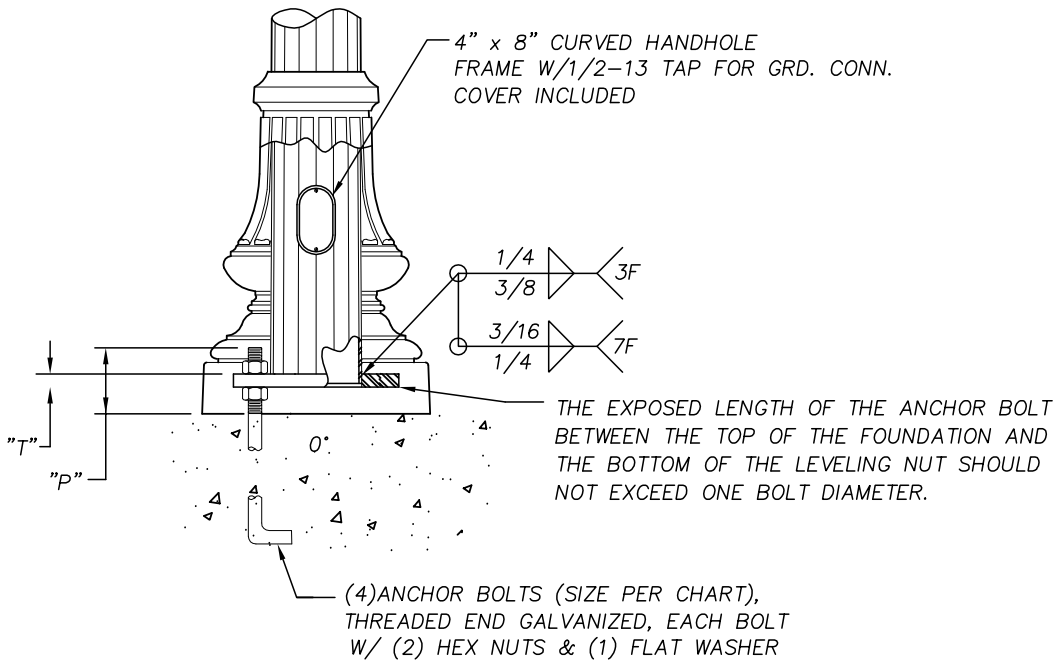


CLAMP-ON ARM DETAIL FOR DESIGN Y7





SIGNAL ARM CLAMP DETAIL FOR DESIGNS Y1-Y6



STATE: KENTUCKY	REQ# / SO# : NKY10800-1	REV	DESCRIPTION	DATE	REV BY	CHK BY
PROJECT NAME: CITY OF LOUISVILLE			REVISIONS			

ORNAMENTAL TRAFFIC STANDARDS FOR LOUISVILLE, KENTUCKY

Union Metal Corporation

DESIGNED BY	CHECKED BY	DATE	SCALE	ENG REF
KLS		10/5/05	NONE	10606-B5

50606-B6	REVISION 0	SHEET 2 OF 2

JEFFERSON 05-397
SN-XXXX

STRUCTURAL SOIL

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

A. Structural Soil

Description. This work shall consist of the labor and materials required to mix and install Structural Soil as a compacted granular base material underneath concrete and/or brick paver sidewalks, and Tree Grate concrete curbs in areas shown on the plans or as directed by the Engineer. This work shall be in accordance with to the Department's 2004 Standard Specifications for Road and Bridge Construction, and this Special Provision. This work shall follow industry standards and shall conform to the details shown in the plans.

Structural Soil is a generic term for manufactured soil which was created for the express purpose of improving tree root structures/growth for trees planted in paved urban streetscape type applications. Properly installed Structural Soil will meet the Department's requirements for compacted granular base material typical in concrete and/or brick pavement applications, while also providing multiple benefits to trees planted there, thus increasing the life and longevity of the entire streetscape pavement system. Structural soil can be compacted and yet possesses the ability to allow roots to grow freely through the soil while greatly reducing the amount of heave in the sidewalk.

1.1 REFERENCES

The following references are used herein and shall mean:

1. ASTM: American Society of Testing Materials.
2. USDA: United States Department of Agriculture.
3. AASHTO: American Association of State Highway and Transportation Officials.
4. Standard Specifications: Regional or Municipal Standard Specifications Documentation for the location of proposed usage.
5. AOAC: Association of Official Agricultural Chemists.

1.2 SUBMITTALS AND SAMPLES

A. At least 30 days prior to ordering materials, the Contractor shall submit to the Engineer's representative samples, certificates, manufacturers literature, and certified tests for materials specified below. No materials shall be ordered until the required samples, certificates, manufacturer's literature, and test results have been reviewed

and approved by the Engineer. Delivered materials shall match the approved samples. Approval shall not constitute final acceptance. The Engineer reserves the right to reject, on or after delivery, any material that does not meet these Specifications.

B. Submit two (2) 1/2 cubic foot representative samples of clay loam, and two (2) 2 cubic foot representative samples structural soil mixes in this section for testing, analysis, and approval. Submit one (1) set of samples for every 100 CY of material to be delivered. In the event of multiple source fields for clay loam, submit a minimum of one (1) set of samples per source field or stockpile. Samples shall be taken randomly throughout the field or stockpile at locations as directed by the Engineer and packaged in the presence of the Engineer. Contractor shall deliver all samples to testing laboratories and shall have the test results sent directly to the Engineer. Samples shall be labeled to include the location of the source of material, the date of the sample, and the Contractor's name. One (1) of the two (2) samples is to be used by the testing laboratory for testing purposes. The second sample of all clay loam and structural soil shall be submitted to the Engineer at the same time as test analysis as a record of the soil color and texture.

1. Submit the locations of all source fields for clay loam.

2. Submit a list of all chemicals and herbicides applied to the clay loam for the last five (5) years and a list of all crops grown in the clay loam source fields for the last three (3) years.

C. Submit soil test analysis reports for each sample of clay loam and structural soil from an approved soil testing laboratory. The test results shall report the following:

1. The soil testing laboratory shall be approved by the Engineer. The testing laboratory for particle size and chemical analysis may be a public agricultural extension service agency or agricultural experiment station.

2. Submit a bulk density of the sample and particle size analysis, including the following gradient of mineral content:

USDA Designation	Size in inches
Gravel	+0.08 in
Sand	0.002 – 0.08 in
Silt	0.00008 – 0.002 in
Clay	-0.0008 in

3. Sieve analysis shall be performed and compared to USDA Soil Classification System. Sieve analysis shall be done by a combined hydrometer and wet sieving using sodium hexametaphosphate as a dispersant in compliance with ASTM D 422 after destruction of organic matter by hydrogen peroxide.

a. pH and Buffer pH.

b. Percent organic matter as determined by the loss of ignition of oven dried samples. Test samples shall be oven dried to a constant weight at a temperature of 230 degrees F, plus or minus 9 degrees.

c. Analysis for nutrient levels by parts per million, including nitrate nitrogen, ammonium nitrogen, phosphorus, potassium, magnesium, manganese, iron, zinc, calcium, and extractable aluminum. Nutrient test shall include the testing laboratory recommendations for supplemental additions to the soil as calculated by the amount of material to be added per volume of soil for the type of plants to be grown in the soil.

d. Analysis for levels of toxic elements and compounds, including arsenic, boron, cadmium, chromium, copper, lead mercury, molybdenum, nickel, zinc, and PCB. Test results shall be cited in milligrams per kilogram.

e. Soluble salt by electrical conductivity of a 1:2 soil/water sample measured in Millimho per cm.

f. Cation Exchange Capacity (CEC).

g. Carbon/nitrogen ratio.

4. Submit 5-point minimum moisture density curve AASHTO T 99 test results for each structural soil sample without removing oversized aggregate.

5. Submit California Bearing Ratio test results for each structural soil sample compacted to peak standard density. The soaked CBR shall equal or exceed a value of 50.

6. Submit measured dry-weight percentage of stone in the mixture.

7. The approved structural soil samples shall be the standard for each lot of 500 cubic yards of material.

8. All testing and analysis shall be at the expense of the Contractor.

D. Submit to the Engineer for review a proposed plan and vertical section layout of all structural soil.

E. Submit 1 cubic foot sample per each 500 cubic yards of required material, and for each sample, the following analysis for all crushed stone. The soil testing laboratory shall be approved by the Engineer.

1. Provide a particle size analysis, including the following gradient of mineral content:

USDA Designation	Size in inches
3@	+3 in
2-1/2@	2.5 - 3 in
2@	2 – 2.5 in
1-1/2@	1.5 - 2 in
1@	1 – 1.5 in
3/4@	0.75 – 1 in
Fine Gravel	0.08 – 0.75 in
Sand	0.002 – 0.08 in
Silt	0.00008 – 0.002 in
Clay	Minus 0.00008 in

2. Provide the manufacturer's analysis of the following:
   a. Loose and rodded unit weight.
   b. Bulk specific gravity and absorbency.
   c. Stone dimension and surface texture description.
   d. Documentation of acceptance for use as DOT approved aggregate by the appropriate regional DOT.

3. Provide a percent pore space analysis defined as follows:

   (1-Rodded Unit Weight divided by the Bulk Specific Gravity) X 100

F. Submit one (1) pound sample of each type of fertilizer and three (3) certificates showing composition and analysis. Submit the purchasing receipt for each fertilizer showing the total quantity purchased for the Project prior to installation.

G. Submit the Landscape or Pavement Material Contractor's qualifications outlining projects of similar quality, schedule requirements, and construction detailing over the last five (5) years.

a. Qualifications shall include the names of all similar projects, year completed, location, description of the scope of work including the types and quantities of planting mix/pavement material installed and the name, address, and telephone number of the Owner or the Owner's representative.

1.3 DELIVERY, STORAGE, AND HANDLING

Soils shall not be delivered or placed in frozen, wet, or muddy conditions. Material shall be delivered at or near optimum compaction moisture content as determined by AASHTO T 99 (ASTM D 698). Materials shall not be delivered or placed in an excessively moist condition (beyond 2 percent above optimum compaction moisture content as determined by AASHTO T 99 (ASTM D 698).

Soils and mixes shall be protected from absorbing excess water and from erosion at all times. Do not store materials unprotected from large rainfall events. Do not allow excess water to enter site prior to compaction. If water is introduced into the material after grading, allow material to drain or aerate to optimum compaction moisture content.

1.4 EXAMINATION OF CONDITIONS

All areas to receive structural soil shall be inspected by the Contractor before starting work and all defects such as incorrect grading, compaction, and inadequate drainage, etc., shall be reported to the Engineer prior to beginning this work. The Contractor shall be responsible for coordination of all other trades to ensure that all utility, irrigation, or other trenching/sleeving operations are complete in Structural Soil areas to avoid disruption after placement.

The Contractor shall be responsible for judging the full extent of work requirements involved, including but not limited to, the potential need for temporary storage and staging of soils, including moving soil stock piles at the site to accommodate scheduling of other work and the need to protect installed soils from compaction, erosion, and contamination. Stock piling soil on site is not permitted without the approval of the Engineer.

1.5 COORDINATION

Coordinate this work with other work including installation of landscaping, lighting, construction of sidewalks and placement of bus shelters and site furniture as well as all utilities elements to avoid damage to installed site materials.

1.6 QUALITY CONTROL

The Contractor shall possess satisfactory experience with the specified method of mixing and installing Structural Soil. The Contractor shall have technicians certified in the specified method of scheduling, procuring, storing, mixing, and installing such product during the past 5 years. The Contractor shall provide a list at the pre-construction meeting of locations where they have installed Structural Soil during such timeframe. This listing shall include the names of all similar projects, year completed, location, description of the scope of work including the types and quantities of planting mix/pavement material installed and the name, address, and telephone number of the Owner or the Owner's representative.

2.0 MATERIALS

2.1 STRUCTURAL SOIL

2.1.1 Manufacturer

Suggested suppliers of Structural Soil include:

1. Amereq, Inc., 19 Squadron Blvd., New York City, NY 10956, ph. 800-832-8788, contact: Brian Kalter.
2. Midwest Trading Horticultural Supplies, Inc., P.O. Box 1005, St. Charles, IL 60174, ph. 847-742-1840.
3. Garick Corporation, 13600 Broadway Avenue, Cleveland, Ohio, 44125, ph. 216-581-0100.

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the Department and the University of Louisville.

2.1.2 Material

The Structural Soil materials shall be in accordance with applicable sections of the Standard Specifications for Construction except as indicated within this special provision. The Work of this special provision consists of all Structural Soil work and related items as indicated on the Drawings, or as specified herein and includes, but is not limited to, the following:

MIX MATERIALS

A. Clay Loam

1. Clay loam shall be a "loam" based on the "USDA Classification System" as determined by mechanical analysis (ASTM D 422) and it shall be of uniform composition, without admixture of subsoil. It shall be free of stones greater than 1/2 inch, lumps, plants and their roots, debris, and other extraneous matter over 1 inch in diameter or excess of smaller pieces of the same materials as determined by the Engineer. It shall not contain toxic substances harmful to plant growth. It shall be obtained from naturally well-drained areas, which have never been stripped of topsoil before and have a history of satisfactory vegetative growth. Clay loam shall contain not less than 2 percent nor more than 5 percent organic matter as determined by the loss on ignition of oven-dried samples. Test samples shall be oven-dried to a constant weight at a temperature of 230 degrees F, plus or minus 9 degrees.

2. Mechanical analysis for a loam/clay loam shall be as follows:

Textural Class	% of Total Weight
Gravel	Less than 5%
Sand	20 - 45%
Silt	20 - 50%
Clay	20 - 40%

3. Chemical Analysis: Meet or be amended to meet the following criteria:

a. pH between 5.5 and 6.5.
b. Percent organic matter 2 - 5 percent by dry weight.
c. Nutrient levels as required by the testing laboratory recommendations for the type of plants to be grown in the soil.
d. Toxic elements and compounds below the United States Environmental Protection Agency Standards for Exceptional Quality sludge or local standard; whichever is more stringent.
e. Soluble salt less than 1.0 Millimho per cm.
f. Cation Exchange Capacity (CEC) greater than 10.
g. Carbon/nitrogen ratio less than 33:1.

4. Clay loam shall be the product of a commercial processing facility specializing in production of stripped natural topsoil. No topsoil shall come from USDA-classified prime farmland.

B. Fertilizer

1. Commercial fertilizer complying with State and United States fertilizer laws. Deliver fertilizer in original unopened containers, which shall bear the manufacturer's certificate of compliance covering analysis, which shall be furnished to the Engineer. Fertilizer shall be formulated for mixing into the soil and be certified by the manufacturer to provide controlled release of nitrogen continuously for a period of no less than 9 months and no more than 12 months.

2. Fertilizer percentages of weight of ingredients and application rates shall be as recommended by the soil testing results.

C. Sulfur (If Needed)

1. Sulfur shall be commercial granular, 96 percent sulfur, delivered in containers with the name of the manufacturer, material, and analysis appearing in the container.

2. Sulfur used to lower soil pH above 6.5 shall be ferrous sulfate formulation.

D. Lime (If Needed)

1. Agricultural limestone containing a minimum of 85 percent carbonates. Minimum Gradation: 100 percent passing 10 mesh sieve; 98 percent passing 20 mesh sieve; 55 percent passing 60 mesh sieve; and 40 percent passing 100 mesh sieve.

E. Crushed Stone

1. Crushed stone shall be a DOT certified crushed stone. Granite and limestone have been successfully used in this application. 90 - 100 percent of the stone

should pass the 1.5 inch sieve, 20 - 55 percent should pass the 1.0 inch sieve, and 10 percent should pass the 0.75 inch sieve. A ratio of nominal maximum to nominal minimum particle size of two (2) is required.

2. Acceptable aggregate dimensions will not exceed 2.5:1.0 for any two (2) dimensions chosen.

3. Minimum 90 percent with one (1) fractured face, minimum 75 percent with two (2) or more fractured faces.

4. Results of Aggregate Soundness Loss test shall not exceed 18 percent.

5. Losses from LA Abrasion tests shall not exceed 40 percent.

F. Hydrogel

1. Hydrogel is a generic term for a stabilizing agent that is added as a tackifier to prevent separation of the stone and soil during mixing and installation. It shall be a potassium propenoate-propenamide copolymer

2. Suggested Hydrogel suppliers:
   a. Amereq, Inc., ph. 800-832-8788.
   b. Midwest Trading Horticultural Supplies, Inc., ph. 847-742-1840.
   c. Garick Corporation, 13600 Broadway Avenue, Cleveland, Ohio, 44125, ph.216-581-0100.

c. Other suppliers will be allowed following submittal of all required materials indicated in this special provision, and review & approval by the University of Louisville.

G. Water

1. The Contractor shall be responsible to furnish his own supply of water to the site at no extra cost. All work injured or damaged due to the lack of water, or the use of too much water, shall be the Contractor's responsibility to correct. Water shall be free from impurities injurious to vegetation.

H. Structural Soil

1. A uniformly blended mixture of crushed stone, clay loam, and Hydrogel, mixed to the following proportion:

Material	Unit of Weight
Crushed Stone Loam mix (approximately 20 units)	100 units dry weight as determined by the test of the
Hydrogel	0.03 units dry weight

Total Moisture	AASHTO T-99 optimum moisture

2. The initial mix design for testing shall be determined by adjusting the ratio between the crushed stone and the clay loam (see Appendices I and II). Adjust final mix dry weight mixing proportion to decrease soil in mixture if CBR test results fail to meet acceptance (CBR #50).

3.0 CONSTRUCTION

3.1 GENERAL

Construction methods. Construction methods shall be in accordance with the Department's 2004 Standard Specifications for Road and Bridge Construction, as required by the Structural Soil manufacturer's recommendations, and as indicated in this special provision.

3.2 MIX DESIGN

1. Prepare sample structural soil mixes to determine the ratio of mix components. Submit for approval.

a. Submit samples and the test results of each mix component for approval. Based on samples and the analysis of the mix components, the Engineer and the Contractor will jointly determine a mix ratio to be tested for conformance with the requirements of the Specifications. For structural soil quantities greater than 100 cubic yards, test the mix ratio for each clay loam or crushed stone where the testing indicates a significant difference in physical analysis of the clay loam or crushed stone as determined by the Engineer.

b. The Contractor shall prepare the samples of the proposed mix ratio options and obtain soil test as described in SAMPLES AND SUBMITTALS paragraph C in this special provision. Submit the samples of each of the mixes with the test results.

c. The Engineer may request additional Structural Soil mix ratio samples to be tested in the event that further refinement of the mix is necessary.

d. Submit to the Engineer proposed fertility amendment recommendations, including amounts and types of fertilizers and pH adjustments for each mix ratio.

e. Fertility adjustments shall be included as part of the mixing process.

3.3 INSTALLATION

A. Soil Mixing and Quality Control Testing

1. All Structural Soil mixing shall be performed at the Contractor's yard using appropriate soil measuring, mixing, and shredding equipment of sufficient capacity and capability to assure proper quality control and consistent mix ratios. No mixing of structural soil at the Project site shall be permitted. Portable pugging may be used.

a. Maintain adequate moisture content during the mixing process. Soils and mix components shall easily shred and break down without clumping. Coil clods shall easily break down into a fine crumbly texture. Soils shall not be overly wet or dry. The Contractor shall measure and monitor the amount of soil moisture at the mixing site periodically during the mixing process.

b. A mixing procedure for front-end loader shall be as follows:

1) On a flat asphalt or concrete paved surface, spread an 8 inch to 12 inch layer of crushed stone.
2) Spread evenly over the stone the specified amount of dry Hydrogel.
3) Spread over the dry Hydrogel and crushed stone a proportional amount of clay loam according to the mix design.
4) Blend the entire amount by turning, using a front-end loader or other suitable equipment until a consistent blend is produced.
5) Add moisture gradually and evenly during the blending and turning operation as required to achieve the required moisture content. Delay applications of moisture for ten (10) minutes prior to successive applications. Once established, mixing should produce a material within 1 percent of the optimum moisture level for compaction.

c. A pugging operation mixing procedure may be as follows:

1) Feed a known weight of crushed stone into the mixing trough.
2) Add Hydrogel as a slurry into trough and mix slurry and stone into a uniform blend.
3) Meter in soil in proper proportion of clay loam soil. While stone-slurry mixture is in motion.
4) Add water to bring mixture to target moisture content after factoring in water from the slurry and the clay loam moisture.
5) Auger out to stock pile or transport vehicle (or into pit if using a portable pugging operation).

d. Add soil amendments to alter soil fertility including fertilizers and pH adjustments at the time of mixing at the rates recommended by the soil test.

1) Soil pH shall be adjusted to fall within a value of 5.5 and 6.5 two (2) months after mixing if the material is stored, unless mixing with a high pH stone. Once pavement is laid, no adjustment should be imposed.
2) Soil component carbon/nitrogen ratio shall be adjusted to be less than 33:1 within two (2) months after mixing.

2. The Contractor shall mix sufficient material in advance of the time needed at the job-site to allow adequate time for final quality control testing as required by the progress of the work. Structural Soil shall be stored in piles of approximately 100 cubic yards or similar in 20 CY increments and each pile shall be numbered for identification and quality control purposes. Storage piles shall be protected from rain and erosion by covering with plastic sheeting.

3. During the mixing process, the Contractor shall take two (2) 1 cubic foot quality control samples per 100 cubic yards of production from the final structural soil. The samples shall be taken from random locations in the numbered stockpiles as required in the SAMPLES AND SUBMITTALS paragraph B of this special provision. Each sample shall be tested for particle size analysis and chemical analysis as described in the SAMPLES AND SUBMITTALS paragraph C.2 and C.3 of this special provision. Submit the results directly to the Engineer for review and approval.

4. The quality control sample clay loam-crushed stone ratios shall be no greater or less than 2 percent of the approved test sample as determined by splitting a known weight of oven dried material on a #4 sieve. In the event that the quality control samples vary significantly from the approved structural soil sample, as determined by the Engineer, remix and retest any lot of soil that fails to meet the correct analysis making adjustments to the mixing ratios and procedures to achieve the approved consistency.

B. Underground Utilities and Subsurface Conditions

1. Notify the Engineer of any subsurface conditions which will effect the Contractor's ability to complete the work.

2. Locate and confirm the location of all underground utility lines and structures prior to the start of any excavation.

3. Repair any underground utilities or foundations damaged by the Contractor during the progress of this work. The cost of all repairs shall be at the Contractors expense.

C. Site Preparation

1. Do not proceed with the installation of the structural soil material until all walls, curb footings, and utility work in the area have been installed. For site elements dependent on structural soil for foundation support, postpone installation until immediately after the installation of structural soil.

2. Install subsurface drain lines as shown on the Drawings prior to installation of structural soil material.

3. Excavate and compact the proposed subgrade to depths, slope, and widths as shown on the Drawings. Maintain all required angles of repose of the adjacent materials as shown on the Drawings. Do not over-excavate compacted subgrades of adjacent pavement or structures.

4. Confirm that the subgrade is at the proper elevation and compacted as required. Subgrade elevations shall slope parallel to the finished grade and/or toward the subsurface drain lines as shown on the Drawings.

5. Clear the excavation of all construction debris, trash, rubble, and any foreign material. In the event that fuels, oils, concrete washout silts, or other material harmful to plants have been spilled into the subgrade material excavate the soil sufficiently to remove the harmful material. Fill any over-excavation with approved fill and compact to the required subgrade compaction.

6. Do not proceed with the installation of structural soil until all utility work in the area has been installed. All subsurface drainage systems shall be operational prior to installation of structural soils.

7. Protect adjacent walls, walks, and utilities from damage or staining by the soil. Use 1/2 inch plywood and/or plastic sheeting as directed to cover existing concrete, metal, and masonry work, and other items as directed during the progress of the work.

a. Clean up all trash and any soil or dirt spilled on any paved surface at the end of each working day.
b. Any damage to the paving or architectural work caused by the Soils Installation Contractor shall be repaired by the General Contractor at the Soils Installation Contractor’s expense.

8. Maintain all silt and sediment control devices required by applicable regulations. Provide adequate methods to assure that trucks and other equipment do not track soil from the site onto adjacent property and the public right-of-way.

D. Installation of Structural Soil Material

1. Install structural soil in 6 inch lifts and compact each lift.

2. Compact all materials to peak dry density from a standard AASHTO compaction curve (AASHTO T 99). No compaction shall occur when moisture content exceeds maximum as listed herein. Delay compaction 24 hours if moisture content exceeds maximum allowable and protect structural soil during delays in compaction with plastic or plywood as directed by the Engineer.

3. Bring structural soils to finished grades as shown on the Drawings. Immediately protect the structural soil material from contamination by toxic materials, trash, debris, water containing cement, clay, silt, or materials that will alter the particle size distribution of the mix with plastic or plywood as directed by the Engineer.

4. The Engineer may periodically check the material being delivered and installed at the site for color and texture consistency with the approved sample provided by the Contractor as part of the submittal for Structural Soil. In the event that the installed material varies significantly from the approved sample, the Engineer may request that the Contractor test the installed Structural Soil. Any soil which varies significantly from the approved testing results, as determined by the Engineer, shall be removed and new Structural Soil installed that meets these Specifications.

E. Fine Grading

1. After the initial placement and rough grading of the Structural Soil, but prior to the start of fine grading, the Contractor shall request review of the rough grading by the Engineer. The Contractor shall set sufficient grade stakes for checking the finished grades.

2. Adjust the finish grades to meet field conditions as directed.

a. Provide smooth transitions between slopes of different gradients and direction.
b. Fill all dips and remove any bumps in the overall plane of the slope.

1) The tolerance for dips and bumps in structural soil areas shall be a 3 inch deviation from the plane in 10 feet.

c. All fine grading shall be inspected and approved by the Engineer prior to the installation of other items to be placed on the structural soil.

3. The Engineer will inspect the work upon the request of the Contractor. Request for inspection shall be received by the Engineer at least ten (10) days before the anticipated date of inspection.

F. Acceptance Standards

1. The Engineer will inspect the work upon the request of the Contractor. Request for inspection shall be received by the Engineer at least ten (10) days before the anticipated date of inspection.

G. Clean-Up

1. Upon completion of the Structural Soil installation operations, clean areas within the contract limits. Remove all excess fills, soils, and mix stockpiles, and legally dispose of all waste materials, trash, and debris. Remove all tools and equipment, and provide a clean, clear site. Sweep, do not wash, all paving and other exposed surfaces of dirt and mud until the paving has been installed over the Structural Soil material. Do no washing until finished materials covering Structural Soil material are in place.

3.4 MAINTENANCE INSTRUCTIONS

A. Prior to the time of Final Acceptance of the Work, submit maintenance instructions for the use, removal, and replacement of structural soil for the licensor's use [Structural Soil manufacturer shall be considered the "licensor"]. The instructions shall be reviewed by the Project Engineer as a pre-condition for final acceptance of the work.

B. Protect installed products until final acceptance by the Engineer.

C. Contractor will repair or replace, at the Engineer's option, any Structural Soil damaged during fabrication, transportation, storage, or installation before final acceptance and use by the Public.

4.0 MEASUREMENT

The Department will measure the quantity of Structural Soil by the Cubic Yard.

5.0 PAYMENT

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

Code Pay Item Pay Unit

XXXXXXX Structural Soil – Cubic Yard

All labor, equipment, and materials required to mix and install Structural Soil (including Hydrogel and all other components) as indicated in this special provision is included in the Pay Item Structural Soil. All affected concrete, and Tree Grate curbs indicated within Structural Soil areas shall be paid for separately with the understanding that Structural Soil shall be used as the compacted granular base material to be used for their subbase support.

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

STRUCTURAL SIDWALK

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2004 Standard Specifications for Road and Bridge Construction. This work must be coordination with the rehabilitation of the Eastern Parkway Bridge over CSX Railroad and Floyd Street. See structure plans for Item 05-1050 for additional information.

The work covered by this section includes the furnishing of all labor, materials, equipment, and incidentals for the construction and inspection of a retaining wall and reinforced sidewalk including associated earthwork as shown on the Contract Drawings and. The work included in this section includes but is not limited to, the following:

Structural Excavation for a retaining wall adjacent to the existing bridge approach retaining wall at the locations shown on the plans.

Construction of a reinforced concrete cantilevered retaining wall as shown in the plans. This includes concrete, reinforcement, dowel bars, formwork, and incidental items for the construction of the wall.

Construction of 6 in reinforced concrete sidewalk, this includes embankment, DGA base concrete and welded wire reinforcement as well as incidental items.

Standard curb and gutter, ornamental fence, sodding and items for new roadway/pedestrian lighting will be paid for separately in accordance with those pay items.

1.1 REFERENCES

Unless noted on the Contract Drawings or in this special note all work shall be in accordance with the applicable sections of the Department's 2004 Standard Specifications for Road and Bridge Construction.

1.2 COORDINATION

Coordinate this work with other work replacement of the existing integral sidewalk and handrail including installation of lighting, landscaping, overheight warning system, curb and gutter as well as ornamental fence. Note that this project requires staged construction and the construction of the structural sidewalk will need to be coordinated with the planned construction phasing.

2.0 MATERIALS

Concrete for the retaining wall shall be Class A.

All materials shall be on the Department's Approved List and shall be in accordance with the applicable sections of the Standard Specifications.

2.1 CONSTRUCTION

Contraction joints shall not be required in the reinforced concrete sidewalk.

2.1.1 SHEETING & SHORING

Excavation for the retaining wall foundation shall not proceed without the approval of the Engineer. The contractor shall submit plans to protect the existing roadbed adjacent to the excavation area thorough the use of sheeting, shoring or some other method.

The Contractors shall take care when exposing the existing retaining wall not to damage the existing concrete. Contractor shall notify the Engineer of any damage to the existing retaining wall prior to construction of the retaining wall or backfilling.

2.1.2 EXISTING RETAINING WALL

The surface of the existing retaining wall shall be thoroughly cleaned of debris and approved concrete bonding agent shall be used where the proposed retaining wall will be cast against the existing surface. .

3.0 MEASUREMENT

The Department will measure the quantity of Structural Sidewalk in Square Yards. Separate measurement for Structure excavation, embankment, concrete, reinforcement and dowel bars shall not be made and shall be considered incidental

4.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit

XXXXXXX STRUCTURAL SIDEWALK – SQUARE YARDS

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

SITE FURNITURE

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

A. Litter/Trash Receptacles.

B. Benches.

C. Tree Grates.

This includes embedded anchorage of the trash receptacles and surface mounting of the benches as described herein. Additional concrete required for trash receptacle embedment shall be incidental to the sidewalk item. Tree Grates include 4 main grate pieces, and the surrounding frame that holds them. Tree Grate concrete curbs are integral to the installation of the tree grate frames and shall be included in price of each Tree Grate.

1.1 REFERENCES

ASTM A 36 - Standard Specification for Carbon Structural Steel.

ASTM A 123 - Standard Specification for Zinc (hot-dip galvanized) Coatings on Iron and Steel Products.

ASTM A 53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

ADA - Americans with disabilities act requirements.

1.2 SUBMITTALS

The Contractor shall submit the Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

Submit 5 sets of shop drawings to the Department for approval The shop drawings will include complete details of layout and assembly, showing member sizes and part identification, fasteners, anchors, and fittings.

Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns shall be furnished to the Department for approval prior to ordering the products.

1.3 DELIVERY, STORAGE, AND HANDLING

Store products in manufacturer's unopened packaging until ready for installation.

Store components off the ground in a dry covered area, protected from adverse weather conditions.

1.4 COORDINATION

Coordinate this work with other work including installation of landscaping, construction of sidewalks and placement of bus shelters to avoid damage to installed site materials.

The contractor shall include embedment plates etc during casting of the sidewalk at the designated locations for the trash receptacles.

2.0 MATERIALS

2.1 LITTER/TRASH RECEPTACLES

2.1.1 Manufacturer

Manufacturer shall be the following or approved equal:

KenCoat Products,
210 Kane Avenue
Leitchfield, KY 42754
Tel: (800) 707-7164
Fax: (270) 259-9858
Web: www.kencoat.com

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the University of Louisville.

2.1.2 Style: Boulevard Litter Receptacle Series 74.

1. Surface pattern: Boulevard.
2. Size: 32 gallon (121 l).
   a. Height: 27-5/8 inches (702 mm).
   b. Width: 27 inches (686 mm) diameter at top.
3. Top: Flat top with optional 12 inch (305 mm) long chain.
4. Mounting:
   a. Mount in cast in place concrete with supplied mounting plate.
5. Materials:
   a. Top Ring: 1/4 inch (6.4 mm) thick steel.

b. Columns: 10 gauge steel.
c. Liners: Plastic.

6. Hardware: All included hardware to be 300 series stainless steel.
7. Metal Finish and Colors: Vinyl coating on all components.
   a. Color is manufacturer's Group B " Black" standard color.

2.2 BENCHES

2.2.1 Manufacturer

Manufacturer shall be the following or approved equal:

KenCoat Products,
210 Kane Avenue
Leitchfield, KY 42754
Tel: (800) 707-7164
Fax: (270) 259-9858
Web: www.kencoat.com

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the University of Louisville.

2.2.2 Style: Santa Fe Bench Series 95(SF).

1. Surface pattern: Santa Fe.
2. Bench length: 72 inches (1829 mm) long.
3. Bench height: 40 inches (1016 mm).
4. Seat height: 19 inches (483 mm).
5. Legs and Arms: 2 inch (51 mm) by 10 gauge steel tubing with rolled steel end caps.
6. Seat frames: 2 inch (51 mm) by 1 inch (25 mm) by 16 gauge steel tubing.
7. Seat back: 1/4 inch (6.4 mm) steel plate.
8. Mounting:
   a. Surface: Bench legs anchored to concrete surface.
9. Hardware: All included hardware to be 300 series stainless steel.
10. Metal Finish and Colors: Vinyl coating on all components.
    a. Color is manufacturer's Group B " Black" standard color.

2.3 TREE GRATES

2.3.1 Manufacturer

Manufacturer shall be the following or approved equal:

Ironsmith
41-651 Corporate Way #2&3
Palm Desert, CA 92260
Tel: (800) 338-4766
Fax: (760) 776-5080

Web: www.ironsmith.cc

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the University of Louisville.

2.3.2 Style: Ironsmith ADA 4-piece 4'x12' "Starburst Series 2"

Tree Grates will be cast iron 4'x12' size w/ accompanying rectangular steel tree grate frame with 18" opening for tree, and other characteristics as described here.

1. Grate Surface pattern: Starburst ADA-compliant radial design w/ 3/8 inch maximum slot opening widths
2. Grate Size: 144 inches long x 48 inches wide (4 pieces)
3. Grate Height: 1-1/2 inches
4. Tree Opening: 18 inch diameter.
5. Grate Model No.: M14402-2
6. Grate Material: Cast Gray Iron meeting ASTM A48 CL30B
7. Load Rating: Non-traffic / Pedestrian loads only
8. Frame Model No.:M48x144F
9. Frame Material: Jig welded from 1-3/4"x1-3/4"x1/4" steel angle
10. Metal Coating and Colors: Vinyl coating on all grate components.
    a. Color is manufacturer's Group B " Black" standard color, low gloss textured black powder

3.0 CONSTRUCTION

3.1 PREPARATION

Clean surfaces thoroughly prior to installation.

Prepare concrete surfaces using the methods recommended by the manufacturer for achieving the best result under the project conditions.

3.2 INSTALLATION

Install in accordance with manufacturer's printed instructions.

Embedded mounting.(Trash Receptacles) Material is to be extended a minimum of 18 inches (457 mm) below finish surface and cast in concrete. Note that embedment plate shall be cast integral to the surrounding sidewalk.

Surface mounting. Location and drilling of holes for inserts included. Anchor bolts and inserts shall be provided by the Contractor.

Tree Grate Frame Installation: ½" Nelson Stud (welded to frame) will be cast permanently embedded into concrete tree grate curb approximately 2" x 2-1/2" @ 45 degree angle according to manufacturer's tree grate frame details and recommendations. Tree Grates will be assembled and installed within tree grate frame assemblies per

manufacturer's recommendations, according to details, and as shown in locations on plans.

3.3 PROTECTION

Protect installed products until final acceptance by the Engineer.

Contractor will repair or replace, at the Engineer's option, any Site Furniture element damaged, defaced, or discolored, during fabrication, transportation, storage, or installation/erection before final acceptance and use by the Public.

4.0 MEASUREMENT

The Department will measure the quantity of Trash Receptacles and Benches receptacles as each. Tree Grates include 4 main grate pieces, and the surrounding frame that holds them. Tree Grate concrete curbs are integral to the installation of the tree grate frames and shall be included in price of each Tree Grate.

5.0 PAYMENT

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

Code Pay Item Pay Unit

XXXXXXX Trash Receptacle –Each

XXXXXXX Bench – Each

XXXXXXX Tree Grate - Each

The Department will consider payment as full compensation for all work required in this provision.

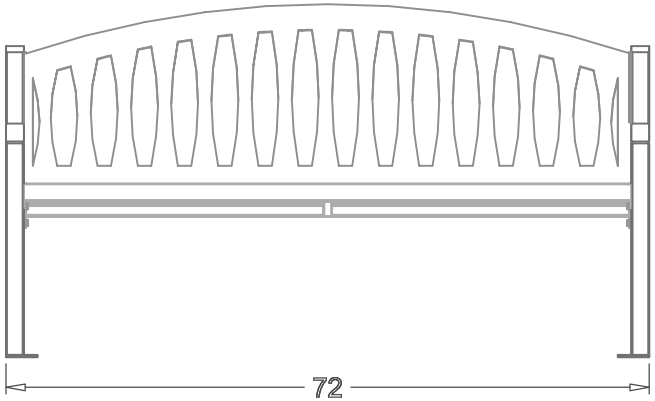
END OF NOTE

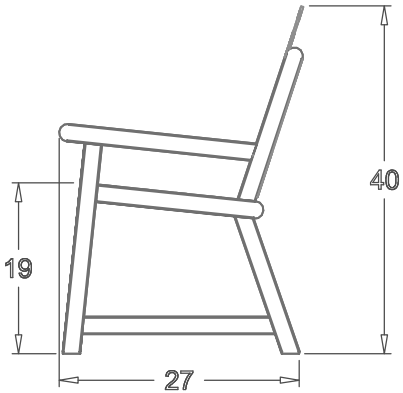
KenCoat™

Corporate Headquarters
206 Production Drive, Suite 100 • Elizabethtown, KY 42701
Phone: (270) 234-9135

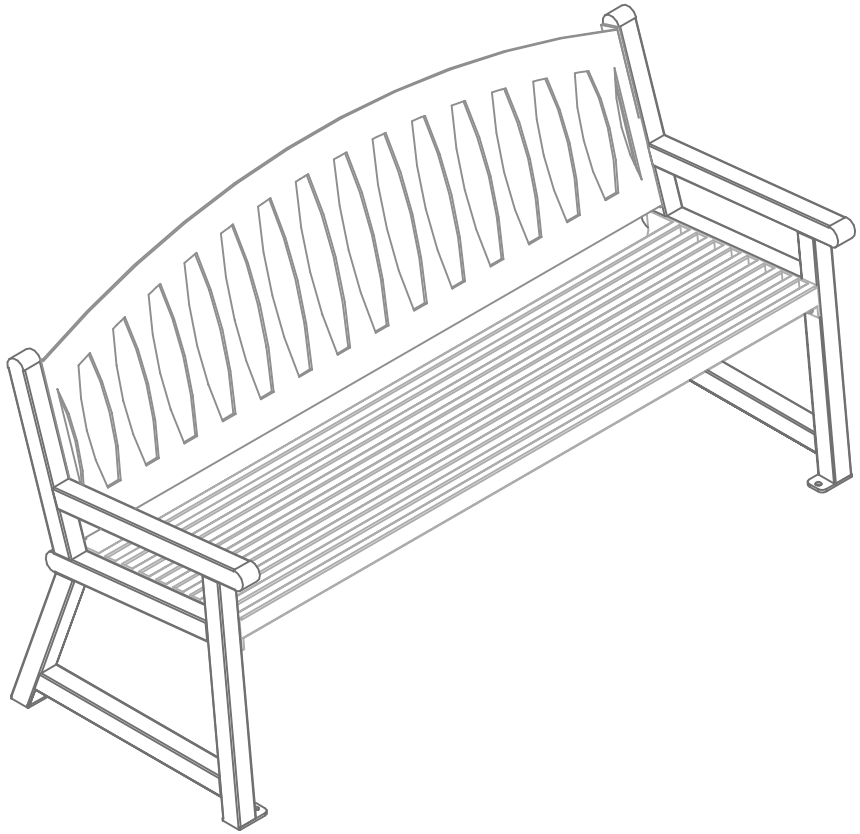
Sales Office & Manufacturing Facilities
210 Kane Avenue • Leitchfield, KY 42754
Phone: (270) 259-5798 • Fax: (270) 259-9858

Specification Sheet





Series 95SF
Santa Fe Bench
6 Ft



Specifications:

- All surfaces receive vinyl coating.
- All dimensions are in inches and are approximate.
- All included hardware is stainless steel.

Materials:

Legs and arms are 2" x 10 Ga. steel tubing with rolled steel end caps.

Seat frames are 2" x 1" x 16 Ga. steel tubing.

Seatback is 1/4" steel plate.

Mounting plates are 1/4" steel with 9/16" holes to accept 1/2" anchors.

Mounting hardware is NOT included.

Title: Series 95SF06 Sante Fe Bench - 6 Ft	
Drawn By: A. Browning	
Date: 3-9-06	Rev:
File Name: 95SF06-Spec	
Drawing Name: 95SF06-Spec	

KenCoat™

Specification Sheet

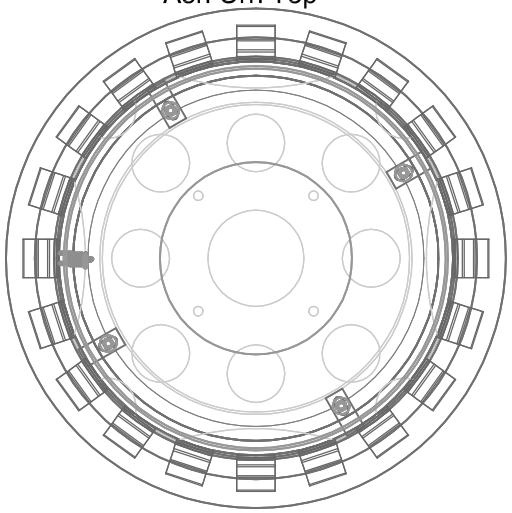
Corporate Headquarters
102 Manor Avenue, Suite 101 • Bardstown, KY 40004
Phone: (502) 331-9135

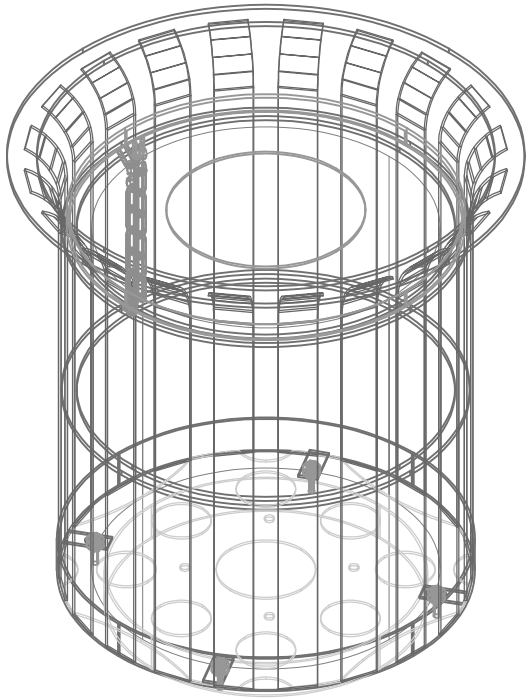
Sales Office & Manufacturing Facilities
210 Kane Avenue • Leitchfield, KY 42754
Phone: (270) 259-5798 • Fax: (270) 259-9858

Series 74

74 Boulevard 32Gallon
Portable/ Surface Mount / In Ground

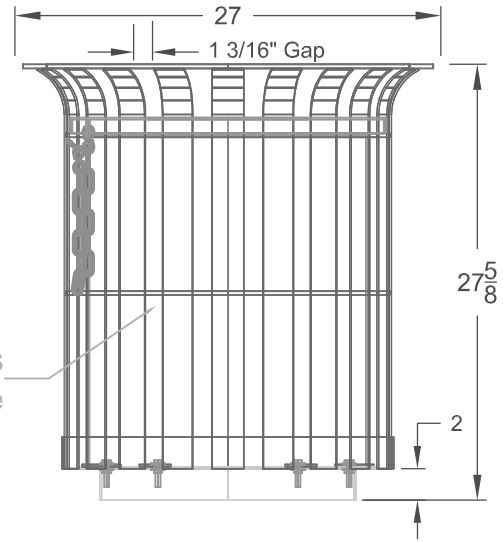
Optional Flat Top(Shown), Rain Bonnet Top or Ash Urn Top

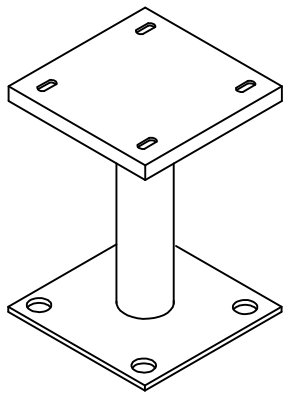




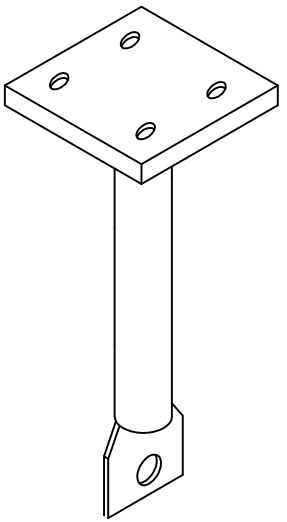
Specifications:

- All components receive vinyl coating.
- All dimensions are in inches and are approximate.
- All included hardware is stainless steel.
- Mounting hardware NOT included.





Surface Mount Plate



In Ground Mount Plate

Title: Series 74 Boulevard Recpt-32 Gal. Portable/Surface Mount / In Ground	
Drawn By: A. Browning	
Date: 5-18-04	REV: 07/19/2004
File Name: 74 Boulevard Trash Receptacle 32Ga	
Drawing Name: Blvd Trash 32Ga Spec	

JEFFERSON 05-397
SN-XXXX

SEGMENTAL RETAINING WALL

1.0 DESCRIPTION

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

The work covered by this section includes the furnishing of all labor, materials, equipment, and incidentals for the construction and inspection of a segmental retaining wall including drainage system as shown on the Contract Drawings and Construction specifications. The work included in this section includes but is not limited to, the following:

Dismantling and removal of the existing segmental concrete retaining wall located between STA 15+80 LT and 18+25+LT.

Salvaging of the existing segmental retaining wall blocks including staking and relocation as directed by University of Louisville....

Installation of a new segmental concrete retaining wall in accordance with the provisions of this note in addition to the Standard Specifications. Installation shall include the following.

A. Excavation and foundation soil preparation.
B. Furnishing and placement of leveling base.
C. Furnishing and placement of drainage system.
D. Furnishing and placement of geotextile.
E. Furnishing and placement of segmental retaining wall units.
F. Furnishing, placement and compaction of backfill drainage and retained soils.

1.1 REFERENCES

Note: All retaining walls should be designed in consultation with a licenced professional engineer, in accordance with established geotechnical procedures, NCMA Design Manual For Segmental Retaining Walls, and in accordance with all local regulations.

Segmental Retaining Wall Units:

ASTM C 33, Specification for Concrete Aggregates.
ASTM C 136, Method for Sieve Analysis for Fine and Coarse Aggregate.
ASTM C 140, Sampling and Testing Concrete Masonry Units.
ASTM C150, Specification for Portland Cement
ASTM C 979, Specification for Pigments for Integrally Colored Concrete.
ASTM C 1372, Standard Specification for Segmental Retaining Wall Units.

Geotextile Filter:

ASTM D 4751, Standard Test Method for Apparent Opening Size

Soils:

ASTM D G51, Soil pH
ASTM D 422, Gradation of Soils
ASTM D 424, Atterburg Limits of Soils
ASTM D 698, Moisture Density Relationship for Soils, Standard Method

Drainage Pipe:

ASTM D 1248, Specification for Corrugated Plastic Pipe
ASTM D 3034, Specification for Polyvinyl Chloride (PVC) Plastic Pipe

1.2 QUALITY ASSURANCE

Installation shall be by a contractor and crew, with at least one year of experience in construction of segmental retaining walls on projects of similar nature or dollar cost.

1.3 SUBMITTALS

Shop drawings sealed by a registered professional engineer (5 sets) and submitted the Department.

Shop drawings must include at a minimum:

- Retaining wall profile
- Typical cross section
- Site Specific details (if applicable) [corners, steps, etc]
- Segmental retaining wall unit dimensions and details
- Project notes
- Samples of segmental retaining wall units to indicate color and face texture. Color will be selected by the Architect/Engineer/Landscape Architect/Owner from manufacturer's available colors.
- Sieve analysis of granular base and backfill materials.
- Test results from an independent testing laboratory for compliance of segmental retaining wall unit requirements in Part 2 Products or other applicable requirements.
- All additional submissions in accordance with project requirements for submittals on this project.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver segmental retaining wall units to the site in steel banded, plastic banded, or plastic wrapped cubes capable of transfer by forklift or clamp lift. Unload units at job site in such a manner that no damage occurs to the product.

Coordinate delivery and building schedule with the Engineer and the University of Louisville to minimize interference with normal use of buildings adjacent to construction.

1.5 REMOVAL AND SALVAGE OF EXISTING SEMENGEAL RETAINING WALL

To the extent possible the individual blocks in the existing segmental retaining wall shall be carefully removed and salvaged by the contractor. The contractor shall neatly stack and secure the blocks on pallets or some other storage platform so that they may be transported and stored as directed by the University of Louisville. Existing backfill, drainage pipe, geotextile fabric etc. shall be removed and disposed of by the Contractor unless otherwise directed by the Engineer.

1.6 COORDINATION

Coordinate this work with other work including installation of lighting, traffic signals , landscaping, modification to pedestrian underpass, construction of sidewalks and placement of bus shelters and site furniture to avoid damage to installed site materials. The wall is planned to abut or wrap around a traffic signal mast arm and pedestrian signal as shown on the plans. The design of the wall shall take this into account. Note that this project requires staged construction and the construction of the segmental retaining wall will need to be coordinate with the planned construction phasing including the phased installation of a new traffic signal at the intersection of Eastern Parkway and the Speed School parking lot.

1.7 ENVIRONMENTAL CONDITIONS

- Do not install base or backfill material during heavy rain.
- Do not install base backfill or segmental retaining wall units over frozen base or subbase materials.
- Do not install frozen base or backfill materials.
- Do not install segmental retaining wall units on improperly prepared base material.

2.0 MATERIALS

2.1 MANUFACTURER

2.1.1 Manufacturer shall be the following or approved equal:

NAVASTONE, Inc.
12898 Mack Ave,
(Vicary Road @ US-127 South Jackson)
Cement City, MI 49233
Phone: (517) 592-2140
Fax: (517) 592-2061

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the Department and the University of Louisville.

2.2 SEGMENTAL RETAINING WALL MATERIALS

2.2.1 SEGMENTAL RETAINING WALL UNITS

The segmental retaining wall units shall be solid concrete interlocking units with a split rock face appearance as follows:

- WedgeSTONE XL® RS [200 mm x 300 mm x 150 mm high][7 7/8 in. x 11 3/4 in. x 5 15/16 in. high]
- Batter configuration: 0 degrees.
- Preliminary Color Selection: Standard Navastone color "Granite" (Natural Grey/Black). Submit actual color sample chips of each standard color available to confirm final color selection by the Department and Univeristy of Louisville..

Meet the following physical requirements:

- Average compressive strength of three coupons to be greater than 21 MPa (3000 psi) with no individual coupon below 18 MPa (2500 psi) when tested in accordance with ASTM C 140.
- Average absorption of three coupons to be less than 10.4% when tested in accordance with ASTM C 140.
- Maximum weight loss of five test specimens to be less than 1.0% when subjected to 100 freeze-thaw cycles or maximum weight loss of four of five test specimens to be less than 1.5% when subjected to 150 freeze-thaw cycles when tested according to ASTM C 1262.

2.2.2 FOUNDATION SOIL

The foundation shall be native undisturbed on-site soil. The foundation shall be examined and approved by the Engineer prior to the placement of the base materials. Should the foundation soil not be suitable for bearing loads to be applied, the Engineer shall provide guidance on the removal and replacement of suitable soil to meet the bearing requirement.

2.2.3 BASE MATERIAL

The footing material shall be a non-frost susceptible, well-graded compacted granular material having no more than 8% by weight passing the No. 200 sieve in the width and thickness indicated on the Contract Drawings.

Compaction density of base material should be no less than 100% Standard Proctor density according to ASTM D 698/

Note: Local aggregate base materials typical to those used for highway flexible pavements are recommended, or those conforming to ASTM D 2940.

2.2.4 BACKFILL MATERIAL

The backfill material shall be a non-frost susceptible, free draining sand and gravel material having no more than 8% by weight passing the No. 200 sieve. Depth required behind wall is dependant on design. See plans.
Compaction density should be no less than 98% Standard Proctor density according to ASTM D 698 or as indicated on the Contract Drawings.

2.2.5 DRAINAGE PIPE

The drainage pipe shall be perforated corrugated HDPE or PVC pipe with minimum 100 mm diameter wrapped in a geotextile sock to prevent the migration of soil into the pipe. Drainage pipe to be sized and outlet as indicated on the Contract Drawings.

3.0 CONSTRUCTION

3.1 FIELD QUALITY CONTROL

The Contractor shall retain a Manufacturer's representative to certify all aspects of construction of the retaining wall are in accordance with the shop drawings. The certification will include but not be limited to the following:

- Verify that subgrade preparation, compacted density and elevations conform to the specifications. The site must be stripped of all topsoil, unstable or unconsolidated materials to the grades indicated. Construction will not proceed until the subgrade has been inspected and approved by the Engineer.
- Verify that aggregate base materials, thickness, compaction, surface tolerances, and elevations conform to the Contract Drawings. Base material to extend a minimum of 200 mm [8 in.] in front of the intended face of wall and 200 mm [8 in.] behind the back of the base block.
- Verify that the drainage pipe behind the wall has been installed and outlet according to the Contract Drawings.
- Verify the retaining wall units are placed in accordance with the Contract Drawings.
- Verify that the aggregate backfill materials, thickness, and compaction conform to the Contract Drawings.
- Verify the type, placement and location of the geotextile is in accordance with the Contract Drawings.
- The Contractor must furnish the Department with a letter indicating the retaining wall has been constructed in accordance with the Contract Drawings.

3.2 INSTALLATION

- The foundation soil shall be excavated or filled as required to the grades and dimensions shown on the Contract Drawings. The foundation soil shall be proof rolled and examined by the inspecting engineer to ensure it meets the minimum

strength requirements indicated on the Contract Drawings. If unacceptable foundation soil is encountered, the contractor shall excavate the material out to the satisfaction of the Engineer and replace with suitable material under the direction of the Engineer.

- Spread the granular base evenly over the geotextile and compact as indicated on the Contract Drawings.
- Level the granular base to level of underside of base block to +/- 3 mm [+/- 1/8”] off approved final base grade elevations. Care should be taken to ensure the base material is level front to back and side to side.
- Place the base row of retaining wall units as indicated. Care should be taken to ensure the blocks are aligned correctly and are level side to side and back to front and are in complete contact with the base material.
- Retaining wall units above the base course shall be placed according to the desired batter configuration. Units shall be places such there is a minimum 1/3 running bond between successive courses.
- Place drainage pipe behind the retaining wall units in the location indicated. The pipe should be laid at a gradient to ensure adequate drainage to outlet sources.
- Before the placement of the successive courses, the top of the laid units shall be swept clean to ensure no dirt, concrete or foreign particles interfere with the placement of the next course.
- Backfill between the back of the retaining wall units and the undisturbed native soil with the backfill material and compact. At no time should the units be stacked higher than 600 mm [24 in.] above the backfill material.
- Cut units as required with a masonry saw.
- Continue with steps F. and I. until all but the coping units are placed.
- Retaining wall shall be finished at the top with coping units. The coping unit shall be secured to the course below it using a concrete adhesive on the Departments’ approved materials list..

3.3 FIELD QUALITY CONTROL

The following are the maximum allowable deviations from the Contract Drawings:

- Vertical Control - +/- 32 mm [1 ¼”] over a 3000 mm [10 ft] distance
- Horizontal Location Control - +/- 32 mm [1 ¼”] over a 3000 mm [10 ft] distance
- Rotation – 2 degrees from published batter
- Bulging – 25 mm [1”] over a 3000 mm [10 ft] distance

All retaining wall units shall be free of defects that would interfere with the proper placement of the unit or would significantly affect the structural integrity of the structure.

3.4 PROTECTION

Protect installed products until final acceptance by the Engineer.

Repair or replace damaged units as directed by the Engineer before final acceptance and use by the Public.

4.0 MEASUREMENT

The Department will measure the quantity of Segmental Retaining Wall as Face Foot.

5.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit

XXXXXXX SEGMENTAL RETAINING WALL – Face Foot

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

REPAIR PARKING LOT PAVEMENT

1.0 DESCRIPTION

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

This item includes furnishing all labor, equipment, material and incidentals to repair existing asphalt parking lot pavement which may be damaged or altered as a result of adjacent construction.

This includes saw cutting, excavation, disposal of existing pavement and base materials, sub grade shaping and compaction, placement of aggregate base, and new asphalt base & surface and sealing all joints as directed by the Engineer.

Signage, and control or maintenance of temporary pedestrian or vehicular access is incidental to this item.

All parking lot pavement repairs shall be made such that proper drainage is provided and that there is a uniform and smooth transition between existing pavement and new pavement, sidewalks and curbs.

1.1 COORDINATION

Coordinate this work with other work including installation of segmental retaining walls, landscaping, and construction of sidewalks and pavement. The details of modifications or alterations to parking areas shall be approved by the Engineer.

1.2 PAYMENT

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

Code Pay Item Pay Unit

XXXXXXX Repair Parking Lot Pavement – Square Yards

END OF NOTE

JEFFERSON 05-397
SN-XXXX

PEDESTRIAN UNDERPASS WATERPROOFING

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section References herein are to the Department's 2004 Standard Specifications for Road and Bridge Construction. This special note exceeds the requirements for water proofing materials in Section 808 of the Standard Specifications. The material does not need to be pre-certified the Department for uses on the existing pedestrian tunnel. The Department may sample and test the materials for the proposed waterproofing system prior to incorporation into the work.

It should be noted that neither the Department nor the University of Louisville has the original as built construction documents for the pedestrian tunnel.

This item shall include furnishing all labor, equipment, materials and incidental items for the following:

- All necessary excavation to expose the roof slab and sides of the existing pedestrian tunnel to allow for the application of fluid applied elastomeric waterproofing to the exterior surfaces of the tunnel.

- All necessary repair and preparation of the existing concrete substrate surfaces to accept the fluid applied elastomeric waterproofing in accordance with this specification and the manufacturers recommendations.

- Furnishing and placement of fluid applied elastomeric waterproofing compound as specified.

- Backfilling, pavement restoration and clean up and general restoration of the work area to be coordinated with placement of new sidewalks pavement curbs, lighting and landscaping.

1.1 COORDINATION

Coordinate this work with other work including, pedestrian tunnel modifications, construction of segmental retaining walls, traffic signals, landscaping, lighting as well as construction of sidewalks and pavement. Note that this project requires staged construction and the installation of the waterproofing will need to be coordinated with the planned construction phasing and associated maintenance of traffic plans

2.0 MATERIALS

GENERAL

A. Provide a complete fluid applied elastomeric waterproofing membrane system designed for concealed building components subject to hydrostatic head that is polyurethane, coal-tar free and complies with ASTM C836 :

1. Acceptable products:

a. TREMproof 201/60; Tremco Inc.
b. or prior approved equal

2.02 ACCESSORIES

A. Primer: As recommended by waterproofing membrane system manufacturer;
B. Joint backing: Closed-cell, polyethylene rod as recommended by membrane manufacturer;
C. Reinforcing fabric: Woven fiberglass scrim cloth;
D. Elastomeric sheet flashing: 1/16 inch thick by 12 inch wide uncured neoprene sheeting;
E. Elastomeric transition flashing to above-grade: polyurethane liquid-applied coating system with ultraviolet protective topcoat.

Acceptable product:
1. Acceptable product:
a. Vulkem 350/351; Tremco Inc.

F. Joint Treatments:

1. Acceptable products:
a. Dymeric 240FC; Tremco Inc.
b. TREMproof 201T; Tremco Inc.
c. or prior approved equal

G. Protection board: As recommended by waterproofing membrane manufacturer.

1. Acceptable product for walls:
a. Protection Mat; Tremco Inc.
2. Acceptable product for slabs:
a. Powerply standard smooth; Tremco Inc or approved equal

.

H. Prefabricated Composite Drainage: Two-part prefabricated composite drainage material consisting of a formed polystyrene core covered on one

side with filter fabric. . For backfilled tunnel walls, provide a composite drainage mat with non-woven needle-punched polypropylene filter fabric, 9 gpm/ft flow capacity per unit width and 10,800 lbs/ft² compressive strength. Acceptable product:

a. Tremdrain; Tremco Inc. or approved equal

2.03 OTHER MATERIALS

A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and approved by the membrane system manufacturer as compatible, subject to approval of the ENGINEER and the University of Louisville.

3.0 CONSTRUCTION

Application of Waterproofing shall be coordinated with the University of Louisville. Contact person for the University is

Larry Detherage
Associate Vice President for. Physical Plant
Department of Physical Plant
University of Louisville
Room 125 Service Complex
Louisville Kentucky 40292
Phone: (502) 852-6245

The contractor shall notify the University Representative a minimum of thirty days prior to beginning the application of waterproofing to the existing underpass structures.

The contractor shall schedule the installation of fluid applied elastomeric waterproofing of the existing pedestrian underpass so that the proposed work to be completed under this item will not damage or inhibit the modification of the pedestrian tunnel, placement of new pavement, sidewalks, lighting and landscaping as shown in the plans.

3.1 PREPARATION

A. Surface preparation and detailing procedures to be in accord with waterproof membrane system manufacturer's instructions and recommendations except where requirements those are more stringent are indicated.

B. Clean all concrete surfaces to receive membrane system in accord with manufacturer's instructions; vacuum clean or blow clean with oil-free compressed air all surfaces to receive sealants, detailing materials or membranes immediately prior to installation.

C. Rout, clean, prepare and detail existing surface cracks in accordance with manufacturer's instructions; install backer rod where required. Repair of

cracks, holes or other damaged portions of the existing concrete shall be approved by the ENGINEER prior to application of the waterproofing.

D. Clean any metal surfaces to bright metal by wire brushing or mechanical etching; scuff-sand lead flashing and plastic surfaces.

E. Prime surfaces in accord with manufacturer's instructions.

F. Install 1/4" diameter backer rod into corner of all horizontal-to-vertical joints subject to movement and cover with 1" detail cant of approved sealant; install 1" detail cants at projections, curbs and other horizontal-to-vertical junctures.

G. Install detail coats, joint and crack treatments, elastomeric flashing and reinforcing fabric in accord with manufacturer's instructions.

H. Allow detail applications to cure in accord with manufacturer's instructions prior to general application of membrane.

3.2 APPLICATION

A. General: Install waterproofing system in accord with manufacturer's recommendations and instructions as applies to the work except where more stringent requirements are indicated. The entire top slab and sides of the tunnel shall be covered with the waterproofing system unless otherwise directed by the engineer.

1. Waterproofing membrane shall be applied in two coats of 30-mils each to provide an overall pinhole-free membrane of minimum 60-mil thickness.

2. Grid deck surfaces to assure proper coverage rates and verify membrane wet-film mil thickness with gauges as work progresses.

3. Retain empty product containers during course of work to aid in determining whether completed membrane complies with required average dry-film thickness.

B. Verify proper dry condition of concrete substrate using method recommended by membrane system manufacturer; perform adhesion checks prior to general application of membrane system using field adhesion test method recommended by manufacturer.

C. Wipe clean all detail coats with white rags wetted with Xylene solvent; do not saturate detail coat.

D. Apply membrane uniformly and allow cure in accord with manufacturer's instructions.

F. Feather terminating edge when entire area cannot be completed in one day; clean area 6" wide along terminating edge of membrane with Xylene solvent on clean white rags prior to startup on next working day; use interlaminary primer per manufacturer's instructions as needed; overlap existing work by 6" with new work.

G. Proof test: Restrict runoff on the tunnel roof slab and flood with water to depth of 2" (50 mm) and allow to stand at least 48 hours to check for leakage and ; repair leaks if occurs and retest.

H. Install protection board over cured membrane in accord with manufacturer's instructions.

I. Install drainage material in accord with manufacturer's instructions.

3.3 PROTECTION AND CLEAN-UP

A. Promptly remove primer or membrane system material from adjacent surfaces with MEK, Toluene or Xylene; leave work area in clean condition.
B. Prohibit traffic over completed work and protect against work overhead or backfilling until protection course is installed; protect from damage until protected beneath overlaying work.
C. Take precautions to contain any spillage of the primer or waterproofing system from seepage into the adjacent excavated soil.

3.4 Shop Drawings

The Contractor shall submit the following product data for the Waterproofing System:

1. Materials list of items proposed to be provided under this Special Note
2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements;
3. Shop Drawings or catalog illustrations in sufficient detail to show the planned installation of the selected system on the top and sides of the pedestrian tunnel including treatment of the expansion joint. This shall take into account the phased construction of Eastern Parkway.
4. Manufacturer's current recommended installation procedures which, when reviewed by ENGINEER, will become the basis for accepting or rejecting actual installation procedures used on the Work.
5. Written documentation of the applicator's qualifications, including reference projects of similar scope and complexity, with current phone contacts of architects/engineers and owners for verification.

3.5 Transportation, Storage, Handling, and Erection.

Deliver materials to job site in manufacturer's unopened containers with all labels intact and legible at time of use. Maintain the products in accord with manufacturer's recommendations with proper precautions to ensure fitness of material when installed. This includes temperature and moisture.

4.0 MEASUREMENT

The Department will measure the quantity of Pedestrian Underpass Waterproofing as a Lump Sum

5.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit
Pedestrian Underpass Waterproofing–Lump Sum

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

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PEDESTRIAN UNDERPASS MODIFICATIONS

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section References herein are to the Department's 2004 Standard Specifications for Road and Bridge Construction. This work shall be coordination with the application of elastomeric waterproofing to the pedestrian underpass tunnel. See special provision for Pedestrian Underpass Waterproofing for additional information.

This item shall include furnishing all labor, equipment, materials and incidental items for the following:

- Partial demolition and removal of existing of stairwell pavilions. This includes relocation of existing communication lines as needed as well as the careful removal of the existing auditory emergency alarm equipment and its return to the University of Louisville. To allow for installation of the cover slabs.

- Furnishing and placement of pre-cast or cast in place concrete cover slabs with access door.

- Installation of prefabricated ladder rungs into the existing stairwell wall as shown on the plans.

- Perimeter fence wall or other means to prevent unauthorized entry into the work area at all times.

- Clean up and general restoration of the work area to be coordinated with placement of new sidewalks, street furnishings, and landscaping.

1.1 COORDINATION

Coordinate this work with other work including application of waterproofing to the pedestrian underpass tunnel, installation of segmental retaining walls, traffic signals, landscaping, lighting and, construction of sidewalks and pavement . Note that this project requires staged construction and the installation of the cover slabs will need to be coordinated with the planned construction phasing.

2.0 MATERIALS

2.1 Concrete

Class AA in accordance with Section 601 of the Standard Specifications.

2.2 Reinforcing Steel

Shall be in accordance with Sections 602 and 811 of the Standard Specifications and shall be epoxy coated.

2.3 Non-Shrink Grout.

Use the non-shrink grout on the Department's List of Approved Materials. Use an approved non-shrink, non-staining grout consisting of either a mixture of hydraulic cement, water, fine aggregate, and an approved non-ferrous expansive admixture, or a packaged commercial product.

2.4 Access Door and Miscellaneous Hardware

2.4.1 Manufacturer

The access door and miscellaneous hardware shall be Bilco JD-A-HS20 or approved equal:

The BILCO Company,
P.O. Box 1203, New Haven, CT 06505;
1-203-934-6363,
Fax: 1 203-933-8478,
Web: www.bilco.com

Furnish and install where indicated on plans vault access door Type JD-AL-HS20, size width 48" x length 48". Length denotes hinge side. The vault access door shall be Double leaf. The vault access door shall be pre-assembled from the manufacturer.

2.4.2 Performance characteristics:

Covers: Shall be reinforced to support AASHTO H-20 wheel load with a maximum deflection of 1/150th of the span.

Operation of the covers shall be smooth and easy with controlled operation throughout the entire arc of opening and closing. Operation of the covers shall not be affected by temperature.

Entire door, including all hardware components, shall be highly corrosion resistant. Please consult the manufacturer when doors are to be installed in unusually harsh environments or extremely corrosive conditions.

Covers: Shall be 1/4" (6.3 mm) aluminum diamond pattern.

Frame: Channel frame shall be 1/4" (6.3mm) extruded aluminum with bend down anchor tabs around the perimeter. A continuous EPDM gasket shall be mechanically attached to the aluminum frame to create a barrier around the entire perimeter of the cover and significantly reduce the amount of dirt and debris that may enter the channel frame.

Hinges: Shall be specifically designed for horizontal installation and shall be through bolted to the cover with tamperproof Type 316 stainless steel lock bolts and shall be through bolted to the frame with Type 316 stainless steel bolts and locknuts.

Lifting mechanisms: Manufacturer shall provide the required number and size of compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and to act as a check in retarding downward motion of the cover when closing. The upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly. The lower tube shall interlock with a flanged support shoe fastened to a formed 1/4" gusset support plate.

A removable exterior turn/lift handle with a spring loaded ball detent shall be provided to open the covers and the latch release shall be protected by a flush, gasketed, removable screw plug].

2.4.3 Hardware:

Hinges: Heavy forged aluminum hinges, each having a minimum 1/4" (6.3 mm) diameter Type 316 stainless steel pin, shall be provided and shall pivot so the cover does not protrude into the channel frame.

Covers shall be equipped with a hold open arm that automatically locks the covers in the open position. Covers shall be fitted with the required number and size of compression spring operators. Springs shall have an electrocoated acrylic finish. Spring tubes shall be constructed of a reinforced nylon 6/6-based engineered composite material].

A Type 316 stainless steel snap lock with fixed handle shall be mounted on the underside of the cover

.

Finishes: Factory finish shall be mill finish aluminum with bituminous coating applied to the exterior of the frame.

2.5 Manhole Steps

Prefabricated Manhole Steps shall be 13 inches center to center and be on the Departments list of approved materials in accordance with Section 710 of the Specifications for Manhole Steps.

3.0 CONSTRUCTION

The contractor shall demolish and remove portions of the existing pedestrian underpass stairwell pavilions as shown on the plans. The contractors shall take care to protect the portions of the existing stairwells to remain including electrical conduits, junction boxes, hand rail and concrete.

The contractor shall relocate any existing conduit and junction boxes mounted to those portions of the stairwells to be demolished as directed by the Engineer. The existing light fixtures and audible warning devices shall be removed. The audible warning devices shall be returned to the University of Louisville.

Demolition shall be coordinated with the University of Louisville. Contact person for the University is

Larry Detherage
Associate Vice President for. Physical Plant
Department of Physical Plant
University of Louisville
Room 125 Service Complex
Louisville Kentucky 40292
Phone: (502) 852-6245

The contractor shall notify the University Representative a minimum of thirty days prior to beginning demolition of the existing underpass structures.

The contractor shall schedule the modification of the existing pedestrian underpass so that the proposed work to be completed under this item will not damage or inhibit the placement of new sidewalks, lighting and landscaping as shown in the plans.

The contractor shall erect and maintain a barrier or fence a minimum of 48” surrounding the pedestrian underpass stairwells at all times until the slabs have been placed in their final position approved by the Engineer. The contractor shall erect signs during construction stating that the pedestrian underpass is closed and is visible from all pedestrian access points.

3.1 Shop Drawings

The Contractor shall submit drawings conforming to applicable requirements of Subsection 607.03. Include with the shop drawings a drawing, including details of the reinforcing, access doors and pick up points. The shop drawings will also illustrate and describe in detail the erection plan for installation of the slabs including placement of erection equipment. Fabrication of the precast slabs shall not begin without approval of the submitted drawings by the Engineer.

3.2 Casting.

The cover slabs may be precast or cast in place at the contractor’s option. Cast the slabs in the horizontal position. Accurately place all steel, as shown or directed. Dimensions shown from the face of concrete to steel are clear distances. Spacing is from center to center of steel. Place and securely tie all steel reinforcement before placing concrete, unless the Engineer requires or allows otherwise.

For concrete batching equipment and procedures, conform to Section 601. Do not begin concreting operations when the wind chill factor at the site is consistently 0 °F or less. Place concrete continuously in each slab, vibrating internally or externally or both to consolidate the concrete. Overfill the forms, screed off the surplus concrete, and finish the top surface to a uniform, even texture comparable to the finish produced by the forms.

Remove any laitance present during the finishing operations. Vibrate in a manner that avoids displacement of any steel or access door enclosures and segregation of the concrete. Properly embed steel and access door in the concrete.

The Department will allow casting of members at any location away from the job site. The Engineer will inspect the slabs at the site of the casting, but will make final acceptance according to Subsection 105.12.

Determine the compressive strength of the concrete from cylinders cast from concrete placed in the members and cured in the same manner as the concrete represented by the cylinders. Cast and test cylinders according to KM 64-305 and ASTM C 39, respectively.

Cast the name or trademark into the concrete according to Subsection 601.03.19 for the plate used to imprint the construction date.

The Department will inspect, sample, and test precast units to determine their acceptability. The fabricator is responsible for providing quality control personnel as necessary to ensure the work performed complies with all requirements of the Contract.

Instead of tying, the Department will allow tack welding steel reinforcement

3.3 Removal of Forms and Surface Finish.

The Department will allow the removal of forms at any time when no distortion, slump, or misalignment of the concrete will result. If cast in place, supporting formwork shall not be removed for a minimum of 7 days or until concrete samples have reached the specified 28 day compressive strength. Ensure that all surfaces are free from rough, open, or honeycombed areas, and appreciable depressions or projections. Finish or chamfer edges as directed.

When removing the forms, avoid spalling or otherwise damaging the concrete. Finish the portions of the slabs that will be exposed in the finished work according to Subsection 601.03.18.

3.4 Dimensional Tolerances.

The contractor shall field verify all measurements shown on the plans prior to beginning casting operations for the slabs. The slab shall overhang the existing perimeter walls of the respective stairwells by 1 inch in all directions.

Precast slabs shall be furnished with dimensions within the tolerances of the following tables. The Engineer will condition final acceptance upon satisfactory placement of the slabs in their final position.

3.5 Transportation, Storage, Handling, and Erection.

If precast, transport precast slabs in an upright position, and keep the points of support and directions of the reactions with respect to the slab approximately the same during transportation and storage as when the slabs are in their final positions.

Prevent cracking or damage during storage, hoisting, and handling of precast slabs. Replace slabs damaged by improper storing or handling.

Do not ship precast slabs to the Project prior to attaining the specified acceptance strength.

During placement of the slabs, keep the tops of the exiting concrete stairwell walls free of foreign materials.

Provide a non shrink grout pad on the entire perimeter of the existing concrete stairwell walls and tunnel slab as shown in the plans. The grout pad shall provide a level bearing surface for the precast slab. The grout pad shall have a minimum thickness of 1 inch and shall completely fill any irregularities in the surface of the existing walls or tunnel slab/

Keep the non-shrink grout continuously moist for 3 or more calendar days, except cure commercial mixtures according to the manufacturer's instructions.

Do not place equipment used to lift cover slabs into place on sidewalk areas or adjacent pavement without Engineer's approval.

4.0 MEASUREMENT

The Department will measure the quantity of Pedestrian Underpass Modifications as a Lump Sum

5.0 PAYMENT

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

Code Pay Item Pay Unit

XXXXX Pedestrian Underpass Modifications–Lump Sum

The Department will consider payment as full compensation for all work required in this provision.

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END OF NOTE

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PARKING EQUIPMENT

1.0 DESCRIPTION

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

The Department will not measure separately for payment the removal, salvage and delivery of existing parking access and control equipment owned and maintained by the University of Louisville..:

1.1 COORDINATION

Coordinate this work with other work including installation of segmental retaining walls, landscaping, and construction of sidewalks and pavement. Note that this project requires staged construction and the removal of existing parking access equipment shall be coordinated with the removal of existing parking lot access to Eastern Parkway. The Contractor shall notify the Engineer and University of Louisville a minimum of 30 days before closure of existing parking lot access to Eastern Parkway as shown on the plans including the removal of any existing parking access equipment.

The contact with the University of Louisville to coordinate the removal and salvage of parking equipment is as follows:

Doreen L. Wood,
Assistant Director of Public Safety/Parking
University Parking Office
Floyd Street Parking Garage
2126 South Floyd Street, Suite 100
Louisville, KY 40208
Phone: (502) 852-5029

2.0 CONSTRUCTION

The Contractor shall carefully remove the existing parking access equipment at the locations shown in the plans or as directed by the Engineer. The existing access equipment shall consist of control gates, card readers, signage and other appurtenances. The equipment shall be salvaged and delivered to the University of Louisville at a designated location.

Removal of the existing subsurface communications and electrical power for the parking equipment may proceed following approval by the Engineer and the University of Louisville.

The removal, salvage and delivery of the existing parking equipment shall be incidental to clearing and grubbing and will not be measured separately for payment.

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END OF NOTE

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OVERHEIGHT WARNING SYSTEM

1.0 DESCRIPTION

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

The design for the Overheight Warning system described herein is to prevent overheight vehicles/loads from striking the Norfolk Southern Railroad Overpass on Third Street by vehicles traveling (north bound), on Third Street and (west bound) on Eastern Parkway at points of detection. Detection and warning items are to comply with Kentucky Transportation Cabinet and Louisville Metro regulations and the Federal Highway Administration Manual of Uniform Traffic Control devices. All items shall be located to provide warning early enough (in consideration of "practiced vehicle speed" at the site) to allow sufficient time for drivers to react.

There should be maximum safety for all drivers with minimum disruption of traffic flows. Warning of drivers of vehicles specifically detected as being overheight for clearance of the overhead structure shall be as follows:

1.1 DETECTION –

All overheight vehicles or vehicle loads traveling toward the above described structure shall be detected and specific individualized warning shall be given. Vehicles traveling away from the structure shall be ignored by the detection equipment. Detection of vehicles traveling toward the structure shall be counted and recorded on an electronic counting device. The detection systems shall consist of 2 source and detector(s) mounted on poles positioned on opposite sides of the approach roadway at a distance from the structure as shown in the plans or as directed by the Engineer. The alignment and height of the infrared beam shall be preset to identify vehicles or loads of over 11 feet 6 inches above the roadway .at the point of detection.

1.2 WARNING AND INSTRUCTIONS FOR DRIVERS

Warning and instructions to drivers of overheight vehicles shall be stated on the face of a warning sign and shall be illuminated internally, i.e., nature of danger "OVERHEIGHT" and action to be taken. "TURN RIGHT" or "TURN LEFT" etc.) if the driver proceeds. The action must cause the driver to become alert to the extent that they react as instructed.

2.0 MATERIALS

2.1 General

The manufacturer for the Overheight Warning System shall be the following or approved equal.

Trigg Industries LLC
716-B Bluecrab Road
Newport News, VA 23606
Tel 757-223-7522
Fax 757-223-7317
www.triggindustries.com

All equipment shall be supplied for installation by the Contractor. Each component of the equipment shall be accompanied by full instructions for installation, wiring, assurance of proper functional interface of components and other information needed for installation and functional testing.

This item shall include all labor, equipment, materials and incidental items for the following:

Equipment is hereinafter referred to by manufacturer for the purpose of establishing standards of quality for Overheight Warning Systems manufactured and/or supplied by Trigg Industries, are presently considered as acceptable when conditions of the drawings and specifications are met.

Products of other firms offered will be considered, subject to the Engineer's approval and will be based on the quality and capability of the substitutes compared to the equipment available from the above indicated supplier.

All equipment shall be constructed in a workmanlike manner and present a neat and finished appearance when completed. Proper operation of the equipment shall commence immediately after restoration of power.

Safety Features - NEMA 3R rated metallic equipment enclosures shall be provided with terminals for attachment of ground safety wire.

2.2 ENVIRONMENTAL CONDITIONS

2.2.1 METROLOGICAL CONDITIONS

The equipment shall operate and meet all of the requirements of this specification under the following atmospheric conditions:

Temperature -40ºF to 135ºF (-40ºC to 57ºC).
Relative Humidity 0 to 100%.
Rain 2 inches per hour at 200 feet between source and detector.
Snow - Light snow.
Fog 200 foot visibility.
Wind Velocity 0 to 90 miles per hour (0 to 144 km per hour).

2.2.2 SUNLIGHT

The equipment shall operate properly when the sun is outside 10 degrees of the extended optical axes of the receiver unit in its installed configuration. If the above requirements cannot be met, the equipment will be deemed satisfactory if explicit installation information is given such that the rays of the sun cannot interfere with the proper operation of the equipment. This provision includes reflections from vehicles.

2.2.3 CLOUDS

The variation in light intensity caused by the shadow of passing clouds shall not interfere with the proper operation of the equipment.

2.3 MECHANICAL EQUIPMENT

2.3.1 DETECTOR UNIT

The detector unit will be
Trigg Industries double eye infra-red model # DE-IR/3111 or approved equal.

The detector unit electronics shall be solid state with printed circuit boards and regulated power supply. The unit shall be modular assembly type. It shall have an effective range of 10 feet (3 m) to 200 feet (38 m) with a reaction speed range of 1 MPH (1.61 km/h) to75 MPH (121 km/h) for a 2½ inch (6.35 cm) diameter object 1 inch (3 cm) above the detection height.

It shall contain provisions for the elimination of the effect of ambient light and an internal environmental control element that reduces operational failure from fog, condensation and insects. Dimensions shall not exceed a maximum overall size of 19 x 15 x 10 inch (48 x 38 x 25 cm). The housing shall be of cast Almag of not less than 1/8" thickness and shall be weather sealed. The mounting shall allow for directional adjustment and aiming after initial installation.

2.3.2 BORESIGHT

Two 1/8 inch (.32 cm) boresight holes are located at top-middle of each housing. Front and rear screws are installed in these holes so as to insure a weather tight enclosure, and should be removed to allow alignment of units. Looking through the boresight hole from rear of unit so as to see through the boresight hole in front of unit gives the installer a basic means of aiming the unit in the proper direction. Focusing the unit on opposite sides of the road in the center of the front boresight while looking through the rear boresight hole ensures that a general alignment is accomplished. This step should be done from both transmitter and receiver unit locations. Fine tuning of alignment can then be done electronically.

2.3.3 ACCESS

The transmitter unit and the receiver unit shall each be provided with a barrier to protect the operating equipment. The enclosure shall maintain its structural integrity for the

operational life of the equipment and shall allow ready access for control adjustment and electrical interconnection without the use of any tools except a phillips head screwdriver.

2.3.4 MOUNTING PROVISION

Each of the equipment units shall be provided with means for rigidly attaching the unit to a vertical cylindrical pole (light pole or existing pedestrian signal pole) without requiring any machining operation. The attachment means shall not stress or deform the unit and shall prevent the movement of the unit in any direction by the force developed by wind. The mounting means shall allow adjustment of the vertical position on the pole. The mounting means for the transmitter unit and the receiver unit shall have the capability of adjusting the angular orientation of the optical axis in both the horizontal and vertical plane over an angular range of plus or minus five degrees from horizontal. The transmitter and receiver unit shall be mounted to detect the presence of vehicles that exceed the specified vertical height.

Pole Mout Bracket

The system shall utilize Trigg pole mount bracket Model PMB-406 with Model TGZ-M017 Three Axis Mount and adapter plate.

ADJUSTMENT
Pan 360°, Pitch +15° / -13°, Roll +/- 25°.

DIMENSIONS
3½ H X 3½ W X 11 L inch (9 H x 9 W x 28 L cm).

CONSTRUCTION
Heavy ALMAG casting.

FINISH
Light gray enamel.

ATTACHMENT
Stainless steel bands or bolts. Adapts to any pole
> 3 inches diameter.

WEIGHT
5 lbs (4kg) each. Two required per system.

2.3.5 VARIABLE MESSAGE SIGNS (VMS)

Variable message sign will be Trigg Industries Model # 5500 Series or approved equal. The sign shall provide two lines with 5”x7” font. The warning message shall be as follows:

Third Street

OVERHEIGHT TRUCK
TURN LEFT

Eastern Parkway

OVERHEIGHT TRUCK
TURN RIGHT

VMS devices shall be provided with Amber full matrix LED's. Viewing angle is generally 30 degrees but a 70-degree viewing angle may sometimes be required. Photocell control for dimming based on ambient light shall be provided. The "Default" message will be blank and both the "Default" and "Warning" messages may be updated locally at the VMS using a laptop computer.

The controller between the VMS and OVDS or computer shall be NTCIP compliant. The overheight warning message shall have priority over the default message and shall be displayed for the duration of the Alarm Time setting in the OVDS detector. Software for VMS message control shall be Windows compatible. The VMS devices shall operate with a power of 120 VAC +/- 10% and a temperature range of –40 to +138 degrees F with internal fans for cooling. The VMS case shall have a NEMA 3R rating and be fully front-serviceable.

VMS devices will mounted on the project traffic signal pole mast arms. The contractor shall submit a detailed mounting design for approval by the Engineer.

3.0 CONSTRUCTION

The contractor shall install traffic signal poles for support of the variable message warning devices and the light poles and pole bases to support the detectors on Eastern Parkway at the locations shown in the plans or as directed by the engineer. See special notes for light poles and traffic signal poles for additional information.

The detector shall be adjusted to match the cross slope and longitudinal grade of the roadway at the detector location.

Conductors power and contact switch shall be installed overhead on Third Street and within a 4" muti-cellular conduit on Eastern Parkway as shown in the plans.

3.1 COORDINATION

Coordinate this work with other work including installation of lighting, traffic signals , landscaping, modification to pedestrian underpass, construction of sidewalks and pavement . Note that this project requires staged construction and the installation of the light poles and traffic signals poles to support the detectors and warning signs will need

to be coordinated with the planned construction phasing including the phased installation of a new traffic signal at the intersection of Eastern Parkway and the Speed School parking lot. The Overheight Warning system is not intended to be operational until the completion of the project.

4.0 MEASUREMENT

The Department will measure the quantity of Overheight Warning System as Each. This includes detectors, warning signs, mounting brackets and other appurtenances. Light Poles, Traffic Signal Poles, Pole bases, conduit, junction boxes and cable will be paid for separately as defined in the Standard Specifications or other Project Special Notes.

5.0 PAYMENT

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

Code Pay Item Pay Unit

Overheight Warning System–Each
Traffic Signal Pole - Each
Light Pole- -Each
Light Pole Base – Each
Conduit, Cable, Trenching, Junction Boxes and open cut roadway will be paid for under their standard respective item codes.

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

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ORNAMENTAL FENCE

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

A. Ornamental Fence

This includes Ornamental picket fencing and accessories as described herein. Ornamental fencing and components includes fence panels, posts, panel hangers, gates, and accessories. All labor, materials and supplies needed for professional installation. Additional attachment and/or concrete required for fencing embedment shall be incidental to the Ornamental Fence item. Ornamental fence shall include two types: 1) installation between masonry piers and 2) stand-alone installation.

1.1 REFERENCES

ASTM A653 Standard Specifications for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process

ASTM A787-01 Standard Specifications for Electric-Resistance-Welded Metallic-Coated Carbon Steel Mechanical Tubing.

1.2 SUBMITTALS

The manufacturer shall supply a total ornamental metal fencing system of the design, style, strength, and picket spacing defined herein. The system includes all material and finishes as required in the plans and specifications. This includes both the ground mounted fence as well as end mounted fence panels as shown for the "Olmsted Wall/Fence".

Shop Drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.

Product Data: Manufacturer's catalog cuts including material compliance and specified options.

Samples: Color shall be gloss black - selections for powder coated and / or galvanized finishes. For each finish product specified, two samples, minimum

size 6 inches (150 mm) square, representing actual product, color, and patterns shall be furnished to the Department for approval prior to ordering the products.

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver prefabricated fence panels, gates, posts and accessories to project site, completely assembled and prefinished. Upon receipt at the job site, all materials shall be checked to ensure that no damages occurred during shipping. Materials shall be handled and stored properly to protect against damage and theft.

Store products in manufacturer's unopened packaging until ready for installation.

Store components off the ground in a dry covered area, protected from adverse weather conditions.

1.4 COORDINATION

Coordinate this work with other work including installation of landscaping, construction of sidewalks and Olmsted Walls, over height warning system, and traffic signals to avoid damage to installed site materials. Installation of median fence shall be coordinate with project maintenance of traffic phasing.

1.5 SPECIAL WARRANTY

Provide manufacturer’s standard limited warranty that its ornamental fence system is free from defects in material and workmanship including cracking, peeling, blistering and corroding for a period of 15 years from the date of purchase.

2.0 MATERIALS

2.1 ORNAMENTAL FENCE

2.1.1 Manufacturer

Manufacturer shall be the following or approved equal:

Payne Metal Works, Inc.
3309 S. I-45
Ennis, TX 75119
Phone: 972-878-7777

Requests for substitutions will be considered in accordance with the Standard Specification and shall be approved by the University of Louisville. Products from other qualified manufacturers having a minimum of 5 years experience manufacturing ornamental picket fencing will be allowed to be requested for

substitution if approved in writing, ten days prior to bidding, and if they meet the following specifications for design, size, gauge of metal parts and fabrication.

2.1.2 Quality Assurance

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and the materials and techniques specified.

2.1.3 Ornamental Fence

1. Style: Payne Metal Works "Commercial Grade" – Product Series 4400
2. Version 1: In-grade application w/ concrete footings, standard 48" height panels.
3. Version 2: Mounted to masonry piers w/ level top and sloped-height picket bottom.

2.2 ORNAMENTAL FENCE

The material for the fence framework (i.e., pickets, rails, and posts) shall be manufactured from electrically welded pre-galvanized tubing per ASTM A787-01 having yield strength of 50,000 psi and a tensile strength of 50,000 psi.

Pickets shall be minimum 3/4" square tubing with 16-gauge wall thickness, built on 4 5/8" centers for 3 7/8" space between pickets. Galvanization of tubing to be per ASTM A653, G90, 0.90 oz. zinc per sq. ft.

Rails shall be minimum 1 1/2" square tubing with 16-gauge wall thickness, actual rail length is 94". Galvanization of tubing to be per ASTM A653, G90, 0.90 oz. zinc per sq. ft. (Models containing an intermediate rail, rail to be 3/8" x 1 1/2" , hot-dip galvanized, flat bar.)

Posts shall be minimum 2 1/2" square tubing with 12-gauge wall thickness. Galvanization of tubing to be per ASTM A653, G90, 0.90 oz. zinc per sq. ft.
Pickets, rails and posts to be cut, pressed, and located as indicated in the shop drawings.

Rails and pickets shall be located and Electro-MIG welded per the final approved shop drawings.

Posts shall have zinc plated, press on type steel caps. Base detail shall be drilled base plate, sleeve or footing as indicated in the design drawings.

The fence panel assembly shall be subjected to a five stage iron phosphate pre-treatment cleaning system to remove foreign material and prepare the panel assembly for finish coat.

Powder Coat: Minimum 2 – 4 mil thickness of high quality TGIC polyester resin by electrostatic spray process followed by a cure cycle of a minimum of 25 minutes at 400 degrees F (232 degrees C), metal temperature. Color as indicated in the design and shop drawings. Powder coated finish shall meet or exceed all pertinent ASTM testing standards.

Fence panel sections shall be capable of supporting a 250 lb. load applied mid-span with minimal deflection, and no permanent deformation.

3.0 CONSTRUCTION

3.1 PREPARATION

Fence contractor shall remove unused material, level uneven areas due to excavations created by fence installations.

Verify areas to receive fencing are completed to final grades, elevations and materials. Ensure other project elements, including existing and proposed utility routing are clearly established.

Coordinate fence installation with work of other sections listed in these specifications and as directed by the Engineer.

3.2 INSTALLATION

Install fence in accordance with manufacturer's instructions and an as shown in the plans. Space posts or mounting hinges at dimensions indicated in the shop drawings. Attach fence panels to posts or concrete columns using stainless steel, panel hanger brackets supplied by manufacturer.

Avoid unnecessary cutting, drilling and welding of prefinished fence panels. If necessary to cut drill, weld or otherwise modify panels due to field conditions, repair factory finish.

Touch-up any necessary areas by lightly sanding; apply a zinc-rich cold galvanizing primer followed by a high quality acrylic paint to match finish. (Touch-up paint available from manufacturer)

3.3 PROTECTION

Protect installed products until final acceptance by the Engineer.

Contractor will repair or replace, at the Engineer's option, any Site Furniture element damaged, defaced, or discolored, during fabrication, transportation, storage, or installation/erection before final acceptance and use by the Public.

4.0 MEASUREMENT

The Department will measure the quantity of Ornamental Fence by the Linear Foot.

Fence panels incorporated into the Olmsted Walls will be incidental to the contract unit price for Olmsted Wall/Fence.

5.0 PAYMENT

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

Code Pay Item Pay Unit

XXXXXXX Ornamental Fence – Linear Foot

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

OLMSTED WALL/FENCE

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

Construction of Olmsted Wall/Fence as shown in the contract drawings. The Olmsted Wall fence is consists of an unreinforced gravity retaining wall generally in conformance with Standard Drawing RGX-002-03. This wall will be constructed to elevations and dimensions as shown in the plans. This wall will be topped with cast in place (as shown in the plans) or precast ornamental concrete columns. . Ornamental fence panels will be installed between, and anchored to, the ornamental columns. All concrete, fence panels, excavation, backfill, steel reinforcement and other miscellaneous items shall be incidental to the unit price bid for Olmsted Wall/Fence.

The ornamental columns shall meet the requirements of ACI 301 "Specifications for Structural Concrete Buildings" ACI 318 "Building Code Requirements for Reinforced Concrete" and ACI 303 "Guide to Cast-in-Place Architectural Concrete Practice"

1.1 Coordination

Coordinate this work with other work including installation of lighting, landscaping, construction of sidewalks, curb inlets and curbs.. Note that this project requires staged construction and the construction of the Olmsted Wall/Fence wall will need to be coordinated with the planned construction phasing. The sidewalk adjacent to the Olmsted Wall/Fence shall not be opened to the public until the Wall/Fence is complete and accepted by the Engineer.

1.2 SUBMITTALS

The Contractor shall furnish shop drawings sealed by a registered professional Engineer (5 sets) and submitted the Department for approval prior to construction of the wall..

Shop drawings must include at a minimum:

- Olmsted Retaining wall profile with locations of proposed expansion and construction joints.
- Typical cross section
- Detailed dimensions for ornamental columns.
- Ornamental fence unit dimensions and details
- Reinforcement or anchorage details for ornamental fence
- Notes confirming materials, color finish and other necessary details.

The Contractor shall construct a full size column mockup (either cast in place or precast) for approval by the Engineer prior to constructing the remaining columns. The mockup can be incorporated into the permanent construction with the approval of the Engineer. The mockup shall utilize the specific materials, reinforcement, formwork and finishing that will be utilized on the remaining columns.

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver fence panels and hardware to the site in steel banded, plastic banded, or plastic wrapped configuration capable of transfer by forklift or clamp lift. Unload panels at job site in such a manner that no damage occurs to the product.

All fence panels shall be stored at the site such that they are protected from weather and ongoing construction activities until they are to be installed. Individual fence panels shall be clearly marked such that their install location can be readily identified.

2.0 MATERIALS

Concrete will be Class A in accordance with the standard specifications. All concrete for the gravity wall and decorative columns shall use be produced by the same ready-mix supplier and shall use aggregate from the same sources in order to maximum a uniform appearance throughout.

Reinforcing Steel shall be in accordance with Sections 602 and 811 of the Standard Specifications and shall be epoxy coated.

Fence panels shall be sloped to match the longitudinal sidewalk slope between columns. The fence panels shall be 36 inches tall with rail and picket spacing as shown in the plans. The fence material and anchorage details shall be as specified in the Special Note for Ornamental Fence and information provided by the fence manufacturer. These details shall be submitted to and approved by the Engineer per Section 1.2.

3.0 CONSTRUCTION

Structure excavation for the Olmsted Wall/Fence will not be measured separately for payment and will be incidental to the Olmsted Wall/Fence. Class A Concrete and Steel Reinforcing or dowel anchorage system will be not be measured for separate payment but will be incidental to the measured quantity for Olmsted Wall/Fence. The wall shall be poured with the location of expansion and or construction joints as shown on the Contractor's approved shop drawings.

Weep holes will not be required for construction of the Olmsted Wall Fence. Prefabricated expansion joint materials shall be incidental to the Olmsted Wall Fence.

The concrete surfaces of the wall and ornamental columns shall receive a "ordinary surface finish" in accordance with Section 601 of the Standard Specifications. Note that a full size mock-up of a decorative column shall be constructed utilizing the materials,

formwork and procedures proposed by the Contractor to verify the appearance of the column prior to construction of the remaining columns.

The fence panels shall not be installed until the wall and ornamental columns have been completed and reached there 28 day compressive strength as approved by the Engineer. Installation of fence panels shall be in accordance with the manufactures instructions. See Special Note for Ornamental Fence for additional information.

3.1 Existing Utilities

There are existing subsurface utilities within the construction area of the Olmsted Wall/Fence including but not limited to natural gas and water lines. Additionally a subsurface utility tunnel owned by the University of Louisville crosses under Eastern Parkway and the proposed Olmsted Wall/Fence as shown in the plans. The Contractor notify utilities to field located subsurface utilities prior to any excavation for construction of the Olmsted Wall/fence. If an existing utility is discovered in conflict with the proposed wall, the Engineer shall be notified immediately and the Contractor shall not proceed without approval by the Engineer. Any proposed modifications to the Olmsted Wall/Fence shall be approved by the Department.

4.0 MEASUREMENT

The Department will measure the quantity of the Olmsted Wall/Fence in Linear Feet..

5.0 PAYMENT

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

Code Pay - Item Pay Unit

XXXXXX Olmsted Wall/Fence – Linear Feet.

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

LUMINAIRE

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction (Specifications).

The unit contract price for "Luminaire" shall be full compensation for furnishing all labor, materials tools and equipment necessary or incidental to furnish and install the luminaire at the locations shown on the plans or where directed by the Engineer.:

Unless otherwise noted on the plans or within this special note the Luminaires shall comply with Section 716 of the Standard Specifications.

1.1 COORDINATION

Coordinate this work with other work including installation of light pole bases, light pole traffic signal poles and lighting control equipment. Note that this project requires staged construction and the installation of the liminaires will need to be coordinated with the planned construction phasing including the phased installation of a new traffic signal at the intersection of Eastern Parkway and the Speed School parking lot.

Three of the luminaires will be mounted atop the traffic signal poles at the locations shown in the plans. Note that service for the traffic signals and luminaires will be separate.

2.0 MATERIALS

2.1 Manufacturer

The manufacturer of the luminare shall be the following or approved equal

Hadco
100 Craftway PO Box 128
Littlestown, PA 17340
Phone (717) 359-9289
www.hadco.com

2.2 Hanging Fixture Bracket

Furnish and install the following hanging fixture bracket for each luminaire.

PTW 2280 with 3" Tenon mounted at the location shown in the plans. Finish shall be black.

2.3 Fixture

Fixture shall be R52 Type V Narrow Traditional Refractive Globe 200 or 250W HPS for 277 Volt service for the ground mounted roadway lights and 480 Volts for the structure mounted lights. Voltages shall be confirmed by the Engineer prior to furnishing the luminaires.

The fixture shall also include the following components:

- Victorian Roof
- Round fitter with scalloped petals.
- Cage for narrow body globes (15" diameter)
- Top Reflector
- Socket: Mogul Base

2.4 Finish:

A durable polyurethane enamel finish is applied after a five-stage conversion cleaning process. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B-117-64 and ANSI/ASTM G53-77 specifications. Color shall be black.

Fixture Number ** R52 B A A N 1 A T N G 200/250 S H

** To be confirmed by the Manufacturer

2.5 Submittals

Obtain the Engineer's approval for all materials before installation. Submit for material approval 5 copies of descriptive literature, drawings, and any requested design data. Do not make substitutions for approved materials without written permission as described above. Two different mounting conditions will be required with two different wattages as shown on the plans.

3.0 CONSTRUCTION

The luminares shall be installed on the light poles or traffic signal poles at the locations shown on the plans.

Luminaire shall include furnishing and installing the specified luminaire. This item shall include lamps, protective starters, ballasts and any adjustments necessary to provide the desired lighting pattern. This also includes furnishing and installing specified reflector, cages and miscellaneous accessories

The contractor shall submit pertinent photometric data for each type of luminaire to include literature with ISO foot-candle curves, ANSI/IES type distribution and actual lamp lumens supplied by that luminaire with the supplied ballast. The contractor shall also submit the photometric data in IES format to the Division of Traffic, Frankfort, KY. A point of contact shall also be provided to answer technical questions about the luminaire.

All luminaire shall be mounted level, both traverse and longitudinally, as measured across points specified by the manufacturer. Leveling shall be accomplished after luminaire standard is plumbed.

All luminaire shall be provided with markers for positive identification of light source, wattage and voltage.

4.0 MEASUREMENT

The Department will measure the quantity of luminaire -Each

5.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit

4770 Luminaires - Each

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

LIGHTING CONTROL EQUIPMENT

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal section References herein are to the current edition of the Department's Standard Specifications for Road and Bridge Construction (Specifications).Unless otherwise noted on the plans or within this special note the Lighting Control Equipment shall comply with Section 716 of the Specifications and sheet T-22A.

Lighting control equipment shall include furnishing and installing a specified base mounted service cabinet, service racks, , photoelectric control, circuit breakers, contactor, manual test switch, fuses, ground rod, cutouts, conduits and service wires. Louisville Gas and Electric will provide the electrical service for the proposed roadway and pedestrian lighting to a meter point or points. The University of Louisville will apply to Louisville Gas & Electric (LG&E) for a "new meter service" for the respective lighting circuits.

It should be noted that lighting for exterior parking lot and building areas south of Eastern Parkway from approximately Sta 10+00 to Sta 20+00 is included with the same circuit as the roadway lighting which is owned and maintained by LG&E under contract with U of L. These light fixtures, wire, conduits or ducts, junction boxes and other miscellaneous equipment or controls shall be maintained by the contractor and shall not be disturbed unless otherwise shown on the plans or as directed by the Engineer.

Furthermore, it should be noted that the existing roadway lighting along both sides of Eastern Parkway from approximately Sta 10+00 to Sta 34+00 is owned and maintained by LG&E under contract with Louisville Metro. The contractor shall maintain these light fixtures, wire, conduits or ducts, junction boxes and other miscellaneous equipment or controls until replacement lighting is constructed as shown on the plans or as directed by the Engineer.

The Contractor shall notify the Engineer minimum of three (3) weeks prior to the removal of any existing lighting. The Engineer will notify U of L or Metro which will provide LG&E with a request to remove their respective existing lighting with a minimum two (2) weeks notice.

The existing lighting information shown in the plans is based on field survey data, visual observation and information provided by LG&E. It should be noted that a sub surface utility investigation has not be conducted for this project and the contract shall field verify the location of all electrical distribution systems.

1.1 Coordination

Coordinate this work with other work including installation of segmental retaining walls, Olmsted Wall/Fence, traffic signals, over height warning system, landscaping, and, construction of sidewalks as well as bridge rehabilitation shown on the structure plans for

Item 05-1050.00. Note that this project requires staged construction and the installation of the lighting control equipment will need to be coordinated with the planned construction phasing

Installation of the lighting control equipment shall require ongoing coordination with the University of Louisville and LG&E during construction, testing and operation. The point of Contact for Louisville Gas & Electric as well as the University of Louisville for this item is

Mr. Greg Geiser
Louisville Gas & Electric
820 West Broadway
Louisville, KY 40202
(502) 627-3708

Mr. Steve Michal
Electrical Operations Superintendent
Department of Physical Plant
University of Louisville
Room 125 Service Complex
Louisville Kentucky 40292
(502) 852-7575

The location for the lighting control equipment will be determined be directed by the Engineer.

2.0 MATERIALS

All materials shall be in accordance with Section 834 of the standard specifications, the National Electrical Code, be UL rated and comply with local regulations and shall be approved by the Engineer and U of L..

3.0 CONSTRUCTION

This work shall include all work necessary to provide lighting control equipment for the roadway and pedestrian lighting in this project. The service for the lighting circuits will be provided by the Louisville Gas and Electric.

Lighting circuits with a 50 amp beakers shall be furnished for the lighting circuits and labeled accordingly. Provide two pole double throw switches for each circuit that will allow manual actuation for testing and maintenance.

All panels, breakers, switches, conduit, trenching, fasteners, junction boxes, ground rods, and restoration to the incidental to the lump sum unit price for lighting control equipment.

3.1 As Built Drawings

Before final inspection of the lighting control equipment, the Contractor shall provide the Department a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment and circuits. The Department will furnish this information to the University of Louisville.

4.0 MEASUREMENT

The Department will measure the quantity of Lighting Control Equipment as each

5.0 PAYMENT

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

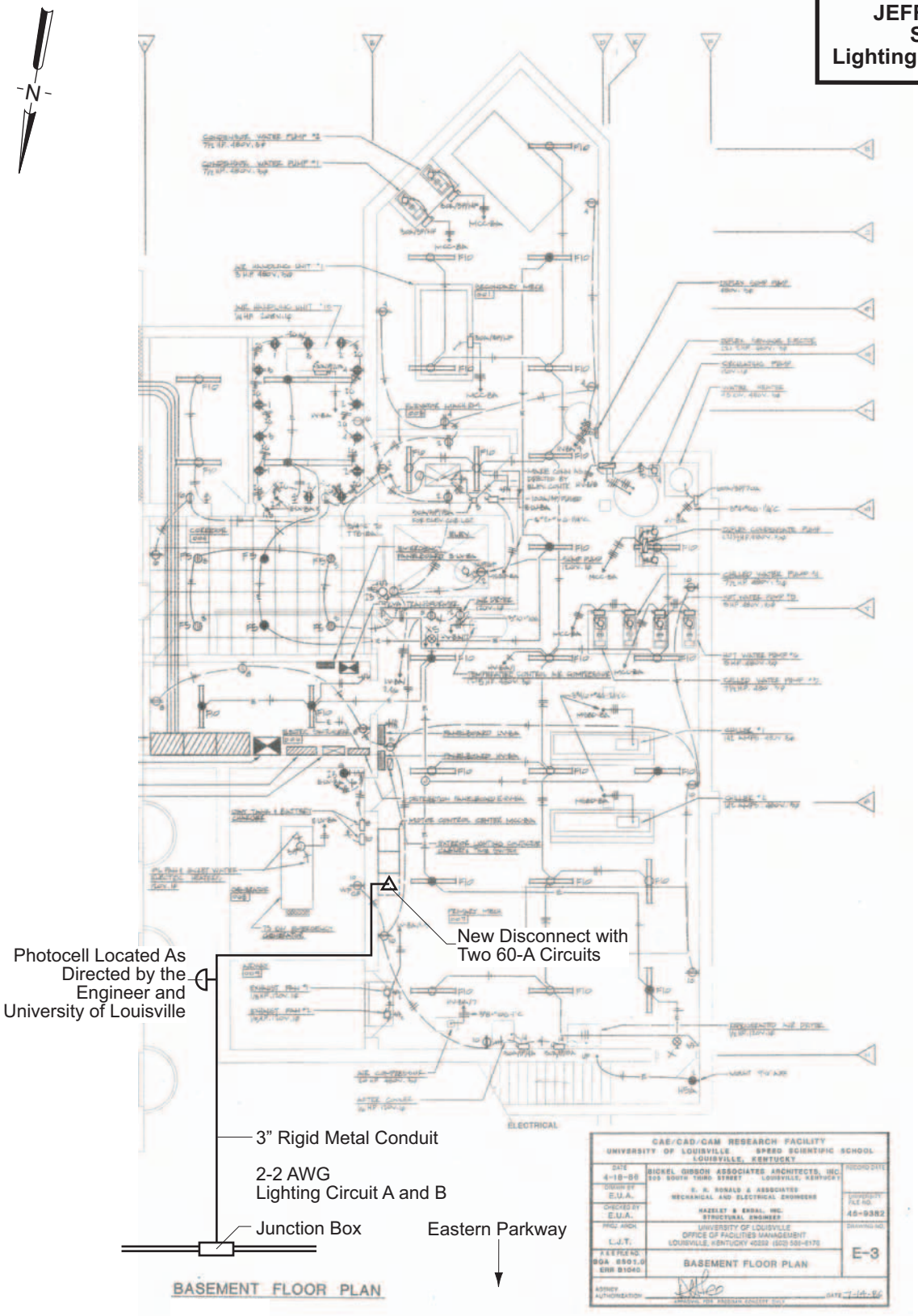
Code Pay Item Pay Unit

4761 Lighting Control Equipment – Each

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
Special Note
Lighting Control Equipment



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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
COUNTY OF JEFFERSON

VOGT BUILDING
BASEMENT FLOOR PLAN
NEW ROADWAY LIGHTING SERVICE

JEFFERSON 05-397
SN-XXXX

LIGHT POLES

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction (Specifications). See structure plans for Item 1050.00 Eastern Parkway Bridge over CSX Railroad & Floyd Street for details of structure mounted lights.

The unit contract price for "Light Pole" shall be full compensation for furnishing all labor, materials tools and equipment necessary or incidental to furnish and install the light pole, pole top cap and other appurtenances to the pole at the locations shown on the plans or where directed by the ENGINEER.:

Decorative Light Pole shall be Hadco P2165 or approved equal with a 22 ft height as shown in the plans for ground mounted lights and with a 18 ft-6 in height for structure mounted light poles.

Unless otherwise noted on the plans or within this Special Note the light poles shall comply with Section 716 of the Standard Specifications.

1.1 COORDINATION

Coordinate this work with other work including installation of segmental retaining walls, Olmsted Wall/Fence, traffic signals, over height warning system, landscaping, and modification to pedestrian underpass, construction of sidewalks and pavement and bridge rehabilitation. Note that this project requires staged construction and the installation of the light poles will need to be coordinated with the planned construction phasing including the phased installation of a new traffic signal at the intersection of Eastern Parkway and the Speed School parking lot. Two poles will provide accommodations for future security camera mounts at the locations shown in the plans. Two poles will provide accommodations for overheight warning system detectors at the locations shown in the plans.

2.0 MATERIALS

2.1 Manufacturer

The manufacturer of the light pole shall be the following or approved equal

Hadco
100 Craftway PO Box 128
Littlestown, PA 17340
Phone (717) 359-9289
www.hadco.com

Light pole will be Model No. 2165 Modified (verify Model No. with the manufacturer)

2.2 Materials

Diameter 5” straight flat fluted with 3”tenon. The shaft shall have a wall thickness of 0.188 to 0.267 in 356 HM high-strength, low-copper, cast aluminum alloy and. 6005-T5 extruded aluminum. Anchor rods shall be hot dipped galvanized steel. Tenon is 356 HM sand cast aluminum.

2.3 Finish:

A durable polyurethane enamel finish shall be applied after a five-stage conversion cleaning process. in accordance with ASTM B-117-64 and ANSI/ASTM G53-77.

Color shall be black.

2.3.1 Hand Hole :

11" x 16"

2.4 Bolt Circle:

8" - 17"

2.4.1 Anchor Rods:

(4) 3/4" dia. x 19"

2.4.2 Base Dimensions:

20 dia. x 25 3/8"

2.4.3 GROUNDING LUG

Each light pole shall be provided with an internal threaded one half inch (1/2") diameter nut holder and fastener for grounding the pole assembly.

2.5 Submittals

Obtain the Engineer’s approval for all materials before installation. Submit for material approval 5 copies of descriptive literature, drawings, and any requested design data. Do not make substitutions for approved materials without written permission as described above. The submittal will include drawings or descriptions of accommodations for luminaires, pedestrian signals, luminares and overheight warning detectors

3.0 CONSTRUCTION

The light poles shall be installed at the locations shown on the plans. Light Poles shall be installed on light pole bases or structure handrails as shown in the plans. Anchor bolts shall be cast with light pole base or in the structure handrails.

The light poles shall be checked for vertical alignment and shall be plumb in all directions. . The light pole shall be placed on the light pole base or handrail with sufficient care to protect the exterior of the pole and the surface of the foundation. The pole shall be plumbed and tightened as shown on the drawings and as indicated in the field by the ENGINEER. The Contractor may use stainless steel or other approved corrosion resistant shims to plum the light pole as needed

Light pole shall support light fixture and where indicated, shall include accommodations for pedestrian signal heads, overheight warning detectors, and accessory banner brackets and for a future security camera mounting. The mounting height for the light fixture, overheight warning system detectors, security camera, pedestrian signal heads and actuator buttons shall be as shown in the plans.

All holes and grommets required for electrical and communications connections to light fixtures, overheight warning system detectors, security cameras, pedestrian signals and actuator buttons shall be incidental to the cost of the Light Pole and will not be measured separately for payment by the Department.

Each light pole will be permanently identified through the use of paint with the building number pole number and circuit as shown in the plans. The identification numbers will be placed so that it is readily visible from the nearest street or sidewalk area.

4.0 MEASUREMENT

The Department will measure the quantity of light poles -Each

Light Pole - Each

5.0 PAYMENT

The Department will make payment for the completed and accepted quantities under the following:
Code Pay Item Pay Unit

XXXXX Light Pole - Each

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

IRRIGATION SYSTEM

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

A. Irrigation System

This work will consist of furnishing and installing a complete Irrigation System, including meter pits, backflow preventers, and connections to the existing municipal water supply system. All crossings under pavement and sidewalks will be in existing conduit or in new jacked or bored conduit unless otherwise specified. All work will be done in accordance with applicable portions of Standard Specifications and as provided herein.

The Prime Contractor or Subcontractor responsible for the installation of the irrigation system must meet the following qualification criteria:

Established business for a minimum of 3 years.
Demonstrate previous experience installing similar size projects. REFERENCES

1.1 SUBMITTALS

The Contractor shall submit the Manufacturer's layout drawings similar to those attached to this note as well as data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

Submit 5 sets of drawings to the Department for approval The drawings will include complete details of layout and assembly, showing member sizes and part identification, fasteners, anchors, and fittings.

1.2 DELIVERY, STORAGE, AND HANDLING

Store products in manufacturer's unopened packaging until ready for installation.

Store components off the ground in a dry covered area, protected from adverse weather conditions.

1.3 COORDINATION

Coordinate this work with other work including installation of landscaping, lighting

construction of retaining walls and sidewalks to avoid damage to the installed irrigation system.

2.0 MATERIALS

2.1 IRRIGATION SYSTEM COMPONENTS

2.1.1 Manufacturer

Manufacturer shall be the following or approved equal:

Rain Bird
Tel: (800) 724-6247
Web: www.rainbird.com

Requests for substitutions will be considered in accordance with the Standard Specifications and shall be approved by the Engineer and the University of Louisville.

2.1.2 System components

All materials will be as specified and detailed in this special note and the attached conceptual drawings. Irrigation products (i.e.: sprinklers, valves, controllers) will be by a single manufacturer. All irrigation system components will be supplied by authorized distributors to provide single source responsibility for warranty, service, and operations and will conform to specifications in all respects.

Submit manufacturer's data sheets for all materials (sprinkler heads, valves, controllers, and pipe) and all other related items to the Engineer for review prior to purchase and/or installation.

Sprinkler heads, valves, and controllers: All sprinkler heads, valves, and controllers will be manufactured by Rain Bird Irrigation or approved equal and of the types and model numbers shown in the plans. There will be no product substitutions.

PVC Pipe: High-impact virgin polyvinyl-chloride (PVC-I 120) conforming to NSF Standard 14 and ASTM D-2241 for thermoplastic pipe with minimum 160 PSI test strength. Pipe will have standard thermoplastic pipe dimension ratio of SDR-26 and will be marked or stamped every 5 feet to indicate brand, strength rating, size, and standards. See conceptual drawings for sizes specified.

Polyethylene Pipe: All polyethylene pipe specified on plans will be high-density (HD) flexible, non-toxic polyethylene made from 100% virgin polyethylene material, and all sizes will have a minimum 100 PSI working pressure rating (ASTM F-239) conforming to NSF standard for thermoplastic pipe dimension ratio of SDR-15. All polyethylene pipe will be continuously and permanently marked with the manufacturer's name, materials, size and schedule. Pipe will conform to the US Department of Commerce Commercial Standard C5255-63-PE-3408 or latest revision thereof. Pipe will be suitable for potable water and will bear the "NSF" trademark. See plans for sizes specified.

Conduit: Conduit will meet the requirements of the Standard Specifications. Conduit sizing is based upon the following:

Pipe Size	Conduit Size
3/4" to 1-1/4"	2-inch
1-1/4" to 1-1/2"	3-inch
2" to 2-1/2"	4-inch
3 inch	6-inch
4 inch	8-inch
6 inch	10-inch

(Conduit sizes and locations are based on a single pipe being installed in a conduit. Contractor will verify conduit sizes with the plans.)

Fittings: PVC Pipe Fittings: All fittings 1-1/2" through 3" will be Schedule 40 PVC solvent weld, type 1, meeting the requirements of ASTM D-2466. No saddles allowed.

Polyethylene Fittings: All fittings 1-1/4" and smaller downstream of control valve will be plastic or insert type fittings where applicable. All 1-1/4" fittings will be double clamped with all stainless steel worm gear clamps. All 1" and smaller fittings will be clamped with all stainless steel worm gear clamps or all stainless steel crimp clamps.

Valves and Valve Boxes
Valves: Type and size as specified on the plans.

Valve Boxes: All valves will be protected by a two-piece valve box assembly consisting of a removable cover and box. Enclosure will be rigid plastic material composed of fibrous components chemically inert and unaffected by moisture, corrosion, and temperature changes. Boxes will be sized as follows: Minimum of 10" valve box and cover will be used for all automatic valves 1-1/2" and smaller and for all manual gate valves and quick coupling valves. Side walls to extend at least 2 inches below the bottom of the valve body; for deep mainline appropriate extensions will be used to reach depth of valves. Valve box will not bear directly on pipe.

Backflow Prevention Devices: Type and size as specified on the plans.

Meter Pit, Meters, and Connection to the Municipal Water Supply System. Meter pit will be as shown on the plans. Water service pipe, connecting to existing water main, and Curb Stop and Box will be as specified by the Louisville Water Company (LWC). The LWC will furnish and install the meter in the meter pit.

Quick Coupling Valves: Type and size as specified on the conceptual drawings.

Sprinkler Heads: Type and size as specified on the conceptual drawings.

Controllers: Type and size as specified on the conceptual drawings.

Solvent and Primer: Solvent and primer used on PVC Pipe will meet the requirements of ASTM D-2564 and will be approved by the National Sanitation Foundation. All solvent and primer to be used in accordance with manufacturer's specification. Primer to be purple in color. Solvent will be used as is from original container. No thinner will be added to the solvent to change its viscosity. If viscosity or consistency is unsuitable, the solvent will not be used.

Swing Joints
All sprinkler heads 6 GPM or less will be attached to the piping with two-elbow joints consisting of 3/8" flexible pipe.

All quick coupling valves will be installed using a galvanized swing joint assembly consisting of three galvanized elbows and four galvanized nipples (2) 2"; (1) 4" and (1) 12". Size will match inlet size of quick coupling valve.

Wire and Wire Splices
Wire: All wire will be 600 volt soft annealed copper, PVC insulated, UL approved, type UF. Wire sizes will be as called for on drawings.

Wire splices: All 24 volt wire connections will be made using water-tight 3M DBY connectors. All field splices will be contained in a 6" valve box.

3.0 CONSTRUCTION

3.1 PREPARATION

3.1.1 Piping Layout:

Piping layout is diagrammatic. Irrigation contractor will verify site conditions. Any deviation from the plan will be approved by the Engineer and the University of Louisville prior to installation. Note that this project will require phased construction. The installation and construction of the irrigation system shall be coordinated with other work such that installation of materials and equipment under pavement and sidewalks will be accomplished without subsequent cutting, removal or restoration necessary to install the irrigation system. Pedestrian access to University buildings must be maintained during construction as shown in the plans or directed by the Engineer.

Staking:
All sprinkler heads, valves, and mainline routing will be staked prior to installation for approval upon request of the Engineer. Design is based on information provided by the Engineer. Any deviation from the drawing requires a written authorization by the Engineer and the University of Louisville prior to installation. Water and pressure requirements will be as noted on drawings and verified by the Contractor.

3.2 INSTALLATION

Install in accordance with manufacturer's printed instructions.

General: Unless otherwise indicated, comply with requirements of Uniform Plumbing Code , the LWC, and the University of Louisville

Trenches will be excavated so that irrigation lines are installed with the following minimum depths for pipe cover:

All polyethylene lateral pipe: minimum depth - 10"

All PVC lateral pipe 3/4" and 1": minimum depth - 12"

All PVC pipe: Depth as specified below:
1-1/2" - 2" pipe size 16" cover
2-1/2" - 4" pipe size 20" cover

All wire:
115V power wire - 24" or as required by code.
24V control wire - 14" or as required by code.

All PVC piping will be trenched. PVC pipe 2-1/2" and smaller may be pulled with approval of the Engineer if proper soil conditions exist and minimum depth requirements are maintained.

Polyethylene distribution pipe may be pulled with approval of the Engineer if proper soil conditions exist and minimum depth requirements are maintained.

Trench excavation in excess of required depth will have bottom graded and tamped prior to any pipe placement.

Where trenching of PVC or polyethylene pipe lines is not possible because of adverse soil conditions or obstructions, and backhoe operation is required, provide labor, materials, and equipment for this operation, including full trench backfilling with soil if required in opinion of the Engineer.

Depth of conduit will be as noted on installation details on the plans.

If existing irrigation facilities are damaged during construction, they shall be repaired or replaced in accordance with this special provision.

Piping: All mainlines and headers will be kept to a minimum to 24 inches from all existing or proposed trees.

Polyethylene pipe connections will be made with insert fittings held tightly in place with worm gear driven stainless steel clamps and screws at ferrules. Pipe sizes 1-1/4" and larger in diameter will be double clamped.

PVC pipe will be laid on solid undisturbed soil or on thoroughly compacted full bed of sand so as to assure full bedding, proper alignment, and minimum slope for drainage.

PVC pipe ends and PVC fittings will be thoroughly cleaned for full depth of fitting with liquid cleaner cement. Method of application will be in accordance with manufacturer's recommendations for solvent weld connections.

Lay pipe on solid sub base, uniformly sloped without humps or depressions.

At wall penetrations, pack the opening around pipe with non-shrink grout. At exterior face, leave perimeter slot approximately 1/2 inch wide by 4/5 inch deep. Fill this slot with backer rod and an acceptable elastomeric sealant.

Install PVC pipe in dry weather when temperature is above 40 degrees F in strict accordance with manufacturer's instructions. Allow joints to cure at least 24 hours at temperature above 40 degrees F before testing, unless otherwise recommended by the manufacturer.

Connection to the existing Louisville Water Company Supply System: Contractor will verify point of connection with the Engineer

Cross Connection Protection: Install according to state and local plumbing codes. All piping will be galvanized steel pipe or copper pipe.

Sprinkler Heads: Flush circuit lines with full head of water and install heads after flushing is complete.
Install lawn heads at manufacturer's recommended heights.

Install groundcover heads flush with grade as indicated on the plans.

Locate part-circle heads to maintain minimum distance of 2' from non-curbed edges and 2 inches from back of curb and other boundaries unless otherwise indicated.

All irrigation heads will be installed on swing joints or as specified in the plans.

All nozzles will match sprinkler head manufacturer.

Dielectric Protection: Use dielectric fittings at connections where pipes of dissimilar metals are joined.

Thrust Blocks: Provide concrete thrust blocks on thrust side of mainline pipe wherever pipe changes direction at tees, bends, or dead ends, and at any other location where thrust is to be expected. Refer to pipe manufacturer's recommendations for type and method of thrust blocks.

3.3 PROTECTION

Protect installed products until final acceptance by the Engineer.

Contractor will repair or replace, at the Engineer's option, any Site Furniture element damaged, defaced, or discolored, during fabrication, transportation, storage, or installation/erection before final acceptance and use by the Public.

4.0 MEASUREMENT

The Department will measure the quantity of the Irrigation System as a Lump Sum.

Material Quantities: Material types and quantities shown on plans may not reflect actual quantities needed in field due to site conditions. Adjustments to these quantities may be made as directed by Engineer based on field conditions, plan adjustments, or other conditions deemed appropriate by the Engineer.

5.0 QUALITY CONTROL

Testing and Inspection: The Engineer will be responsible for inspection of the Contractor's work while such work is in progress. The Contractor will be notified of any work which does not meet specifications and will be required to correct such work. Upon completion of construction, the Contractor will test the entire system under the normal working conditions. Upon visual inspection of the ground, should any leak be found, it will be promptly repaired. All components will be checked for proper operation. Any malfunctioning equipment or leak will be repaired and re-tested until it is in satisfactory working condition.

Balance and Adjustment: Contractor will balance and adjust various components of sprinkler system to maximize performance and efficiency. This includes synchronization of controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, individual station adjustments, and any other adjustments necessary to obtain optimum performance of the system. The Contractor will flush all lines and evacuate all air and debris from the system.

Drawings of Record/Owner's Manual

Drawing of Record: After completion of system and before final payment, the Contractor will furnish to the University of Louisville a reproducible copy of a drawing of record of the entire system showing sprinkler heads, valves, drains, controllers and pipelines to scale with dimensions where required.

Owner's Manual: After completion of system and before final payment, the Contractor will provide to the University of Louisville instruction sheets including a maintenance and operations manual and parts lists covering all operating equipment that will be bound into a folder and furnished to the Owner. Contractor will also provide all necessary special tools for maintaining the system.

Maintenance, Guarantee and Warranty
After completion, testing and acceptance of the system, instruct University of Louisville in the operation and maintenance of the system. Following acceptance, thoroughly flush and drain the system for winter, and in the following spring, put the system into operation at no additional expense to the Department.

6.0 PAYMENT

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

Code Pay Item Pay Unit

XXXXXXX Irrigation System – Lump Sum

Irrigation System will include all labor, equipment, materials, and incidentals to install the system as shown on the plans and as specified. For this pay item, the Contractor will be eligible for payment of 50% of the lump sum unit prices upon completion of all installation for the system. The remaining 50% of each lump sum item will be paid upon completion of final testing and acceptance of the system.

If existing irrigation facilities are damaged during construction, they shall be repaired or replaced in accordance with this special provision.

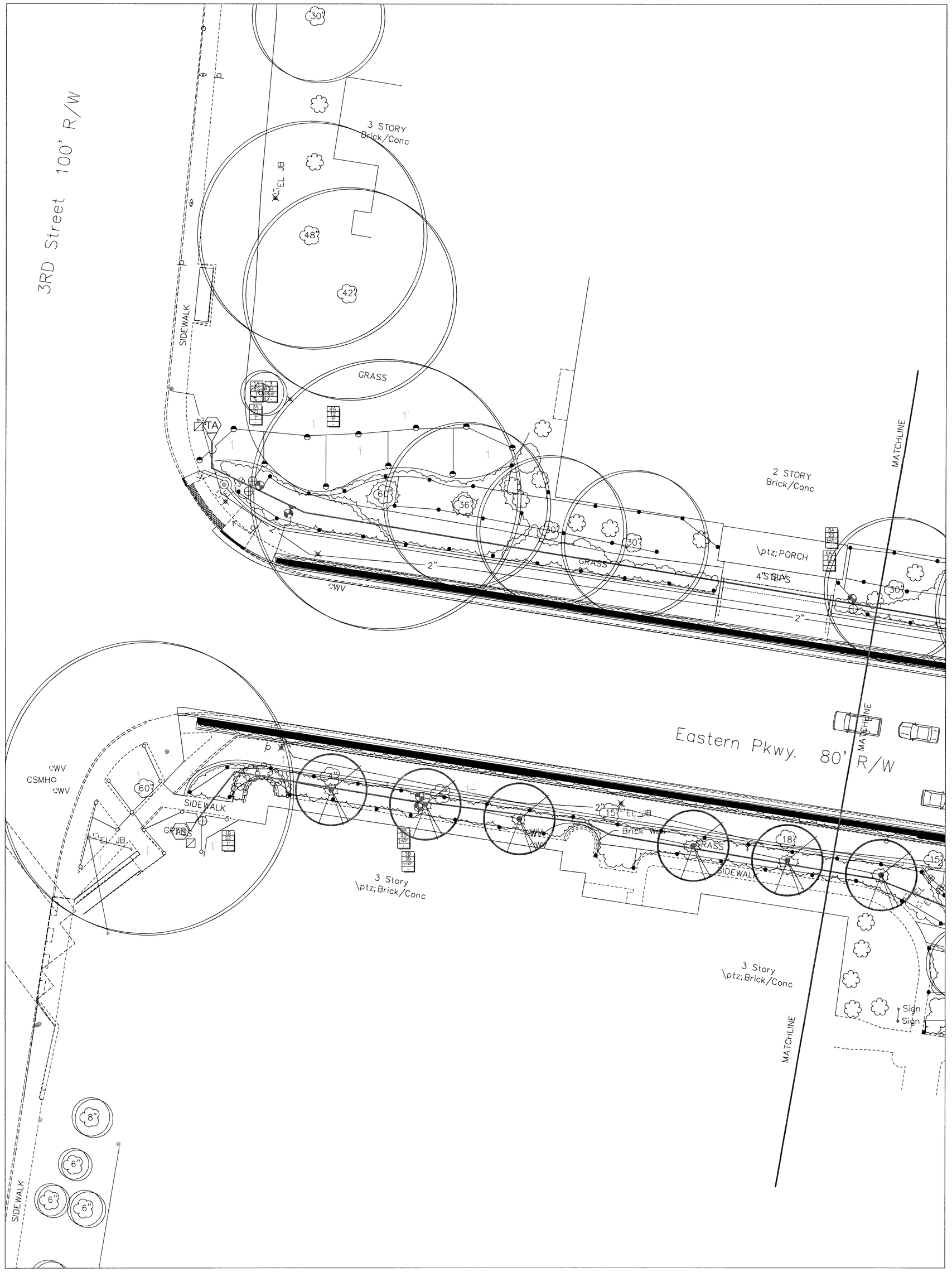
The Louisville Water Company will furnish and install water meters in the meter pits constructed by the Contractor as shown on the plans.

Surface Restoration pavement removal and replacement, curb and gutter removal and replacement, and sidewalk removal and replacement will be paid for separately where designated the plans. The installation of the irrigation system shall be coordinated with other work such that pavement, curb and gutter and sidewalks will not need to be altered after completion in order to accommodate the irrigation system.

The Department will consider payment as full compensation for all work required in this provision.

SEE ATTACHED DRAWINGS FOR CONCEPTUAL LAYOUT AND DETIALS

END OF NOTE



IRRIGATION LEGEND

- RAIN BIRD, 5004 GEAR DRIVEN ROTOR, W/ MPR NOZZLE
  HUNTER, PGP SERIES GEAR DRIVEN ROTOR, W/ #7 NOZZLE
- RAIN BIRD, 3504 GEAR DRIVEN ROTOR, W/ MPR NOZZLE
  HUNTER, PGJ SERIES GEAR DRIVEN ROTOR, W/ #7 NOZZLE
- RAIN BIRD, 1800 SERIES, 4" POP UP SPRAY, W/ MPR NOZZLE
  HUNTER, PRO SERIES 4" POP UP SPRAY, W/ MPR NOZZLE
- RAIN BIRD, 1800 SERIES, 4" POP UP SPRAY, W/ BUBBLERS
  HUNTER, PRO SERIES 4" POP UP SPRAY, W/ BUBBLERS
- RAIN BIRD, 1800 SERIES, 12" POP UP SPRAY, W/ MPR NOZZLE
  HUNTER, PRO SERIES 12" POP UP SPRAY, W/ MPR NOZZLE
- RAIN BIRD, 5RC QUICK COUPLING VALVE, 1"
  HUNTER, QCV-100 QUICK COUPLING VALVE, 1"
- RAIN BIRD, PGA-150 SERIES ELECTRIC CONTROL VALVE, 1.5"
  HUNTER, PGV-151G SERIES ELECTRIC CONTROL VALVE, 1.5"
- RAIN BIRD, PGA-100 SERIES ELECTRIC CONTROL VALVE, 1"
  HUNTER, PGV-101G SERIES ELECTRIC CONTROL VALVE, 1"
- RAIN BIRD, ESP LX SERIES AUTOMATIC CONTROLLER
  HUNTER, ICCPL SERIES AUTOMATIC CONTROLLER
- RAIN BIRD, RAIN CHECK RAIN SENSOR
  HUNTER, MINI CLIK RAIN SENSOR
- TA TAP LOCATION, 2"
- TB TAP LOCATION, 2"
- FEBCO, 765 SERIES PRESSURE VACUUM BREAKER, 2"
- PVC MAINLINE, CLASS 200, BE, 18" BURY, SIZE 2.5"
- PVC, CLASS 200, BE, 12" BURY, TYPICAL SIZE SHOWN
- PVC SLEEVING, CLASS 200, BE, 18" BURY, SIZE AS SHOWN
- RAINBIRD DRIP TUBE

LATERAL PIPE SIZE CHART FOR POLY

1"	0 – 16 GPM
1.5"	17 – 35 GPM
2"	36 – 56 GPM
2.5"	56 – 80 GPM

IRRIGATION SPECIFICATIONS

1. ALL WORK IS TO BE IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL CODES AND ORDINANCES.
2. ALL UNDERGROUND ELECTRICAL CONNECTIONS ARE TO BE MADE WITH 3-M WIRE CONNECTORS, DBY.
3. ALL AUTO CONTROL VALVES ARE TO BE INSTALLED IN CARSON VALVE BOXES OF APPROPRIATE SIZE.
4. ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 14 AWG, UL APPROVED FOR DIRECT BURY.
5. ALL ROTORS AND SPRAY POP-UPS SHALL BE INSTALLED ON SWING PIPE.
6. ALL QCV SHALL BE INSTALLED ON 3-ELBOW PVC SWING JOINTS.
7. SYSTEM DESIGN BASED UPON 40 GPM @ 60 PSI.
8. ANY CHANGES IN AVAILABILITY OF SUPPLY SHOULD BE NOTED AND MODIFICATIONS TO THE DESIGN SHOULD BE MADE.
9. CONTRACTOR TO VERIFY WATER PRESSURE AND AVAILABILITY PRIOR TO INSTALLATION.
10. ANY IRRIGATION PIPING SHOWN OUTSIDE OF CURBS FOR CLARITY ONLY.
11. 120V. TO CONTROLLER AND COPPER STUB, BY OTHER THAN IRRIGATION CONTRACTOR.
12. THERE WILL BE NO SUBSTITUTIONS OR CHANGES TO THE IRRIGATION DESIGN ALLOWED WITHOUT DIRECT, WRITTEN APPROVAL FROM THE IRRIGATION CONSULTANT.
13. NOTE TO REPAIR ANY DAMAGE MADE TO EXISTING SYSTEMS AND MODIFY AS NECESSARY TO ACHIEVE HEAD TO HEAD COVERAGEIN TURF AREA. (EAST SIDE OF NATURAL SCIENCE BUILDING)
14. NOTE TO PROTECT HERITAGE TREES(LARGE OLD TREES) IN MEDIAN AREAS BY KEEPING MAINLINE AND LATERAL PIPE INSTALLATION AS FAR AWAY AS POSSIBLE.

NORTH

IRRIGATION PLAN
SCALE: 1" = 20'

EASTERN PARKWAY

LOUISVILLE, KY

PROJECT # 01369494
ISSUE DATE: 10/9/07
SHEET 1 OF 4

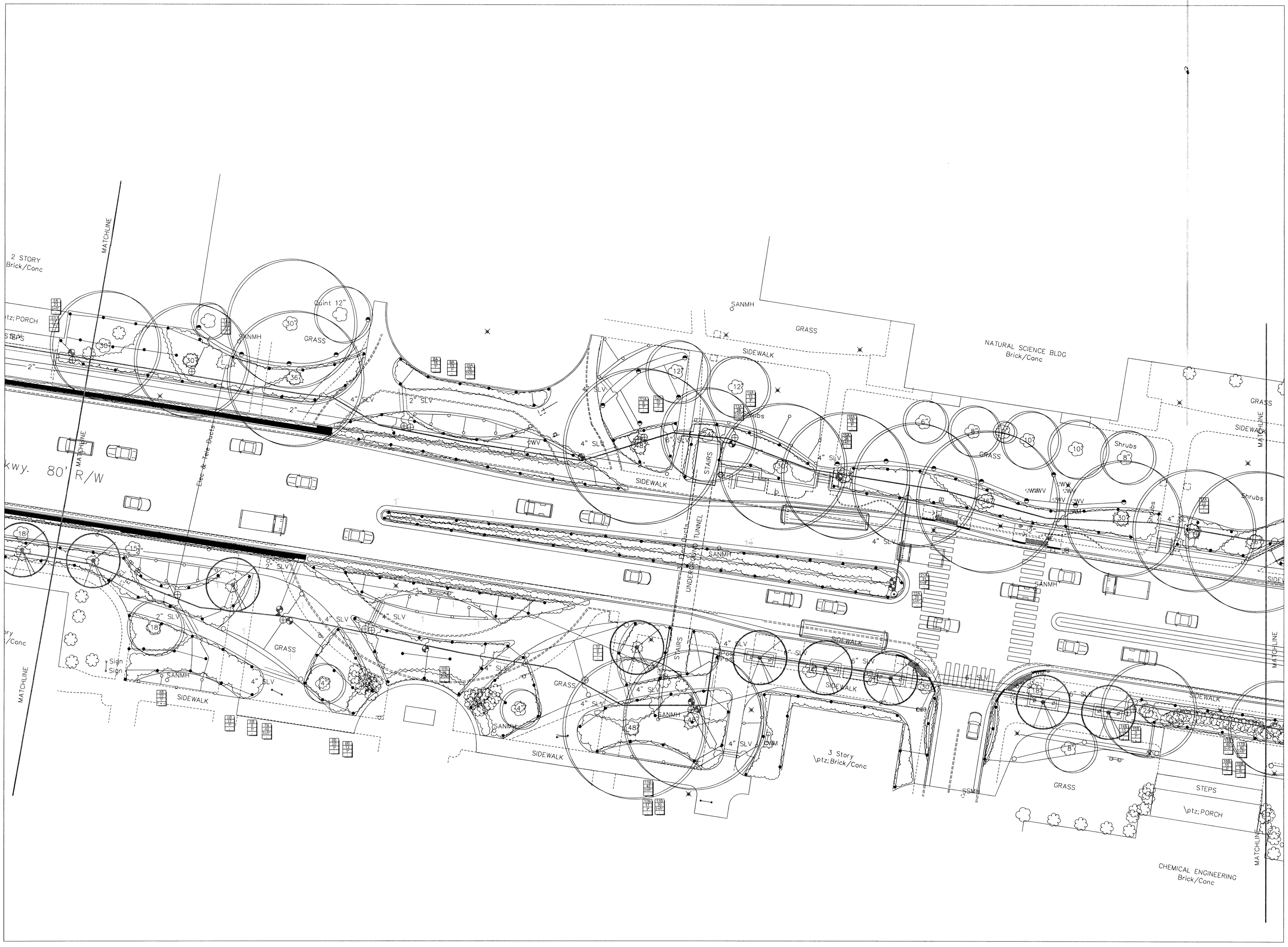
DATE REVISIONS

IRRIGATION PLAN

SCALE: 1" = 20'

DESIGNED BY: CEP
CHECKED BY: CP
APPROVED BY: WDM

JOHN DEERE LANDSCAPES
650 STEPHENSON HWY
TROY, MI 48083
PH: (248) 588-2100
FX: (248) 588-3528
WWW.JohnDeereLandscapes.com
bmarshall@JohnDeereLandscapes.com



EASTERN PARKWAY

LOUISVILLE, KY

PROJECT # 01369494
ISSUE DATE: 10/9/07
SHEET 2 OF 4

DATE REVISIONS

IRRIGATION PLAN

SCALE: 1" = 20'

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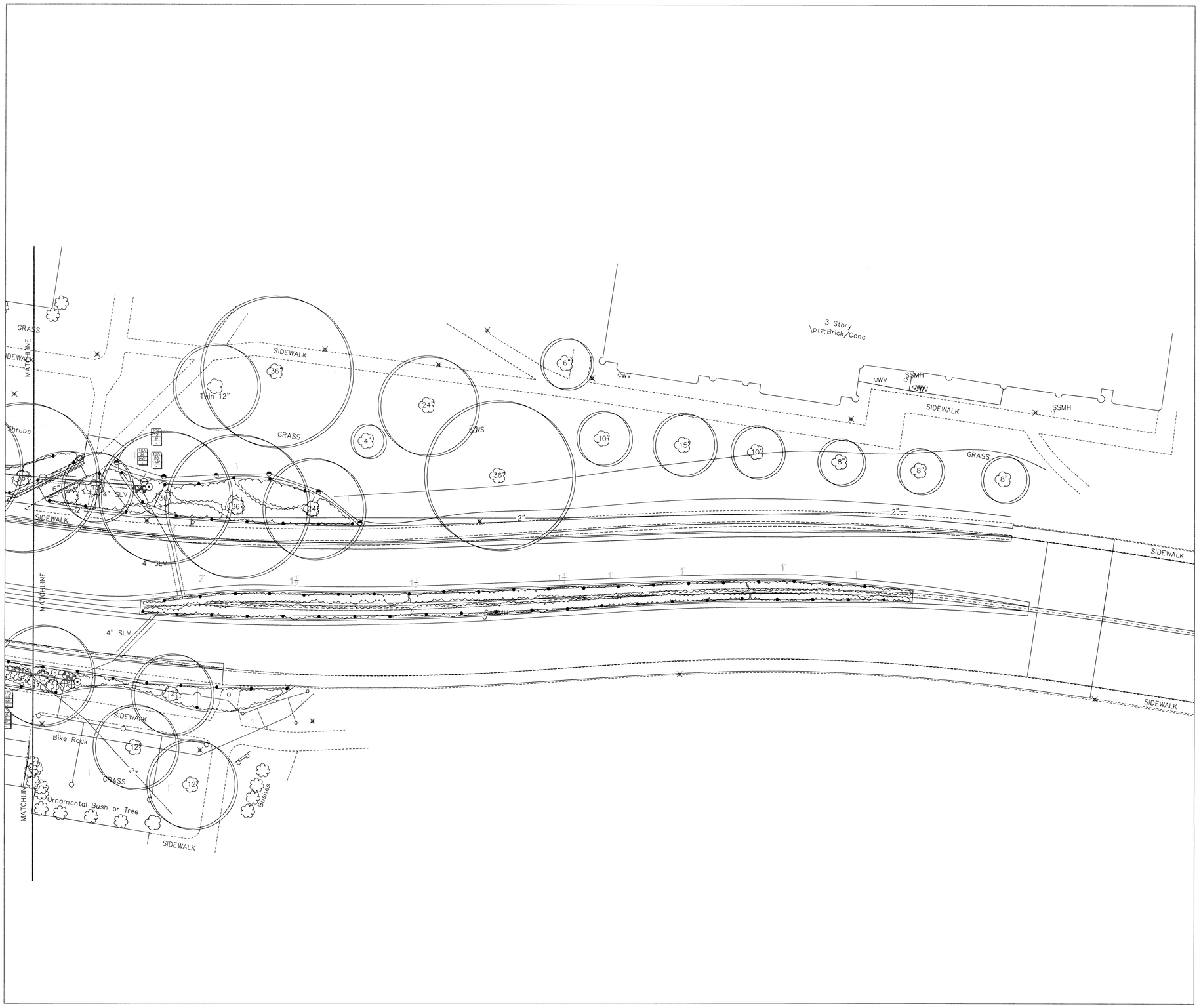

EASTERN PARKWAY

LOUISVILLE, KY

PROJECT # 01369494
ISSUE DATE: 10/9/07
SHEET 3 OF 4

DATE REVISIONS

IRRIGATION PLAN

SCALE: 1" = 20'

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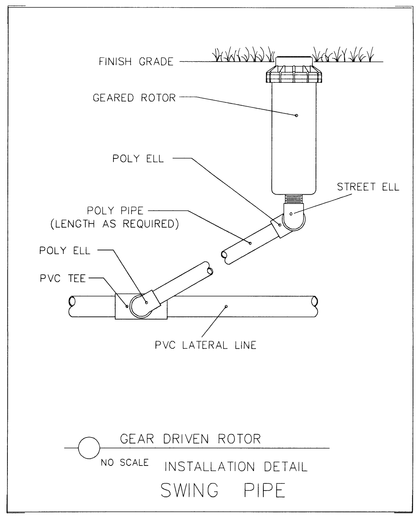
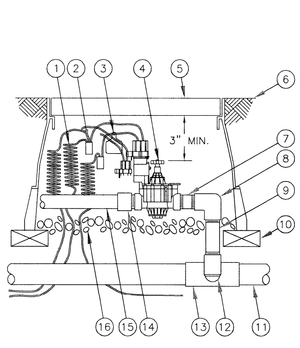
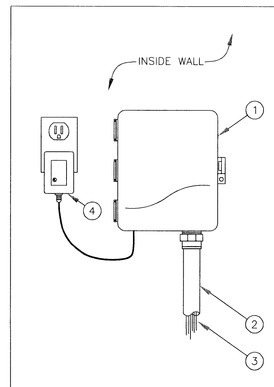


GEAR DRIVEN ROTOR
NO SCALE INSTALLATION DETAIL
SWING PIPE



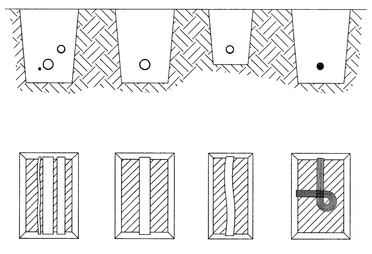
1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATER PROOF CONNECTION (1 OF 2)
3. ID TAG
4. REMOTE CONTROL VALVE:
5. VALVE BOX WITH COVER: 12-INCH SIZE
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

(D) REMOTE CONTROL VALVE

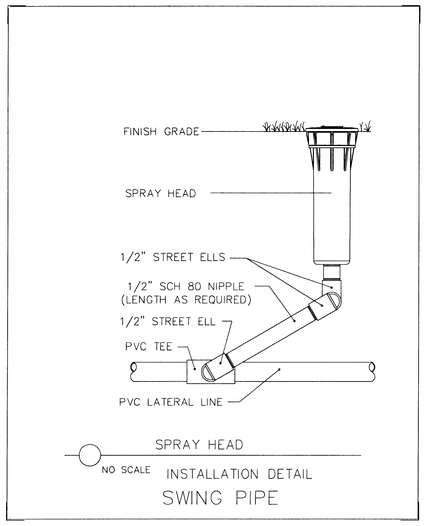


1. HYBRID CONTROLLER: INDOOR WALL MOUNT
2. 1.5-INCH PVC SCH 40 CONDUIT AND FITTINGS
3. WIRES TO REMOTE CONTROL VALVES
4. 117 VAC, 60 HZ EXTERNAL PLUG-IN TRANSFORMER

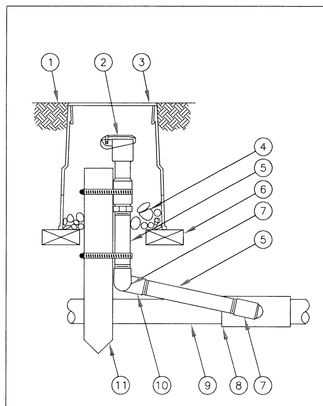
(D) HYBRID CONTROLLER



(D) PIPE & WIRE TRENCHING



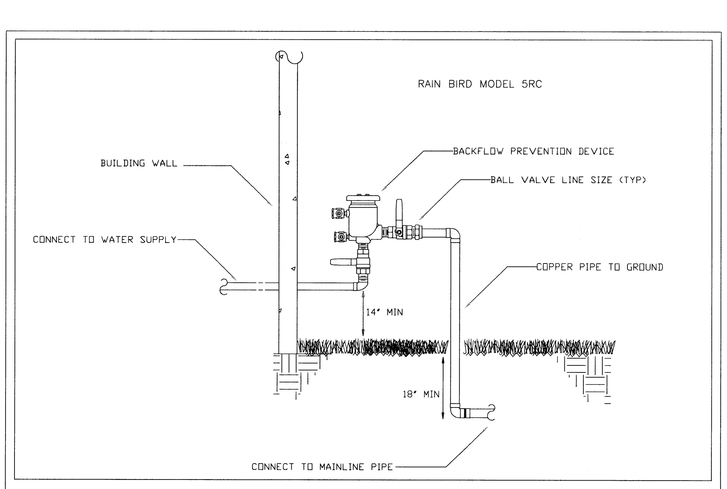
SPRAY HEAD
NO SCALE INSTALLATION DETAIL
SWING PIPE



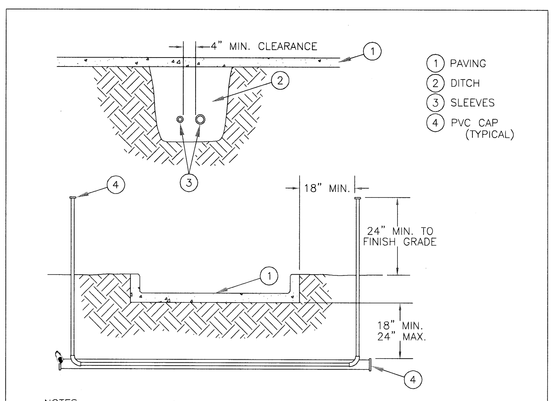
1. FINISH GRADE/TOP OF MULCH
2. QUICK-COUPLING VALVE:
3. VALVE BOX WITH COVER: 6-INCH SIZE
4. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
5. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
6. BRICK (1 OF 2)
7. PVC SCH 40 STREET ELL
8. PVC SCH 40 TEE OR ELL
9. PVC MAINLINE PIPE
10. PVC SCH 40 ELL
11. 2" x 2" REDWOOD STAKE W/ STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM

NOTE:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

(D) QUICK-COUPLING VALVE



PRESSURE VACUUM BREAKER NO SCALE



1. PAVING
2. DITCH
3. SLEEVES
4. PVC CAP (TYPICAL)

NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE CLASS 200 PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
4. MECHANICALLY TAMP TO 95% PROCTOR.

(D) SLEEVING

4 OF 4

Contract ID: 091038
Page 122 of 283

JOHN DEERE LANDSCAPES

Scale: NOT TO SCALE

Title: Irrigation Detail Sheet

JEFFERSON COUNTY
056GR09D015

JEFFERSON 05-397
SN-XXXX

EMERGENCY TELEPHONES

1.0 DESCRIPTION

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

This item shall include all labor, equipment, materials and incidental items for the following:

Provide freestanding emergency telephone stanchion, minimum 9'6" high, with mounting accommodations for an Emergency Telephone. Tower shall contain emergency blue strobe light, and, shall be coated with a durable finish that will not be adversely affected by outdoor weather conditions. Tower shall display the word EMERGENCY on upper four exterior surfaces and fasten to anchor bolts embedded in concrete footing.

This item includes construction of the necessary foundations as well as electrical and communications connections to the nearest University owned building as shown in the plans or as directed by the Engineer.

1.1 SUBMITTALS

Contractor shall submit five (5) sets of Manufactures cut sheets and specifications to the Department for review and approval prior to ordering or installing equipment. Also provide a plan showing the stanchion location with the routing of all conduits for power and communications.

1.2 COORDINATION

Coordinate this work with other work including installation of lighting, traffic signals, landscaping, modification to pedestrian underpass, and construction of sidewalks to avoid damage to installed site equipment.

1.3 SUBMITTALS

Obtain the Engineer's approval for all materials before installation. Submit for approval 5 copies of descriptive literature, drawings, and any requested design data. Do not make substitutions for approved materials without written permission as described above. This shall also include a plan for the stanchion foundations.

2.0 MANUFACTURER

The Emergency Telephone will be manufactured by the following or approved equal:

GAI-Tronics USA
P.O. Box 1060 –
Reading PA 19607-1060
Phone: 1-800-492-1212
Fax: (610) 796-5954
http://www.gai-tronics.com

2.1.1 Stanchion

The Stanchion shall be GAI Tronics Model 234 Assembly

The Tower shall be fabricated from 10" square steel tubing with 3/16" minimum wall thickness and be properly designed to the appropriate wind and load factors for the intended project site.

The internal base plate to be minimum 1/2" thick steel, welded within the column and designed to accommodate 4- 3/4"

Anchor bolts. A 5"x 8" covered opening shall be located no higher than 8" from the base of stanchion to provide easy access to mounting and wiring connections. All visible hardware to be tamper-resistant requiring special tool for removal.

Tower to be finished with Graffiti Resistant, Polyester Powder Coating to enhance weatherability. Coating shall have High Impact Resistance and shall withstand 1,000 hr Salt Spray Test per ASTM 117B. Color shall be Black.

Emergency Phone panel area shall be illuminated by a 7 watt lamp contained within the tower structure.

Internal conduit shall be provided to separate power and telephone cable. All electrical components shall be UL listed.

Tower shall provide suitable mounting accommodations for GAI-Tronics Model 297-series Single Button, Emergency Telephone.

Tower shall provide suitable mounting accommodations for GAI-Tronics Model 530-series Constant-On Beacon with Strobe.

The Tower and all components shall be warranted for one year from date of manufacture. Telephone shall be designed and developed by the manufacturer.

Stanchion assembly shall be designed and developed by the manufacturer

3.0 CONSTRUCTION

Install foundations, conduit, stanchion and telephone equipment as specified by the manufacturer at the locations shown in the plans or as directed by the engineer. The University of Louisville will be responsible for the electrical and communications connections to their facilities'.

The contact with the University of Louisville to coordinate the installation of the Emergency Telephones is as follows:

Jim Bratcher
University Police
Physical Security Coordinator
University of Louisville
Louisville, KY 40208
Phone: 502-852-7241
jlbrat02@louisville.ed

4.0 MEASUREMENT

The Department will measure the quantity of Emergency Telephones as Each.

5.0 PAYMENT

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

Code Pay Item Pay Unit

Special Emergency Telephones –Each

The Department will consider payment as full compensation for all work required in this provision.

END OF NOTE

JEFFERSON 05-397
SN-XXXX

TYPE III BARRICADE

1.0 DESCRIPTION

This Special Note will apply when indicated on the plans or in the proposal. Section References herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction (Specifications). This section shall take precedence over Section 112.04.05 "Barricades"

The Contractor shall furnish newly manufactured Type III barricades and deliver and locate the said barricades at the locations shown in the contract drawings. The total number of barricades furnished shall be as shown in the plans.

The barricades shall be comprised of 100% new material and no salvaged or retrofitted materials, signage, hardware or other components. The Contractor shall relocate the barriers per the contract drawings as necessary for all phases of construction. At the completion of the project the barricades shall become the property of the Department. The Department will take delivery and remove the barricades from the project when no longer needed as directed by the Engineer.

1.1 COORDINATION

Coordinate this item with other work as shown on the project maintenance of traffic plans and the standard specifications.

1.2 PROTECTION

Protect all barricades until final acceptance by the Engineer.

Contractor will repair or replace, at the Engineer's option, any Barricades damaged, defaced, or discolored, during fabrication, transportation, storage, or installation the project site before final acceptance.

2.0 MEASUREMENT

The Department will measure the quantity of Type III Barricades furnished and placed at the project site as "Each". This quantity will include installation, maintenance, and removal and delivery to the Department.

3.0 PAYMENT

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

Code Pay Item Pay Unit

02014 TYPE III Barricade

The Department will consider payment as full compensation for all materials, equipment and labor required in this note.

END OF NOTE

END OF NOTE

SPECIAL NOTE
For

JEFFERSON COUNTY
Traffic and Safety Improvements for the Eastern Parkway Corridor near Third Street
ITEM NO. 5-397.00
And
NB I-65/Warnock Ramp Modifications
ITEM NO. 5-964.10
And
Rehab Bridge at CSX Railroad and Floyd Street
ITEM NO. 05-1050.00

FIXED COMPLETION DATE AND LIQUIDATED DAMAGES

Fixed Completion Date

December 31, 2009 is the date established for the completion of all work associated with these projects.*

Liquidated Damages

Contrary to the 2008 Standard Specifications for Road and Bridge Construction, Section 108.09, if the Contractor fails to complete all work on the projects by December 31, 2009, **Liquidated Damages will be assessed at the rate of $5,000 per day for each calendar day that the Contractor has not completed the contract work.** Contrary to Section 108.09 of the 2008 Standard Specifications, **Liquidated Damages will be charged during the months of January through March for all work that is not complete.** Contrary to Section 108.09 of the 2008 Standard Specifications, **Liquidated Damages will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation.**

* A complete closure of Eastern parkway is not allowed until after the work on Warnock Street (Item No. 5-964.10) has been completed and is reopened to traffic.

SPECIAL NOTE FOR PROJECT COMPLETION

Jefferson County
I-65 at Warnock Street
Item No. 5-964.10

A complete road closure is necessary to construct the project. This will require closure of the I-65 northbound entrance and exit ramps to Warnock Street and Warnock Street from Arthur Street to Crittenden Drive for sixteen (16) consecutive calendar days to construct the project. Warnock Road and Northbound I-65 ramp closure will be from 9:00 pm Friday for 16 consecutive days to 5:00 am Monday.

Contrary to the current *Standard Specifications for Road and Bridge Construction, Section 108.09*, if the contractor fails to reopen the lane or Ramp closure to traffic by the agreed upon time frames the contractor shall be assessed liquidated damages of $5,000 for each calendar day that the lane closure is in effect. Liquidated damages shall be charged even if work on the controlling item of operation is prohibited by seasonal limitations, including winter months. There will be no limitations of the liquidated damages.

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

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

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

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

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

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

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

Required Contract Provision to Implement Recovery Act Section 902:

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

"(1) to examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and

(2) To interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions."

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

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

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

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

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

1.0 DESCRIPTION. This work consists of collecting and reporting data as required by the American Recovery and Reinvestment Act of 2009 (Recovery Act).

2.0 REPORTING. The Contractor shall complete the Monthly Employment Report form, FHWA-1589, for their employees and a separate form for each of their respective subcontractors as well. This form contains information about the number of employees, total hours for employees, total wages for employees, and other information as required by the Recovery Act. The Department will provide the necessary Excel file after the award of the contract. The initial submittal shall be before the Notice to Proceed. All remaining submittals shall be no later than the seventh Calendar Day of each month thereafter for the full life of the contract even if no work is performed during any month. See the following web link for filling out form FHWA-1589:
http://www.fhwa.dot.gov/economicrecovery/forms/arra_reporting_req_2_0.pdf"

The Contractor shall also need their Data Universal Numbering System or DUNS number as described in the Recovery Act Reporting Requirements. See the following web link for obtaining a DUNS number:
http://www.whitehouse.gov/omb/grants/duns_num_guide.pdf

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

June 10, 2009

Monthly Employment Report (Form: FHWA-1589)

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

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

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

Format: The State, contractors, or consultant may use the FHWA provided model form, but the use of the model form is optional and at the discretion of the State.

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

Due to: To be sent by each Recovery Act funded project prime contractor or consultant to the designated office in each State DOT or Federal Lands Division Office.

Coding Instructions

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

BOX 2. **Contracting agency:** The name of the contracting agency. Enter "State" for State DOT projects. For non-State projects, enter the name of the contracting agency (other State agency, Federal agency, tribe, MPO, city, county, or other funding recipient).

BOX 3. **Federal-aid project number:** The State assigned federal-aid project number, consistent with the seven digit format reported in FMIS. For example, the project STM-1222(12) should be reported as "*1222012*"

BOX 4. **State project number or identification number:** The project number or ID, as assigned by the State or its funding recipient, consistent with the format reported in FMIS.

BOX 5. **Project location:** The 2 digit State Federal Information Processing Standard (FIPS) code for the project. If the project is being performed for Federal Lands, provide the 4 digit FLH Division or Federal Land Managing Agency (FLMA) region code. See Appendix A for a list of the State FIPS and FLMA region codes.

BOX 6. **Contractor name and address:** The name and address of the contracting or consulting firm shall include the name, street address, city, state, and zip code.

BOX 7. **Contractor DUNS number:** The unique nine-digit number issued by Dun & Bradstreet. Followed by the optional 4 digit DUNS Plus number. Reported as "*999999999.9999"*

BOX 8. **Employment data:** The prime contractor or consultant will report the direct, on-the-project jobs for their workforce and the workforce of their sub-contractors active during the reporting month. These jobs data include employees actively engaged in projects who work on the jobsite, in the project office, in the home office or telework from a home or other alternative office location. This also includes any engineering personnel, inspectors, sampling and testing technicians, and lab technicians performing work directly in support of the Recovery Act funded project. This does not include material suppliers such as steel, culverts, guardrail, and tool suppliers. States should include in their reports all direct labor associated with the Recovery Act project such as design, construction, and inspection. The States reports should include their own project labor, including permanent, temporary, and contract project staff. States are asked not to include estimated indirect labor, such as material testing, material production or estimated macro-economic impacts. FHWA will be estimating all indirect labor based on the information provided in this form along with other FHWA data. The form requests specifically:

a. **Subcontractor name:** The name of each subcontractor or sub-consultant that was active on the project for the reporting month.

b. **Employees:** The number of project employees on the contractor's or consultant's workforce that month, and the number of project employees for each of the active subcontractors for the reporting month. Do not include material suppliers. Total field at bottom will be automatically calculated and reported as a whole number.

c. **Hours:** The total hours on the specified project for all employees reported on the contractor's or consultant's project workforce that month, and the total hours for all project employees reported for each of the active subcontractors that month. Total field at bottom will be automatically calculated and reported as a whole number.

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

BOX 9. **Prepared by:**

a. **Name:** Indicate the person responsible for preparation of the form. By completing the form the person certifies that they are knowledgeable of the hours worked and employment status for all the employees. Contractors, consultants, and their subs are responsible to maintain data to support the employment form and make it available to the State should they request supporting materials.

b. **Date:** The date that the contractor completed the employment form. Reported as "*mm/dd/yyyy*." (e.g. "May 1, 2009" would be coded as "05/01/2009").

MONTHLY EMPLOYMENT REPORT
AMERICAN RECOVERY AND REINVESTMENT ACT

1. Report Month: (mm/yyyy)	2. Contracting Agency	
3. Federal-Aid Project Number	4. State Project Number or ID Number	5. Project Location: State, County or Federal Region

6. CONTRACTOR NAME AND ADDRESS

Name:
Address:
City: State:
Zip:

7. Contractor/Subcontractor DUNS Number:

8. Employment Data

	EMPLOYEES	HOURS	PAYROLL
Prime Contractor Direct, On-Project Jobs (see guidance for definitions)			
Subcontractor Direct, On-Project Jobs			
Subcontractor Name			
Prime and Subcontractor Totals	0	0	0.00

9. PREPARED BY CEO or Payroll Official:	DATE:
Name: Title:	

Form FHWA-1589

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

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

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

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

2.0 Materials. Recovery Act signs shall be constructed and installed in accordance with signing details included with this note. Conform to Sections 830, 832 and 833.

3.0 Construction. Recovery Act signs should be placed where they can be easily identified with the corresponding projects and in a location that does not conflict with higher priority signs (temporary or permanent), traffic signals or any temporary traffic control device. In no case shall these signs be installed such that it obscures the view of other traffic control devices.

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

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

4.0 Measurement. The Department will measure the quantity in square feet. The Department will not measure sign maintenance, posts, mounting, installation or any required bracing for payment and will consider them incidental to this item of work.

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

Code	Pay Item	Pay Unit
02562	Signs	Square Foot

3/23/2009

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

PROJECT FUNDING SOURCE
SIGN ASSEMBLY

3/23/2009

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

PROJECT FUNDING SOURCE SIGN

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

Dimensions in inches

A	B	C	D	E	F	G	H	J	K	L	M	N	P
120	84	1.5	6	5 D	4.5	8 D*	3.75	6 D* (4.5 L.C.)	14.5	10	27.917	5	10.831
84	60	1	5	4 C	3.5	6 C*	3	4 D* (3 L.C.)	9.25	7	19.047	4	7.362

Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD
14.087	8.106	11.556	49.42	2.742	5.258	46.904	6.812	46.76	22.472	8	16.288	5	30
9.484	5.162	7.763	31.722	2.415	3.585	30.552	4.542	30.911	14.737	6	10.175	4	21

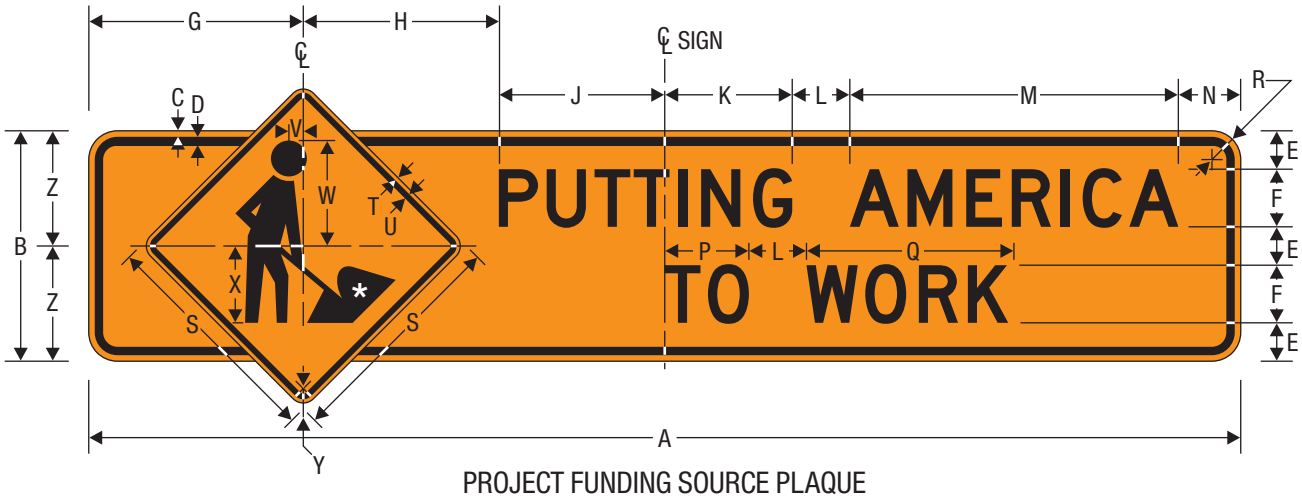
EE	FF	GG
11	4.5	3
7.5	2.25	2.25

* Increase character spacing 50%
** See Pictograph page 4
*** See Pictograph page 5

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

3/23/2009

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



PROJECT FUNDING SOURCE PLAQUE

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

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

Dimensions in inches

A	B	C	D	E	F	G	H	J	K	L	M	N	P
120	24	0.625	0.875	4	6 D	22.349	20.370	17.281	13.28	6	34.22	6.5	8.765
84	18	0.375	0.625	3.5	4 D	16.607	15.686	9.707	10.667	4	22.813	5	5.843

Q	R	S	T	U	V	W	X	Y	Z
21.013	3	24	0.375	0.625	1.5	11	8	1.5	12
14.009	2.25	18	0.375	0.625	1	7	6	1.5	9

COLORS: LEGEND, BORDER – BLACK
BACKGROUND – ORANGE (RETROREFLECTIVE)

3/23/2009

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

RECOVERY
Vector-Based, Vinyl-Ready Pictograph

COLORS:	LEGEND, OUTLINE	– WHITE (RETROREFLECTIVE)
	BORDER	– BLUE (RETROREFLECTIVE)
	BACKGROUND (UPPER)	– BLUE (RETROREFLECTIVE)
	BACKGROUND (LOWER RIGHT)	– RED (RETROREFLECTIVE)
	BACKGROUND (LOWER LEFT)	– GREEN (RETROREFLECTIVE)

3/23/2009

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

USDOT TIGER
Vector-Based, Vinyl-Ready Pictograph

COLORS:
OUTLINE – WHITE (RETROREFLECTIVE)
USDOT LEGEND – BLACK
TIGER DIAGONALS – BLACK, ORANGE (RETROREFLECTIVE)

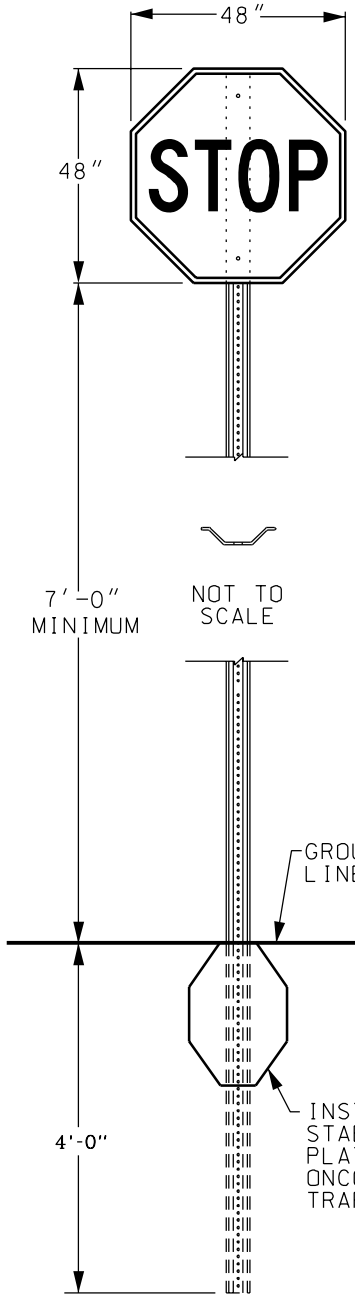
Traffic Notes For Temporary Signs

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

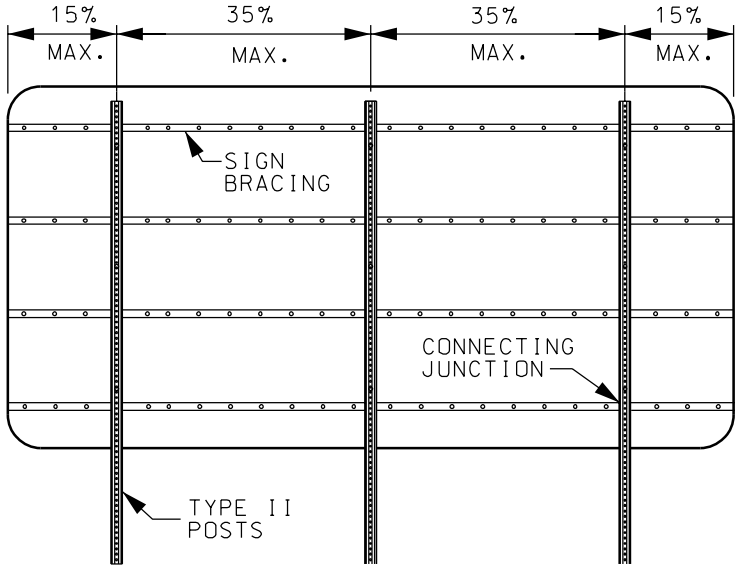
A seven-foot (7’) or more clear path should exist between the supporting posts. The bottom edge of the sign panel should have at least seven foot (7') clearance above the ground. Posts shall be embedded a minimum of 48 inches.

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

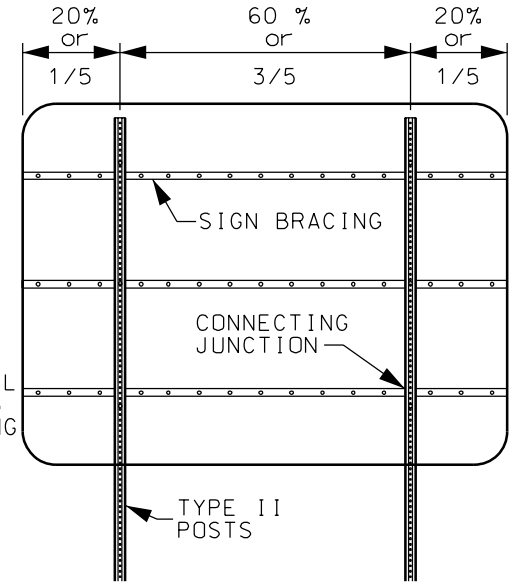
For additional details see the Federal Highway Administration memorandum HNG-14/SS-25 dated 6/4/91, HNG-14/SS-36 dated 9/3/93 and HNG-14/SS-27 dated 5/15/92.



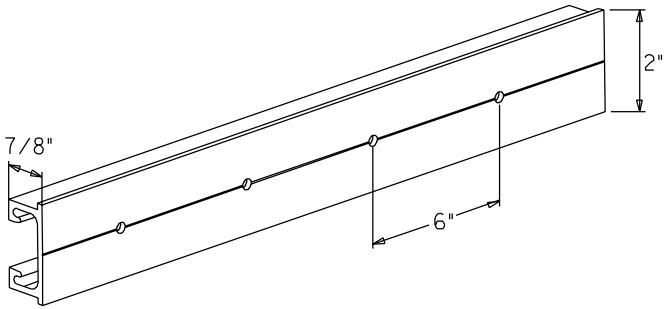
TYPE II
CHANNEL POST
WITH SOIL STABILIZER



3 POST – BRACING DIAGRAM



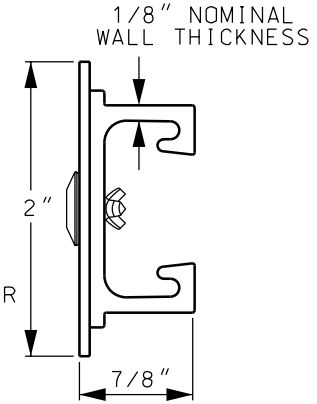
2 POST - BRACING DIAGRAM



SHEETING SIGN BRACING

NOTE:
ALUMINUM SIGN BRACING
2″ MOUNTING SURFACE
× 7/8″ DEPTH × 1/8″
NOMINAL WALL THICKNESS

6061-T6 ALUMINUM ALLOY,
PUNCHED WITH 3/16″ DIAMETER
HOLES ON 6″ CENTERS FOR
ATTACHMENT OF SIGN
SUBSTRATE USING RIVETS



SIGN BRACE

NOTES:
1. VERTICAL SPACING NOT TO EXCEED 36″ BETWEEN BRACES OR 12″ FROM TOP OR BOTTOMOF SIGN TO FIRST BRACE.

2. MAXIMUM AREA PER CONNECTING JUNCTION =16 SQ. FT.

3. LENGTH OF BRACE TO BE A MINIMUM OF TOTAL SIGN WIDTH LESS 4″, NOT TO EXTEND BEYOND RIGHT OR LEFT EDGE OF SIGN.

4. POSTS, BRACING, AND SOIL STABLISHER SHALL BE INCIDENTAL TO SIGNS.

SHEETING SIGN POST AND BRACING DETAIL

SPECIAL NOTES FOR
PROTECTION OF RAILROAD INTEREST - CSXT

1. AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER:

The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks.

The authorized representative of the State, hereinafter referred to as the Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.

2. NOTICE OF STARTING WORK:

A. The Contractor shall not commence any work on Railroad rights of way until he has complied with the following conditions:

1. Given the Railroad written notice, with copy to the Engineer who has been designated to be in charge of the work, at least ten days in advance of the date he proposes to begin work on Railroad rights of way.

Benjamin P. Biesterveld, Principal Engineer Public Projects
CSX Engineering Department
500 Water Street – J301
Jacksonville, Florida 32202
(P) 904-359-1158; (F) 904-366-4042

2. Notify the Railroad's Chief Regional Engineer's representative, **John Williams, Roadmaster at Louisville, KY, (502) 364-1133**, at least 72 hours (not including Saturday, Sunday or Holidays) before proceeding with the work on Railroad property and shall abide by the instructions of said Railroad representative, insofar as the safety of the Railroad is concerned.

3. Obtain written authorization from the Railroad to begin work on Railroad rights of way, such authorization to include an outline of specific conditions with which he must comply.

4. Obtain written approval from the Railroad of Railroad Protective Insurance Liability coverage as required by paragraph 14 herein.

5. Furnish a schedule for all work within the Railroad rights of way as required by paragraph 7, B, 1.

B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

3. INTERFERENCE WITH RAILROAD OPERATIONS:

A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights of way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service (watchman) shall be deferred by the Contractor until the flagging protection required by the Railroad is available at the job site.

B. Whenever work within Railroad rights of way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.

C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgement of the Railroad Engineer, or in his absence, the Engineer, such provisions are insufficient, either may require or provide such provisions, as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the State.

4. TRACK CLEARANCES

A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. However, before undertaking any work within Railroad rights of way, or before placing any obstruction over any track, the Contractor shall:

1. Notify the Railroad's representative at least 72 hours in advance of the work.

2. Receive assurance from the Railroad's representative that arrangements have been made for flagging service as necessary.

3. Receive permission from the Railroad's representative to proceed with the work.

4. Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

5. CONSTRUCTION PROCEDURES

A. General:

Construction work on Railroad property shall be:

1. Subject to the inspection and approval of the Railroad.

2. In accord with the Railroad's written outline of specific conditions.

3. In accord with the Railroad’s general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.

4. In accord with these Special Notes.

B. Excavation:

The subgrade of an operated track shall be maintained with edge of berm at least 10'0" from centerline of track and not more than 24 inches below top of rail. Contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained.

C. Excavation of Structures:

The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles, or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall first be approved by the Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.

D. Blasting:

1. The Contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosive on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If

permission for use of explosives is granted, the Contractor will be required to comply with the following:

(a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.
(b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.

(c) No blasting shall be done without the presence of an authorized representative of the Railroad. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B above) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.

(d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.

2. The Railroad representative will:

(a) Determine the approximate location of trains and advise the Contractor the approximate amount of time available for the blasting operation and clean-up.

(b) Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these Special Notes.

E. Maintenance of Railroad Facilities:

1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas with Railroad rights of way and to repair any other damage to the property of the Railroad or its tenants.

2. All maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

F. Storage of Materials and Equipment:

Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights of way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.

All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

G. Cleanup:

Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights of way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

6. DAMAGES:

A. The Contractor shall assume all liability for any and all damages to his work, employees, equipment and materials caused by Railroad traffic.

B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

7. FLAGGING SERVICES:

A. When Required:

Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are likely to be, working on the Railroad's

rights of way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging.

Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three- (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required until the project has been completed.

B. Scheduling and Notification:

1. Not later than the time that approval is initially requested to begin work on Railroad rights of way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad rights of way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

2. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad rights of way. Once begun, when work is suspended at any time for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of notice before resuming work on Railroad rights of way. Such notice shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen is present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 10 days to again obtain flagging services from the Railroad. Due to labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.

3. If, after the flagman is assigned to the project site, emergencies arise which require the flagman's presence elsewhere, and then the Contractor shall delay work on Railroad rights of way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.

C. Payment:

1. The Contractor will be responsible for paying the Railroad directly for any and all costs of flagging, which may be required to accomplish the construction.

2. The estimated cost of flagging is $850 per day based on Contractor's 8-hour work day. This cost includes the base pay for the flagman, overhead, and includes an estimated $50 per diem charge for travel expenses, meals and lodging. The charge to the Contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.

3. Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 ½ times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 ½ times the normal rate.

4. Railroad work involved in preparing and handling bills will also be charged to the Contractor. Charges to the Department by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way.

D. Verification:

1. The Contractor and Department will review and sign the Railroad flagman's time sheet, attesting that the flagman was present during the time recorded. Flagman may be removed by Railroad if form is not signed. If flagman is removed, the Contractor will not be allowed to re-enter the Railroad rights of way until the issue is resolved. Any complaints concerning flagman or flagmen must be resolved in a timely manner. If need for flagman or flagmen is questioned, please contact

Railroad's Projects Engineer (904) 359-1158. All verbal complaints must be confirmed in writing by the Contractor within 5 working days with copy to the Highway Engineer. All written correspondence should be addressed to:

Benjamin Biesterveld, Principal Engineer Public Projects
CSX Engineering Department
500 Water Street – J301
Jacksonville, Florida 32202
(P) 904-359-1158; (F) 904-366-4042

2. The Railroad flagman assigned to the project will be responsible for notifying the Project Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Project Engineer will document such notification in the project records. When requested, the Project Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

8. HAUL ACROSS RAILROAD:

A. Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the State has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental, including flagging, to such crossings whether services are performed by his own forces or by Railroad personnel.

B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for is installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the Contractor, is first obtained from the Railroad Engineer.

9. WORK FOR THE BENEFIT OF THE CONTRACTOR:

A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the State and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the State and/or the Railroad.

B. Should the Contractor desire any changes in addition to the above,

then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

10. COOPERATION AND DELAYS:

A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefor.

B. No charge or claims of the Contractor against either the Department or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of Railroad traffic or for any delays due to compliance with these Special Notes.

11. TRAINMAN'S WALKWAYS:

Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each day. If there is any excavation near the walkway, a handrail, with 10'-0" minimum clearance from centerline of track, shall be placed.

12. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHTS OF WAY:

A. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots cinched with straps which fit snugly about the ankle are adequate. Safety boots are strongly recommended.

B. No one is allowed within 25' of the centerline of the track without specific authorization from the flagman.

C. All persons working near track when train is passing are to look out for dragging bands, chains and protruding or shifting cargo.

D. No one is allowed to cross tracks without specific authorization from the flagman.

E. All welders and cutting torches working within 25' of track must

stop when train is passing.

F. No steel tape or chain will be allowed to cross or touch rails without permission.

13. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHTS OF WAY:

A. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.

B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

C. All employees will stay with their machines when crane or boom equipment is pointed toward track.

D. All cranes and boom equipment under load will stop work while a train is passing (including pile driving).

E. Swinging loads must be secured to prevent movement while train is passing.

F. No loads will be suspended above a moving train.

G. No equipment will be allowed within 25' of centerline of track without specific authorization of the flagman.

H. Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.

I. No equipment or load movement within 25' or above a standing train or other equipment without specific authorization of the flagman.

J. All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.

K. All equipment, loads and cables are prohibited from touching rails.

L. While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.

M. No equipment or materials will be parked or stored on Railroad's property unless specific permission is granted from the Railroad Engineer.

N. All unattended equipment that is left parked on Railroad property

shall be effectively immobilized so that it can not be moved by unauthorized persons.

O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

14. INSURANCE:

A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the following kinds:

1. Commercial General Liability and Property Damage Liability Insurance. Insurance shall include "XCU" coverage.

The Contractor shall furnish to the Department, for transmittal to the Railroad Company, certificate of insurance in triplicate as evidence that with respect to the operations he performs he carries regular Contractor's Public Liability Insurance and Contractor's Property Damage Liability Insurance both providing for limits of liability as follows:

COVERAGE	MINIMUM COMBINED LIMITS OF LIABILITY
Bodily Injury Liability) Property Damage Liability) Physical Damage to Property)	$3,000,000 Per Occurrence $3,000,000 Aggregate

2. Contractor's Protective Liability and Property Damage Liability Insurance.

The Contractor shall furnish the Department, for transmittal to the Railroad Company, certificate of insurance in triplicate as evidence that with respect to the operations performed for him by any subcontractor, he carries in his own behalf regular Contractor's Public Liability Insurance and regular Contractor's Protective Property Damage Liability Insurance both providing for limits of liability as follows:

COVERAGE	MINIMUM COMBINED LIMITS OF LIABILITY
Bodily Injury Liability) Property Damage Liability) Physical Damage to Property)	$3,000,000 Per Occurrence $3,000,000 Aggregate

3. Railroad Protective Liability Insurance.

The Contractor shall furnish to the Department, for transmittal to the Railroad Company, original and two (2) copies of Railroad Protective Insurance Policy with limits of liability as follows:

COVERAGE	MINIMUM COMBINED LIMITS OF LIABILITY
Bodily Injury Liability)	$5,000,000 Per Occurrence
Property Damage Liability)	$10,000,000 Aggregate
Physical Damage to Property)	

The Standard for this protective insurance shall follow the requirements of Subchapter G, Part 646, Subpart A of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments.

Evidence of insurance as required above shall be furnished to the address shown below for review by the Department and transmittal to the Railroad:

Department:	Railroad:
Mr. Steve Waddle, Acting Director	Ms. Donna W. Melton
Div. of Contract Procurement	Manager-Insurance
KY Transportation Cabinet	CSX Corporation
200 Mero Street, 3rd Floor West	500 Water Street – C907
Frankfort, Kentucky 40622	Jacksonville, Florida 32202
Phone (502) 564-3500	Phone (904) 359-1247
Fax (502) 564-8961	Fax (904) 245-2833

The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:

(a) Named Insured:

CSX Transportation, Inc.

(b) Description and Designation:

Jefferson County, BRO 8800 (004)
FE02 056 77576 01D
US 60A (Eastern Parkway)
Bridge Rehabilitation, Louisville

As Shown in the Advertisement

B. If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the Prime Contractor, shall be provided by or in behalf of the subcontractor to cover his

operations. Endorsements to the Prime Contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.

C. All insurance herein before specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the rights of way of the Railroad as evidenced by the formal acceptance by the Department. Insuring Companies may cancel insurance by permission of the Department and Railroad or on thirty (30) days written notice to the Department and Railroad as follows:

Department:	Railroad:
Mr. Steve Waddle, Acting Director	Ms. Donna W. Melton,
Div. of Contract Procurement	Manager-Insurance
KY Transportation Cabinet	CSX Corporation
200 Mero Street, 3rd Floor West	500 Water Street – C907
Frankfort, Kentucky 40622	Jacksonville, Florida 32202
Phone (502) 564-3500	Phone (904) 359-1247
Fax (502) 564-8961	Fax (904) 245-2833

15. FAILURE TO COMPLY:

These Special Notes are supplemental and amendatory to the Kentucky Department of Highways' Standard Specifications for Road and Bridge Construction, Edition of 2004, and amendments thereof, and where in conflict therewith, these Special Notes shall govern.

In the event the Contractor violates or fails to comply with any of the requirements of these Special Notes:

A. The Railroad Engineer may require that the Contractor vacate Railroad property.

B. The Engineer may withhold all monies due the Contractor on monthly statements.

Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

16. PAYMENT FOR COST OF COMPLIANCE:

No separate payment will be made for any extra cost incurred on account of compliance with these Special Notes. All such cost shall be included in prices bid for other items of the work as specified in the payment items.

Office of the Principal Engineer Public Projects
CSX Engineering Department
500 Water Street – J301
Jacksonville, Florida 32202

Date: June 4, 2009
File: Louisville, Jefferson County, Kentucky
Milepost: MP OTR-1.12
AAR-DOT# 343-942A

Right-of-Way Certification Form

□ **Federal Funded** X **Original**

X **State Funded** □ **Re-Certification**

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

Date: March 4, 2009
Project #: FD39 056 8011601R
Item #: 05-397.00

County: Jefferson
Federal#: _____
Description of Project: Traffic and safety improvements For the Eastern Parkway Corridor near Third Street (To be let with 05-1050.00)

Letting Date: April 24, 2009

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 part of this project.

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

X Per 23 CFR 635.309, the KYTC hereby certify that all relocates have been relocated decent, safe, and sanitary housing or that KYTC has made available to relocates adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administrative 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. Trail or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish these improvements and enter all land. **Fair market value has been paid or deposited with the court.**

□ 2. Although all necessary rights-of –way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Trial or appeal of some parcels may be pending in court and on other parcels full legal possession has not been obtained, but an interlocutory judgment has been granted, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish these improvements. **Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to start of construction. (See note.)**

Right – of – Way Certification Form

Project #: FD39 056 8011601R
Item #: 05-397.00

County: Jefferson
Federal#: _____
Description of Project: Traffic and safety improvements
For the Eastern Parkway Corridor near Third Street
(To be let with 05-1050.00)

Letting Date: April 24, 2009

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

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

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

Approved: BRIAN MEADE (Printed Name) — Brian Meade, PE (Date Approved) — District ROW Supervisor

Approved: DAVID L. ORR (Printed Name) — 3-4-09 (Date Approved) — For Steve Damron, Director of ROW & Utilities or Designee

Approved: N/A (Printed Name) — N/A (Date Approved) — FHWA, Right-of-Way Officer

Right-of-Way Certification Form

Project #: FD39 056 801101R
Item #: 05-00397.00

County: Jefferson
Federal#: _____
Description of Project: Traffic and safety improvements For the Eastern Parkway Corridor near Third Street (To be let with 05-1050.00)

Letting Date: April 24, 2009

This project has 3 total number of parcels to be acquired, and 0 total number of individual of 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 (**Type 1**)
_____ Parcels have been acquired through condemnation and IOJ granted by the court and fair market value has been deposited with the court (**Type 1 Certification**)
X Parcels have not been acquired at this time but can be re-certified as acquired prior to notice to proceed for construction. (Explain below for each parcel) (**Type 2 Certification**)
_____ Parcels have been acquired or have a "right of entry" but the fair market value has not been paid or has not been posted with the court, and they can not be re-certified prior to construction. (These parcels require and explanation below for each one as well as FHWA approval. (**Type 3 only**)
_____ Some displaces 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
1	University of Louisville	Temporary easement is being acquired	06/01/2009
2	University of Louisville	Temporary easement is being acquired	06/01/2009
3	University of Louisville	Temporary easement is being acquired	06/01/2009

There are 0 billboards and/or 0 cemeteries involved on this project.
There are 0 water or monitoring wells on parcels _____ and ____. All

Right-of-Way Certification Form

X **Federal Funded** X **Original**

□ **State Funded** □ **Re-Certification**

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

Date: March 16, 2009
Project #: FD52 056 7757601D
Item #: 05-1050.00
Letting Date: April 24, 2009

County: Jefferson
Federal#: BRO 8800 004
Description of Project: Rehab bridge on US 60A Parkway over CSX RR and Floyd Street (B138) near Uof L 0.1 mile west of I-65 underpass

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

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

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

□ Per 23 CFR 635.309, the KYTC hereby certify that all relocates have been relocated decent, safe, and sanitary housing or that KYTC has made available to relocates adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administrative 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. Trail or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish these improvements and enter all land. **Fair market value has been paid or deposited with the court.**

□ 2. Although all necessary rights-of –way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Trial or appeal of some parcels may be pending in court and on other parcels full legal possession has not been obtained, but an interlocutory judgment has been granted, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish these improvements. **Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to start of construction. (See note.)**

Right – of – Way Certification Form

Project #: FD52 056 7757601D
Item #: 05-1050.00
Letting Date: April 24, 2009

County: Jefferson
Federal#: BRO 8800 004
Description of Project: Rehab bridge on US 60A Eastern parkway Over CSX RR and Floyd Street (B138) near UofL 0.1 mile West of I-65 underpass

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

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

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

Brian
Approved: Brian Meade (Printed Name) — Brian Meade 3-17-09 (Approved Date) District ROW Supervisor

Approved: DAVID L. ORR (Printed Name) — 3-18-09 (Approved Date) For Steve Damron Director of ROW & Utilities or Designee

Approved: N/A (Printed Name) — N/A (Approved Date) FHWA, Right-of-Way Officer

Right – of – Way Certification Form

Project #: FD52 056 7757601D
Item #: 05-1050.00
Letting Date: April 24, 2009

Federal#: BRO 8800 004
Description of Project: Rehab bridge on US 60A Eastern Parkway Over CSX RR and Floyd Street (B138) near Uof L 0.1 mile West of I-65 underpass

This project has ____0_____ total number of parcels to be acquired, and ____0____ total number of individual of 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 (**Type 1**)
_____ Parcels have been acquired through condemnation and IOJ granted by the court and fair market value has been deposited with the court (**Type 1 Certification**)
_____ Parcels have not been acquired at this time but can be re-certified as acquired prior to notice to proceed for construction. (Explain below for each parcel) (**Type 2 Certification**)
_____ Parcels have been acquired or have a "right of entry" but the fair market value has not been paid or has not been posted with the court, and they can not be re-certified prior to construction. (These parcels require and explanation below for each one as well as FHWA approval. (**Type 3 only**)
_____ Some displaces 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 _____ and ____. All

Right-of-Way Certification Form

X Federal Funded X **Original**

□ **State Funded** □ **Re-Certification**

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

Date: March 23, 2009
Project #: FD52 056 7769 01D
Item #: 05-0964.10

County: Jefferson
Federal#: HSIP 3001 (311)
Description of Project: Northbound I-65 Warnock ramp modifications (2006BOPC)

Letting Date: May 22, 2009

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

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

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

□ Per 23 CFR 635.309, the KYTC hereby certify that all relocates have been relocated decent, safe, and sanitary housing or that KYTC has made available to relocates adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administration of the Highway Relocation Assistance Program **<u>and</u>** that at least one of the following three conditions has been met. **(Check those that apply)**

□ 1. All necessary rights-of-way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish these improvements and enter all land. **Fair market value has been paid or deposited with the court.**

□ 2. Although all necessary rights-of –way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Trial or appeal of some parcels may be pending in court and on other parcels full legal possession has not been obtained, but an interlocutory judgment has been granted, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish these improvements. **Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to start of construction. (See note.)**

Right – of – Way Certification Form

Project #: FD52 056 7769 01D
Item #: 05-0964.10

County: Jefferson
Federal#: HSIP 3001 (311)
Description of Project: Northbound I-65
Warnock ramp modifications (2006BOPC)

Letting Date: May 22, 2009

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

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

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

Approved: BRIAN MEADE (Printed Name) March 23, 2009 (Approved) District ROW Supervisor

Approved: [signature] (Printed Name) 4/6/09 (Approved) Director of ROW & Utilities or Designee

Approved: _____ (Printed Name) _____ (Approved) FHWA, Right-of-Way Officer

Right-of-Way Certification Form

Project #: FD52 056 7769 01D
Item #: 05-0964.10

County: Jefferson
Federal#: HSIP 3001 (311)
Description of Project: Northbound I-65 Warnock ramp modifications

Letting Date: May 22, 2009

This project has ____0_____ total number of parcels to be acquired, and ____0____ total number of individual of 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 **(Type 1)**
_____ Parcels have been acquired through condemnation and IOJ granted by the court and fair market value has been deposited with the court **(Type 1 Certification)**
_____ Parcels have not been acquired at this time but can be re-certified as acquired prior to notice to proceed for construction. (Explain below for each parcel) **(Type 2 Certification)**
_____ Parcels have been acquired or have a "right of entry" but the fair market value has not been paid or has not been posted with the court, and they can not be re-certified prior to construction. (These parcels require and explanation below for each one as well as FHWA approval. **(Type 3 only)**
_____ Some displaces 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 _____ and ____. All

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

JEFFERSON COUNTY
FD39 056 80116 01U
Eastern Parkway (US-60A) at Third Street (Safety & Traffic)
ITEM NO. 5-397.00

The following Companies have facilities to be relocated and/or adjusted on subject project.

LOUISVILLE GAS & ELECTRIC (Gas)
The Louisville Gas and Electric Company have existing 4" and 8" gas mains in the area. The 4" gas main lies on the north side of Eastern Parkway and the 8" gas main is on the south side of Eastern Parkway, running east to west. There are two separate 4" services that run north and south across Eastern Parkway at approximate Station 11+50 and 15+50. The relocated facilities consist of an 8" main crossing under the intersection of Third Street and Eastern Parkway and running east along the south side of Eastern Parkway, tying into the existing 8" main at approximate Station 14+26 Rt. and a 6" valve was installed at approximate Station 19+40. The 4" main located on the north side of Eastern Parkway from approximate Station 10+50 to 15+50 will be abandoned. This work was completed on **April 24, 2009 per Greg Geiser at LG&E.**

LOUISVILLE GAS & ELECTRIC (Electric)
The Louisville Gas and Electric Company has an existing underground electric service in a 2" conduit running east and west along both sides of Eastern Parkway servicing the existing lighting and there is an existing overhead facility along the east side of Third Street crossing over Eastern Parkway. These facilities are not to be disturbed.

LOUISVILLE WATER COMPANY
The Louisville Water Company has 48" & 12" mains on the north side of the existing roadway and run east and west from approximate Station 15+10 where they turn northeast and exit the existing roadway at approximate Station 15+12. The 12" main turns to the northwest at approximate Station 10+74 and runs askew across Third Street. The 48" main turns to the south west at approximate Station 11+16 and runs askew across Eastern Parkway to Third Street where it turns south and continues to run along the east side of Third Street. The aforementioned water mains are not to be disturbed should be located prior to work. The facility relocations consist of the relocation of two fire hydrants at approximate Stations 11+00 and 17+25, an 8" fire service meter vault along the south side of Eastern Parkway in front of Ernst Hall at approximate Station 17+35, a 4" domestic service meter vault from the north side of Eastern Parkway in front of the Natural Science building to the south side in front of Ernst Hall, another 4" domestic service meter at approximate Station 17+47 with reconnection of a 4" and 2" domestic service line to the Natural Science building and a 6" main across Eastern Parkway at approximate Station 17+50. This work will be in the road contract.

Jefferson County
FD39 056 80116 01U
ITEM NO. 5-397.00

AT&T-KY TELECOMMUNICATIONS (TELEPHONE)
AT&T-KY has an existing facility in conduit at approximate Station 12+10 and 13+50 near the UofL tunnel. This facility is not to be disturbed.

METROPOLITAN SEWER DISTRICT
Metropolitan Sewer District has existing sanitary sewer facilities in Eastern Parkway roadway. The existing sanitary manholes at approximate Stations 15+87, 17+32, 20+30, 32+68, 33+60 and 51+18 will be adjusted to grade. This work will be in the road contract. Any other sewer facilities are not to be disturbed.

SPECIAL CAUTION NOTE – 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 and may not be accurate. It will be the roadway contractor's responsibility to locate utilities before excavating by calling the various utility owners and by examining any supplemental information supplied by the Cabinet. If necessary, the roadway contractor shall determine the exact location and elevation of utilities by hand digging to expose utilities before excavating in the area of a utility. The cost for repair and any other associated costs for any damage to utilities caused by the roadway contractor's operations shall be borne by the roadway contractor.

The contractor is advised to contact the "BUD" one-call system; the Contractor should be aware that owners of underground facilities are not required to be members of the "BUD" one-call system. It may be necessary for the Contractor to contact the County Court Clerk to determine what utility companies have facilities in the project area.

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

JEFFERSON COUNTY
FD52 056-060A 003-004
Rehab Bridge @ CSX RR & Floyd Street
Item No. 5-1050.00

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

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

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

The contractor is advised to contact the "BUD" one-call system; the Contractor should be aware that owners of underground facilities are not required to be members of the "BUD" one-call system. It may be necessary for the Contractor to contact the County Court Clerk to determine what utility companies have facilities in the project area.

Note:
The Contractor is advised to contact the BUD one-call system; however, the Contractor should be aware that not all owners may be a member of the BUD one-call system.

Call Before You Dig (BUD) 1-800-752-6007

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

JEFFERSON COUNTY
RECONSTRUCT I-65 OFF/ON RAMPS AND WIDEN WARNOCK BETWEEN ARTHUR STREET AND THE RAMPS
ITEM NO. 5-964.10

Louisville Gas & Electric Company (Electric)
Louisville Gas & Electric Company has existing overhead facilities located along the north side of Warnock Street with service lines crossing over Warnock Street at approximate Sta. 302+43 a service line that runs askew from power pole at approximate Sta. 103+07 and a service line to the bridge lighting that runs from said pole to existing pole with platform near the bridge. A 4 KV and neutral line crosses Warnock Street at approximate Sta. 102+40.These facilities will remain in place. The relocated facilities will consist of moving a pole located on the north side of Warnock Street from approximate Sta. 303+12 to the west to approximate Sta. 302+22. Said relocations were completed by **June, 18, 2009, as per Greg Geiser of LG&E.**

Louisville Gas & Electric Company (Gas)
Louisville Gas & Electric Company has a 4" gas main that lies along the northeast side of Warnock Street running from Crittenden Drive to where it turns north off of Warnock Street. This facility is in the immediate area and clear of construction. This facility should not be disturbed.

Louisville Water Company
Louisville Water Company has a 6" water main that lies under Warnock Street and runs east to west and turns north on Fort Street. This facility is in the immediate area, and is clear of construction. Caution should be exercised if excavation in this area is performed. This facility should not be disturbed.

Metropolitan Sewer District
Metropolitan Sewer District has a 24" Sanitary Sewer facility that lies under Warnock Street and runs from east to west. The manhole lids will not be adjusted. Caution should be exercised if excavation in this area is performed. This facility is clear of the project and should not be disturbed.

AT&T KY
AT&T KY has existing overhead facilities on the above LG&E pole route and will be relocated when the pole is relocated. The relocation was completed on **June 18, 2009, as per Morgan Herndon of AT&T-KY.**

Insight Communications
Insight Communications has an existing facility on the LG&E pole route and also running under the bridge. This facility was relocated with the LG&E pole on **June 19, 2009, as per Deno Barbour of Insight Communications.**

SPECIAL CAUTION NOTE – 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 and may not be accurate. It will be the roadway contractor's responsibility to locate utilities before excavating by calling the various utility owners and by examining any supplemental information supplied by the Cabinet. If necessary, the roadway contractor shall determine the exact location and elevation of utilities by hand digging to expose utilities before excavating in the area of a utility. The cost for repair and any other associated costs for any damage to utilities caused by the roadway contractor's operations shall be borne by the roadway contractor.

The contractor is advised to contact the "BUD" one-call system; the Contractor should be aware that owners of underground facilities are not required to be members of the "BUD" one-call system. It may be necessary for the Contractor to contact the County Court Clerk to determine what utility companies have facilities in the project area.

Kentucky Transportation Cabinet

Highway District 5

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System Permit KYR10 Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Northbound I-65 / Warnock Street Ramps Modifications

Project: PCN ## -

Project information

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

1. Owner – **Kentucky Transportation Cabinet, District 5**
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 - **Northbound I-65 ramps and Warnock Street**
6. Latitude/Longitude - **38 Degrees 12 Minutes 51 Seconds North / 85 Degrees 45 Minutes 08 Seconds West**
7. County - **Jefferson**
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

A. Site description:

1. Nature of Construction Activity – **Warnock Street widening and NB I-65 Ramps modifications**

2. Order of major soil disturbing activities (2) and (3)

3. Projected volume of material to be moved - **2,547 cubic yards**

4. Estimate of total project area – **2.2 Acres**

5. Estimate of area to be disturbed – **0.7 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 (2)

8. Data describing existing discharge water quality (if any) (2)

9. Receiving water name – **NA**

10. TMDLs and Pollutants of Concern in Receiving Waters: **NONE**

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 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. <u>All DDA's will have adequate BMP's in place before being disturbed.</u>

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 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 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 :

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.

➢ **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 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.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract 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

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.
- 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

_____ 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 ## - ####

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

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 gathered and evaluated 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. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

Signed _____title_____, _____
Typed or printed name[2] signature

(3) Signed _____title_____, _____
Typed or printed name[1] signature

1. Contractors 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.

2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) 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.

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 name[1] 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.

Kentucky Transportation Cabinet

Highway District _5_

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Rehab Bridge on US-60A Eastern Parkway over CSX RR and Floyd Street (B138) near U of L 0.1 Mile west of I-65 Underpass

Contract ID ######

Six Year Plan 05-1050.00

Revised
1-28-08

KYTC BMP Plan for Contract ID ######

Project Information

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

1. Owner – Kentucky Transportation Cabinet, District _5_
2. Resident Engineer: (2)
3. Contractor Name: (2)
   Address: (2)
   Phone number: (2)
   Contact: (2)
   Responsible Person: (3)
4. Contract ID Number: (2)
5. Route (Address): **US-60A**
6. Latitude/Longitude (project mid-point) **38/12/47, -85/45/21**:
7. County (project mid-point): **Jefferson**
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

1.0 SITE DESCRIPTION.

1) Nature of construction activity (from letting project description). **Rehab bridge on US-60A Eastern Parkway over CSX railroad and Floyd Street near U of L 0.1 mile west of I-65 underpass.**
2) Order of major soil disturbing activities. (2) and (3)
3) Projected volume of material to be moved.
   1091.6 C.Y. Remove Concrete Masonry
   275.8 C.Y. Remove Epoxy Bit. Foreign Overlay (4965 S.Y. at 2 inches thick)
4) Estimate of total project area (acres). **1.29 (consists of bridge deck surface area)**
5) Estimate of area to be disturbed (acres). **0.00 (project is a bridge rehab)**
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. (1)
7) Data describing existing soil condition. **No known soil stabilization needed (1)** & (2)
8) Data describing existing discharge water quality (if any). **No data available at this time (1)** & (2)
9) Receiving water name. **Project drains into a sewer system. Project is located in the City/Ohio River Watershed as identified by the local MS4 agency (Metropolitan Sewer District).**
10) TMDLs and Pollutants of Concern in Receiving Waters. (1 DEA)
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 and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

2.0 SEDIMENT AND EROSION CONTROL MEASURES.

2.1 Erosion Control Sheets. 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.

2.2 Annotations. 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 BMPs 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 BMPs in place before being disturbed.

2.3 Disturbed Drainage Areas. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

A) 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.

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

C) Clearing and Grubbing. The following BMPs will be considered and used where appropriate.

1) Leaving areas undisturbed when possible.
2) Silt Basins to provide silt volume for large areas.
3) Silt Traps Type A for small areas.
4) Silt Traps Type C in front of existing and drop inlets which are to be saved.
5) Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
6) Brush and/or other barriers to slow and/or divert runoff.
7) Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
8) Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
9) Non-standard or innovative methods.

D) Cut and Fill and Placement of Drainage Structures. The BMP Plan will be modified to show additional BMPs such as:

1) Silt Traps Type B in ditches and/or drainways as they are completed.
2) Silt Traps Type C in front of pipes after they are placed.
3) Channel Lining
4) Erosion Control Blanket
5) Temporary Mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
6) Non-standard or innovative methods.

E) Profile and X-Section in Place. The BMP Plan will be modified to show elimination of BMPs which had to be removed and the addition of new BMPs as the roadway was shaped. Probably changes include:

1) 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.
2) Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
3) Additional Channel Lining and/or Erosion Control Blanket.
4) Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
5) Special BMPs such as Karst Policy.

F) Finish Work (Paving, Seeding, Protect, etc.). A final BMP Plan will result from modifications during this phase of construction. Probable changes include:

1) Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMPs which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
2) Permanent Seeding and Protection.
3) Placing Sod.
4) Planting trees and/or shrubs where they are included in the project.

G) Post Construction. BMPs including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMPs to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: **N/A**

3.0 OTHER CONTROL MEASURES.

1) Solid Materials. 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 are 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.

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

1) An effort will be made to store only enough product required to do the job.
2) 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.
3) Products will be kept in their original containers with the original manufacturer's label.
4) Substances will not be mixed with one another unless recommended by the manufacturer.
5) Whenever possible, all of the product will be used up before disposing of the container.
6) Manufacturers' recommendations for proper use and disposal will be followed
7) The site contractor will inspect daily to ensure proper use and disposal of materials onsite.

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

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

2.6 The following product-specific practices will be followed onsite:

A) **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 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.

B) **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.

C) **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.

D) **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

E) **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:

1) 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.
2) 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.
3) All spills will be cleaned up immediately after discovery.
4) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
5) Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
6) The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
7) Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

4.0 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. **N/A**

5.0 MAINTENANCE. 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. **N/A**

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

1) All erosion prevention and sediment control measures will be inspected by the contractor at least once each week and following any rain of one-half inch or more.
2) 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.
3) Inspection reports will be written, signed, dated, and kept on file.
4) Areas at final grade will be seeded and mulched within 14 days.
5) 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.
6) All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported and completed within 5 days.
7) Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
8) Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
9) 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.
10) 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.

11) 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.
12) 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.

7.0 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:

1) Water from water line flushings.
2) Water form cleaning concrete trucks and equipment.
3) Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
4) 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.

8.0 GROUNDWATER PROTECTION PLAN.

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

Contractor's statement: (3)

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

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

_____ (f) Storing, treating, disposing, or related handling of hazardous waste, solid waste or special waste, or special waste in landfills, incinerators, surface impoundments, 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);

_____ (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;

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

_____ (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);

_____ (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

_____ 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 Contract ID ######

Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

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 gathered and evaluated 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. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Contractor and Resident Engineer Certification:

(3)
Signed _____ title _____ , _____
typed or printed name[1] *signature*

(2)
Signed _____ title _____ , _____
typed or printed name[2] *signature*

1. *Contractors 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 Contract ID number and KPDES number when one has been issued.*

2. *KYTC Note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) 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 Contract ID number and KPDES number when one has been issued.*

KYTC BMP Plan for Contract ID ######

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:

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 name[1] *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 Contract ID number and KPDES number when one has been issued.*

Kentucky Transportation Cabinet

Highway District _5_

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Traffic and Safety Improvements for the Eastern Parkway Corridor near Third Street

Contract ID

Six Year Plan 05-397.00

Revised
1-28-08

KYTC BMP Plan for Contract ID ######

Project Information

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

1. Owner – Kentucky Transportation Cabinet, District _5_
2. Resident Engineer: (2)
3. Contractor Name: (2)
   Address: (2)
   Phone number: (2)
   Contact: (2)
   Responsible Person: (3)
4. Contract ID Number: (2)
5. Route (Address): **US-60A**
6. Latitude/Longitude (project mid-point) **38/12/48, -85/45/34**:
7. County (project mid-point): **Jefferson**
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

1.0 SITE DESCRIPTION.

1) Nature of construction activity (from letting project description). **Traffic and safety improvements for the Eastern Parkway corridor near Third Street.**
2) Order of major soil disturbing activities. (2) and (3)
3) Projected volume of material to be moved. (1)
4) Estimate of total project area (acres). (1)
5) Estimate of area to be disturbed (acres). **3.88**
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. (1)
7) Data describing existing soil condition. **No known soil stabilization needed (1)** & (2)
8) Data describing existing discharge water quality (if any). **No data available at this time (1)** & (2)
9) Receiving water name. **Project drains into a sewer system. Project is located in the City/Ohio River Watershed as identified by the local MS4 agency (Metropolitan Sewer District).**
10) TMDLs and Pollutants of Concern in Receiving Waters. (1 DEA)
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 and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

2.0 SEDIMENT AND EROSION CONTROL MEASURES.

2.1 Erosion Control Sheets. 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.

2.2 Annotations. 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 BMPs 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 BMPs in place before being disturbed.

2.3 Disturbed Drainage Areas. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

A) 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.

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

C) Clearing and Grubbing. The following BMPs will be considered and used where appropriate.

1) Leaving areas undisturbed when possible.
2) Silt Basins to provide silt volume for large areas.
3) Silt Traps Type A for small areas.
4) Silt Traps Type C in front of existing and drop inlets which are to be saved.
5) Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
6) Brush and/or other barriers to slow and/or divert runoff.
7) Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
8) Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
9) Non-standard or innovative methods.

D) Cut and Fill and Placement of Drainage Structures. The BMP Plan will be modified to show additional BMPs such as:

1) Silt Traps Type B in ditches and/or drainways as they are completed.
2) Silt Traps Type C in front of pipes after they are placed.
3) Channel Lining
4) Erosion Control Blanket

5) Temporary Mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
6) Non-standard or innovative methods.

E) Profile and X-Section in Place. The BMP Plan will be modified to show elimination of BMPs which had to be removed and the addition of new BMPs as the roadway was shaped. Probably changes include:

1) 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.
2) Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
3) Additional Channel Lining and/or Erosion Control Blanket.
4) Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
5) Special BMPs such as Karst Policy.

F) Finish Work (Paving, Seeding, Protect, etc.). A final BMP Plan will result from modifications during this phase of construction. Probable changes include:

1) Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMPs which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
2) Permanent Seeding and Protection.
3) Placing Sod.
4) Planting trees and/or shrubs where they are included in the project.

G) Post Construction. BMPs including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMPs to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: **N/A**

3.0 OTHER CONTROL MEASURES.

1) Solid Materials. 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 are 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.

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

1) An effort will be made to store only enough product required to do the job.
2) 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.
3) Products will be kept in their original containers with the original manufacturer's label.
4) Substances will not be mixed with one another unless recommended by the manufacturer.
5) Whenever possible, all of the product will be used up before disposing of the container.
6) Manufacturers' recommendations for proper use and disposal will be followed
7) The site contractor will inspect daily to ensure proper use and disposal of materials onsite.

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

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

2.6 The following product-specific practices will be followed onsite:

A) 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 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.

B) 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.

C) 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.

D) 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

E) 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:

1) 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.
2) 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.
3) All spills will be cleaned up immediately after discovery.
4) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
5) Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
6) The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
7) Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

4.0 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. **N/A**

5.0 MAINTENANCE. 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. **N/A**

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

1) All erosion prevention and sediment control measures will be inspected by the contractor at least once each week and following any rain of one-half inch or more.
2) 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.
3) Inspection reports will be written, signed, dated, and kept on file.
4) Areas at final grade will be seeded and mulched within 14 days.
5) 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.
6) All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported and completed within 5 days.
7) Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
8) Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
9) 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.
10) 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.
11) 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.

12) 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.

7.0 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:

1) Water from water line flushings.
2) Water form cleaning concrete trucks and equipment.
3) Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
4) 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.

8.0 GROUNDWATER PROTECTION PLAN.

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

Contractor's statement: (3)

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

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

_____ (f) Storing, treating, disposing, or related handling of hazardous waste, solid waste or special waste, or special waste in landfills, incinerators, surface impoundments, 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);

_____ (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;

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

_____ (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);

_____ (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

_____ 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 Contract ID ######

Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

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 gathered and evaluated 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. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Contractor and Resident Engineer Certification:

(3)
Signed _____ title _____ , _____
typed or printed name[1] *signature*

(2)
Signed _____ title _____ , _____
typed or printed name[2] *signature*

1. *Contractors 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 Contract ID number and KPDES number when one has been issued.*

2. *KYTC Note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) 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 Contract ID number and KPDES number when one has been issued.*

KYTC BMP Plan for Contract ID ######

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:

Phone:

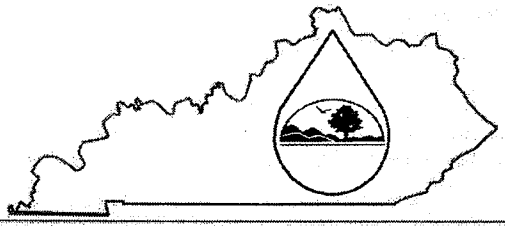
The part of BMP plan this subcontractor is responsible to implement is:

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 name[1] *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 Contract ID number 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 5	**Phone:**	(502)210-5400
Address:	8310 Westport Road	**Status of Owner/Operator:**	S
City, State, Zip Code:	Louisville, Kentucky, 40242		

II. Facility/Site Location Information

Name:	KyTC PCN ##-####		
Address:	US 60A		
City, State, Zip Code:	Louisville, Kentucky, 40217		
County:	Jefferson		
Site Latitude: (degrees/minutes/seconds)	38/12/48	**Site Longitude: (degrees/minutes/seconds)**	-85/45/34

III. Site Activity Information

MS4 Operator Name:	Metropolitan Sewer District, Jefferson County						
Receiving Water Body:	City/Ohio River Watershed (sewer system)						
Are there existing quantitative data?	**Yes** ☐ **If Yes, submit with this form.** **No** ☒						
SIC or Designated Activity Code Primary	**1611** **1622**	**2nd**		**3rd**		**4th**	
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):		3.88	
Is the Storm Water Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans?		**Yes** ☒ **No** ☐	

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:	**Matt Bullock, P.E.**		
Signature:	Matt Bullock	**Date:**	4-2209

Revised June 1999

LETTING JUNE 2009

KENTUCKY TRANSPORTATION CABINET

COMMUNICATING ALL PROMISES (CAP)

JEFFERSON COUNTY

5-964.10

(NO CAPS INVOLVED IN PROJECT)

SYP8161
07 MAY 2009

KENTUCKY TRANSPORTATION CABINET
COMMUNICATING ALL PROMISES (CAP)

Item No. 5 - 1050 **Project Mgr.** MARK HITE

County JEFFERSON **Route** US-60 A

CAP #	Date of Promise	Promise made to:	Location of Promise
1			

CAP Description

2	07-MAY-09	carl jenkins	near bridge

CAP Description

INSTALL A NATIONAL PARK SERVICE TYPE INTERPRETIVE PANEL TO MITIGATE FOR THE CONDITIONAL NO ADVERSE EFFECT DETERMINATION BY THE SHPO. THIS WILL BE COMPLETED AFTER CONSTRUCTION USIGN STATE FORCES.

LETTING JUNE 2009

KENTUCKY TRANSPORTATION CABINET

COMMUNICATING ALL PROMISES (CAP)

JEFFERSON COUNTY

5-397.00

(NO CAPS INVOLVED IN PROJECT)

MATERIAL SUMMARY CONTRACT ID: 091038

HSIP 3001(269) PES NO: DE05600650938
WARNOCK INTERCHANGE (I-65) NORTHBOUND I-65/WARNOCK RAMP MODIFICATIONS

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	00001	DGA BASE	718.00	TON
0020	00214	CL3 ASPH BASE 1.00D PG64-22	776.00	TON
0030	00388	CL3 ASPH SURF 0.38B PG64-22	231.00	TON
0040	00460	CULVERT PIPE-12 IN	12.00	LF
0050	00461	CULVERT PIPE-15 IN	16.00	LF
0060	00521	STORM SEWER PIPE-15 IN	324.00	LF
0070	01480	CURB BOX INLET TYPE B	8.00	EACH
0080	01487	CURB BOX INLET TYPE F	1.00	EACH
0090	01585	REMOVE DROP BOX INLET	2.00	EACH
0100	01641	JUNCTION BOX-15 IN	4.00	EACH
0110	01718	REMOVE INLET	5.00	EACH
0120	01810	STANDARD CURB AND GUTTER	344.00	LF
0130	01812	REMOVE CURB AND GUTTER	388.00	LF
0140	01880	BARRIER HEADER CURB	1,375.00	LF
0150	02014	BARRICADE-TYPE III	6.00	EACH
0160	02091	REMOVE PAVEMENT	395.00	SQYD
0170	02200	ROADWAY EXCAVATION	2,547.00	CUYD
0180	02242	WATER	336.00	MGAL
0190	02351	GUARDRAIL-STEEL W BEAM-S FACE	25.00	LF
0200	02360	GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH
0210	02555	CONCRETE-CLASS B	30.00	CUYD
0220	02562	SIGNS	436.00	SQFT
0230	02585	EDGE KEY	121.00	LF
0240	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	441.00	SQYD
0250	02650	MAINTAIN & CONTROL TRAFFIC I-65	1.00	LS
0260	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0270	02676	MOBILIZATION FOR MILL & TEXT I-65	1.00	LS
0280	02677	ASPHALT PAVE MILLING & TEXTURING	148.00	TON
0290	02690	SAFELOADING	8.00	CUYD
0300	02701	TEMP SILT FENCE	590.00	LF
0310	02705	SILT TRAP TYPE C	15.00	EACH
0320	02708	CLEAN SILT TRAP TYPE C	45.00	EACH
0330	02709	CLEAN TEMP SILT FENCE	1,770.00	LF
0340	02720	SIDEWALK-4 IN CONCRETE	625.00	SQYD
0350	02726	STAKING I-65	1.00	LS
0360	03240	BASE FAILURE REPAIR	100.00	SQYD
0370	03289	SIDEWALK RAMP TYPE 3	5.00	EACH
0380	05985	SEEDING AND PROTECTION	989.00	SQYD
0390	06510	PAVE STRIPING-TEMP PAINT-4 IN	3,200.00	LF
0400	06514	PAVE STRIPING-PERM PAINT-4 IN	1,520.00	LF
0410	06515	PAVE STRIPING-PERM PAINT-6 IN	1,280.00	LF
0420	06565	PAVE MARKING-THERMO X-WALK-6 IN	350.00	LF
0430	06568	PAVE MARKING-THERMO STOP BAR-24IN	122.00	LF
0440	06573	PAVE MARKING-THERMO STR ARROW	4.00	EACH
0450	06574	PAVE MARKING-THERMO CURV ARROW	4.00	EACH
0460	06591	PAVEMENT MARKER TYPE V-BY	19.00	EACH
0470	06593	PAVEMENT MARKER TYPE V-B Y/R	17.00	EACH
0480	23131ER701	PIPELINE VIDEO INSPECTION	177.00	LF
0490	04793	CONDUIT-1 1/4 IN	615.00	LF
0500	04795	CONDUIT-2 IN	205.00	LF

MATERIAL SUMMARY CONTRACT ID: 091038

0510	04811	JUNCTION BOX TYPE B	3.00	EACH
0520	04820	TRENCHING AND BACKFILLING	570.00	LF
0530	04840	CABLE-INTERCONNECT	500.00	LF
0540	04844	CABLE-NO. 14/5C	1,120.00	LF
0550	04845	CABLE-NO. 14/7C	100.00	LF
0560	04850	CABLE-NO. 14/1 PAIR	1,600.00	LF
0570	04885	MESSENGER-10800 LB	220.00	LF
0580	04894	PREFORMED LOOP/LEAD-IN	82.00	LF
0590	04895	LOOP SAW SLOT AND FILL	370.00	LF
0600	04931	INSTALL CONTROLLER TYPE 170	1.00	EACH
0610	04932	INSTALL STEEL STRAIN POLE	4.00	EACH
0620	20093NS835	INSTALL PEDESTRIAN HEAD-LED	6.00	EACH
0630	20188NS835	INSTALL LED SIGNAL-3 SECTION	6.00	EACH
0640	20189NS835	INSTALL LED SIGNAL-5 SECTION	1.00	EACH
0650	20452ES835	PREFORMED LOOPS	24.00	LF
0660	20453ES835	PREFORMED QUADRAPOLE LOOPS	306.00	LF
0670	21743NN	INSTALL PEDESTRIAN DETECTOR	6.00	EACH
0680	23157EN	TRAFFIC SIGNAL POLE BASE	12.04	CUYD
0690	23222EC	INSTALL SIGNAL PEDESTAL	1.00	EACH
0700	04740	POLE BASE	2.00	EACH
0710	04760	POLE W/SECONDARY CONTROL EQUIP	1.00	EACH
0720	04780	FUSED CONNECTOR KIT	4.00	EACH
0730	04793	CONDUIT-1 1/4 IN	80.00	LF
0740	04795	CONDUIT-2 IN	20.00	LF
0750	04811	JUNCTION BOX TYPE B	3.00	EACH
0760	04820	TRENCHING AND BACKFILLING	80.00	LF
0770	04832	WIRE-NO. 12	180.00	LF
0780	04833	WIRE-NO. 8	340.00	LF
0790	04940	REMOVE LIGHTING I-65	1.00	LS
0800	04942	REMOVE STORE & REINSTALL POLE	2.00	EACH
0810	06405	SBM ALUMINUM PANEL SIGNS	1,443.50	SQFT
0820	06406	SBM ALUM SHEET SIGNS .080 IN	141.63	SQFT
0830	06407	SBM ALUM SHEET SIGNS .125 IN	125.50	SQFT
0840	06410	STEEL POST TYPE 1	108.00	LF
0850	06411	STEEL POST TYPE 2	193.00	LF
0860	06451	REMOVE SIGN SUPPORT BEAM	4.00	EACH
0870	06490	CLASS A CONCRETE FOR SIGNS	0.92	CUYD
0880	21373ND	REMOVE SIGN	10.00	EACH
0890	21596ND	GMSS TYPE D	4.00	EACH
0900	02569	DEMOBILIZATION	1.00	LS

BRO 8800(005) PES NO: DE056060A0938
EASTERN PARKWAY (US 60A) BRIDGE REHAB ON US 60A EASTERN PKWY. OVER CSX RR AND FLOYD STREET NEAR U OF L 0.1 MILE WEST OF I-65 UNDERPASS

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	02014	BARRICADE-TYPE III	44.00	EACH
0020	02562	SIGNS	1,191.00	SQFT
0030	02650	MAINTAIN & CONTROL TRAFFIC (US 60A) BRO	1.00	LS
0040	02653	LANE CLOSURE	1.00	EACH
0050	02701	TEMP SILT FENCE	1,588.00	LF
0060	02705	SILT TRAP TYPE C	17.00	EACH
0070	02708	CLEAN SILT TRAP TYPE C	51.00	EACH
0080	02709	CLEAN TEMP SILT FENCE	4,764.00	LF
0090	02775	ARROW PANEL	1.00	EACH
0100	06550	PAVE STRIPING-TEMP REM TAPE-W	400.00	LF
0110	06551	PAVE STRIPING-TEMP REM TAPE-Y	3,700.00	LF
0120	06585	PAVEMENT MARKER TY IVA-MW TEMP	30.00	EACH
0130	06588	PAVEMENT MARKER TY IVA-BY TEMP	15.00	EACH
0140	22664EN	WATER BLASTING EXISTING STRIPE	1,000.00	LF
0150	02403	REMOVE CONCRETE MASONRY	1,050.00	CUYD
0160	02998	MASONRY COATING	8,583.00	SQYD
0170	03299	ARMORED EDGE FOR CONCRETE	40.00	LF
0180	04797	CONDUIT-3 IN	3,494.00	LF
0190	04811	JUNCTION BOX TYPE B	37.00	EACH
0200	08100	CONCRETE-CLASS A	410.90	CUYD
0210	08151	STEEL REINFORCEMENT-EPOXY COATED	53,299.00	LB
0220	08160	STRUCTURAL STEEL 5100 LBS	1.00	LS
0230	08435	JACK & SUPPORT BRIDGE SPAN (US 60A) BRO	1.00	LS

0250	08471	EXPANSION DAM-2.5 IN NEOPRENE	52.00	LF
0260	08472	EXPANSION DAM-4 IN NEOPRENE	52.00	LF
0270	08510	REM EPOXY BIT FOREIGN OVERLAY	4,940.00	SQYD
0280	08711	BRIDGE CHAIN LINK FENCE-6 FT	153.00	LF
0290	20186ED	REINFORCED CONCRETE SLAB	6,014.00	SQYD
0300	21119ED	CONCRETE FORM LINER	28.00	SQYD
0310	22146EN	CONCRETE PATCHING REPAIR	512.00	SQFT
0320	23379EC	STAMPED CONCRETE	1,044.00	SQYD
0330	23380EC	BEARING PADS	128.00	EACH
0340	23381EC	REINFORCED SIDEWALK	2,407.00	LF
0350	23382EC	CONCRETE HANDRAIL	2,407.00	LF
0360	23383EC	REMOVE AND REINSTALL LIGHTS (US 60A) BRO	1.00	LS
0370	23385EC	CONCRETE MEDIAN	1,059.00	SQYD
0380	02569	DEMOBILIZATION	1.00	LS
0390	02403	REMOVE CONCRETE MASONRY	208.00	CUYD
0400	02998	MASONRY COATING	2,899.00	SQYD
0410	04797	CONDUIT-3 IN	1,112.00	LF
0420	04811	JUNCTION BOX TYPE B	16.00	EACH
0430	23381EC	REINFORCED SIDEWALK	819.00	LF
0440	23382EC	CONCRETE HANDRAIL	819.00	LF

TE ARRA 3001(339) PES NO: DE056060A0939

EASTERN PARKWAY (US 60A) TRAFFIC AND SAFTEY IMPROVEMENTS FOR THE EASTERN PARKWAY CORRIDOR NEAR THIRD STREET

LINE NO	BID CODE	DESCRIPTION	QUANTITY	UNIT
0010	00001	DGA BASE	897.00	TON
0020	00190	LEVELING & WEDGING PG64-22	233.00	TON
0030	00221	CL2 ASPH BASE 0.75D PG64-22	261.00	TON
0040	00272	CL2 ASPH BIND 0.50D PG64-22	1,063.00	TON
0050	00307	CL2 ASPH SURF 0.38B PG64-22	1,210.00	TON
0060	00521	STORM SEWER PIPE-15 IN	112.00	LF
0070	00522	STORM SEWER PIPE-18 IN	56.00	LF
0080	01310	REMOVE PIPE	13.00	LF
0090	01455	CURB BOX INLET TYPE A TRAPPED	5.00	EACH
0100	01456	CURB BOX INLET TYPE A	2.00	EACH
0110	01482	CURB BOX INLET TYPE B TRAPPED	2.00	EACH
0120	01541	DROP BOX INLET TYPE 10	1.00	EACH
0130	01543	DROP BOX INLET TYPE 10 TRAPPED	1.00	EACH
0140	01718	REMOVE INLET	7.00	EACH
0150	01719	ADJUST INLET	1.00	EACH
0160	01720	RECONSTRUCT INLET	2.00	EACH
0170	01756	MANHOLE TYPE A	1.00	EACH
0180	01761	MANHOLE TYPE B	1.00	EACH
0190	01787	REMOVE MANHOLE	1.00	EACH
0200	01789	RECONSTRUCT MANHOLE	1.00	EACH
0210	01792	ADJUST MANHOLE	5.00	EACH
0220	01810	STANDARD CURB AND GUTTER	5,565.00	LF
0230	01875	STANDARD HEADER CURB	165.00	LF
0240	01895	VALLEY GUTTER	181.00	LF
0250	01904	REMOVE CURB	154.00	LF
0260	01921	STANDARD BARRIER MEDIAN TYPE 4	213.00	SQYD
0270	01923	STANDARD BARRIER MEDIAN TYPE 5	141.00	SQYD
0280	01941	MOUNTABLE MEDIAN TYPE 4	2.00	SQYD
0290	02014	BARRICADE-TYPE III	16.00	EACH
0300	02101	CEM CONC ENT PAVEMENT-8 IN	47.00	SQYD
0310	02242	WATER	50.00	MGAL
0320	02267	REMOVE & RESET FENCE	80.00	LF
0330	02545	CLEARING AND GRUBBING 5.26 ACRES	1.00	LS
0340	02551	CONCRETE-CLASS A FOR STEPS	5.00	CUYD
0350	02562	SIGNS	737.00	SQFT
0360	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	142.00	SQYD
0370	02606	FIRE HYDRANT	2.00	EACH
0380	02650	MAINTAIN & CONTROL TRAFFIC (US 60A) TE ARRA	1.00	LS
0390	02676	MOBILIZATION FOR MILL & TEXT (US 60A) TE ARRA	1.00	LS
0400	02677	ASPHALT PAVE MILLING & TEXTURING	1,116.00	TON
0410	02701	TEMP SILT FENCE	2,170.00	LF
0420	02709	CLEAN TEMP SILT FENCE	2,170.00	LF
0430	02720	SIDEWALK-4 IN CONCRETE	198.00	SQYD
0440	02720	SIDEWALK-4 IN CONCRETE	576.00	SQYD
0450	02721	REMOVE CONCRETE SIDEWALK	96.00	SQYD
0460	02723	SIDEWALK-6 IN CONCRETE	2,913.00	SQYD
0470	02726	STAKING (US 60A) TE ARRA	1.00	LS
0480	03289	SIDEWALK RAMP TYPE 3	11.00	EACH
0490	03425	ADJUST WATER VALVE	4.00	EACH

0510	06410	STEEL POST TYPE 1	2,980.00	LF
0520	06510	PAVE STRIPING-TEMP PAINT-4 IN	5,466.00	LF
0530	06513	PAVE STRIPING-TEMP PAINT-12 IN	50.00	LF
0540	06514	PAVE STRIPING-PERM PAINT-4 IN	4,806.00	LF
0550	06566	PAVE MARKING-THERMO X-WALK-12 IN	1,300.00	LF
0560	06568	PAVE MARKING-THERMO STOP BAR-24IN	130.00	LF
0570	06572	PAVE MARKING-DOTTED LANE EXTEN	456.00	LF
0580	06574	PAVE MARKING-THERMO CURV ARROW	15.00	EACH
0590	08100	CONCRETE-CLASS A	49.00	CUYD
0600	20904ED	RECONSTRUCT CURB BOX INLET	1.00	EACH
0610	20914ED	ROLLED CURB AND GUTTER	157.00	LF
0620	22664EN	WATER BLASTING EXISTING STRIPE	3,450.00	LF
0630	23131ER701	PIPELINE VIDEO INSPECTION	77.00	LF
0640	23158ES505	DETECTABLE WARNINGS	250.00	SQFT
0650	23398EC	STRUCTURAL SIDEWALK	18.00	SQYD
0660	23399EC	REPAIR PARKING LOT PAVEMENT	56.00	SQYD
0670	23400EC	PEDESTRIAN UNDERPASS MODIFICATION (US 60A) TE ARRA	1.00	LS
0680	23401EC	PEDESTRIAN UNDERPASS WATERPROOFING (US 60A) TE ARRA	1.00	LS
0690	23402EC	SEGMENTAL RETAINING WALL	898.00	LF
0700	23403EC	BUS SHELTER	2.00	EACH
0710	23404EC	BENCH	2.00	EACH
0720	23405EC	TRASH RECEPTACLE	4.00	EACH
0730	23406EC	OLMSTED WALL AND FENCE	642.00	LF
0740	23407EC	ORNAMENTAL FENCE	526.00	LF
0750	23408EC	EMERGENCY PHONE	2.00	EACH
0760	23426EC	PAINT SYMBOL-BICYCLE LANE	22.00	EACH
0770	04700	POLE 30 FT MTG HT	72.00	EACH
0780	04740	POLE BASE	48.00	EACH
0790	04761	LIGHTING CONTROL EQUIPMENT	3.00	EACH
0800	04770	HPS LUMINAIRE	75.00	EACH
0810	04780	FUSED CONNECTOR KIT	75.00	EACH
0820	04791	CONDUIT-3/4 IN	50.00	LF
0830	04792	CONDUIT-1 IN	60.00	LF
0840	04795	CONDUIT-2 IN	3,070.00	LF
0850	04797	CONDUIT-3 IN	100.00	LF
0860	04811	JUNCTION BOX TYPE B	19.00	EACH
0870	04820	TRENCHING AND BACKFILLING	2,975.00	LF
0880	04821	OPEN CUT ROADWAY	240.00	LF
0890	04830	LOOP WIRE	1,875.00	LF
0900	04835	WIRE-NO. 4	6,349.00	LF
0920	04844	CABLE-NO. 14/5C	1,340.00	LF
0930	04845	CABLE-NO. 14/7C	101.00	LF
0940	04850	CABLE-NO. 14/1 PAIR	325.00	LF
0950	04895	LOOP SAW SLOT AND FILL	610.00	LF
0960	04899	ELECTRICAL SERVICE	1.00	EACH
0970	04920	SIGNAL CONTROLLER-TYPE 170	1.00	EACH
0980	04931	INSTALL CONTROLLER TYPE 170	1.00	EACH
0990	20093NS835	INSTALL PEDESTRIAN HEAD-LED	10.00	EACH
1000	20188NS835	INSTALL LED SIGNAL-3 SECTION	5.00	EACH
1010	20189NS835	INSTALL LED SIGNAL-5 SECTION	1.00	EACH
1020	20495NS835	AUDIBLE PEDESTRIAN DETECTOR	10.00	EACH
1030	21729EN	PVC CONDUIT-4 IN	1,100.00	LF
1040	23409EC	TRAFFIC SIGNAL POLE	5.00	EACH
1050	23410EC	OVER HEIGHT WARNING SYSTEM	2.00	EACH
1060	05985	SEEDING AND PROTECTION	750.00	SQYD
1070	05990	SODDING	1,423.00	SQYD
1080	05997	TOPSOIL FURNISHED AND PLACED	239.00	CUYD
1090	20028ES724	GROW-LOW FRAGRANT SUMAC	1,040.00	EACH
1100	21428NS724	LACEBARK ELM	5.00	EACH
1110	23411EC	IRRIGATION SYSTEM (US 60A) TE ARRA	1.00	LS
1120	23412EC	METAL TREE GRATE	5.00	EACH
1130	23413EC	SOIL PLANTING MIX	1,636.00	CUYD
1140	23414EC	STRUCTURAL SOIL	260.00	CUYD
1150	23415EC	EDGING	1,340.00	LF
1160	23416EC	IMPERIAL HONEYLOCUST	5.00	EACH
1170	23417EC	CHANTICLEER FLOWERING PEAR	2.00	EACH
1180	23418EC	PURPLELEAF WINTERCREEPER	7,235.00	EACH
1190	23419EC	NEARLY WILD ROSE	676.00	EACH
1200	23420EC	CRANBERRY COTONEASTER	610.00	EACH
1210	23421EC	KARL FOERSTER'S FEATHER REED GRASS	483.00	EACH
1220	23422EC	DWARF JAPANESE HOLLY	1,042.00	EACH
1230	23423EC	SIX HILLS GIANT NEPETA	117.00	EACH
1240	23424EC	DWARF HONEYSUCKLE	520.00	EACH
1250	23425EC	HAPPY RETURNS DAYLILY	1,455.00	EACH
1260	02568	MOBILIZATION	1.00	LS
1270	02569	DEMOBILIZATION	1.00	LS

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

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

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(Effective with the July 24, 2009 Letting)

SUBSECTION: **REVISION:**	101.02 Abbreviations. Insert the following abbreviation and text into the section: KEPSC Kentucky Erosion Prevention and Sediment Control
SUBSECTION: **REVISION:**	101.03 Definitions. Replace the definition for Specifications – *Special Provisions* with the following: Additions and revisions to the Standard and Supplemental Specifications covering conditions peculiar to and individual project.
SUBSECTION: **REVISION:**	102.07.01 General. Replace the first sentence with the following: Submit the Bid Proposal on forms furnished on the Department internet website (http://transportation.ky.gov/contract/), including the Bid Packet and disk created from the Expedite Bidding Program.
SUBSECTION: **REVISION:**	102.07.02 Computer Bidding. Replace the first paragraph with the following: Subsequent to ordering a Bid Proposal for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement (http://transportation.ky.gov/contract/). Download the bid file from the Department's website to prepare a Bid Proposal for submission to the Department. Include the completed Bid Packet produced by the Expedite Bidding Program and submit it along with the disk created by said program. Replace the second paragraph with the following: In case of a dispute, the printed Bid Proposal and bid item sheets created by the Expedite Bidding Program take precedence over any bid submittal.
SUBSECTION: **REVISION:**	102.08 IRREGULAR BID PROPOSALS. Replace point four of the first paragraph with the following: 4) fails to submit a disk created from the Expedite Bidding Program. Replace point one of the second paragraph with the following: 1) when the Bid Proposal is on a form other than that furnished by the Department or printed from other than the Expedite Bidding Program, or when the form is altered or any part is detached; or
SUBSECTION: **REVISION:**	103.02 AWARD OF CONTRACT. Replace the first sentence of the third paragraph with the following: The Department will normally award the Contract within 10 working days after the date of receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all bidders for a period not to exceed 60 calendar days for final disposition of award.

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SUBSECTION: **REVISION:**	105.12 FINAL INSPECTION AND ACCEPTANCE OF WORK. Insert the following paragraphs after the first paragraph: Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completion. Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work. Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspection(s). The 90 calendar day allowance is cumulative regardless of the number of follow-up electrical inspections required. The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repairing damage done by other contractors during the construction of the remaining project. Failure to complete the electrical corrective work within the 90 calendar day allowance will result in penalties assessed to the project. Penalties will be assessed at ½ the rate of liquidated damages established for the contract. Delete the fifth paragraph from the section.
SUBSECTION: **REVISION:**	105.13 CLAIM RESOLUTION PROCESS. Delete the last paragraph from the section.
SUBSECTION: **REVISION:**	106.10 FIELD WELDER CERTIFICATION REQUIREMENTS. Insert the following sentence before the first sentence of the first paragraph: All field welding must be performed by a certified welder unless otherwise noted.
SUBSECTION: **PART:** **REVISION:**	112.03.11 Temporary Pavement Markings. B) Placement and Removal of Temporary Striping. Replace the 2nd sentence of the fist paragraph with the following: On interstates and parkways, and other roadways approved by the State Highway Engineer, install pavement striping that is 6 inches in width.
SUBSECTION: **REVISION:**	112.03.12 Project Traffic Coordinator (PTC). Add the following at the end of the subsection: After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task.

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SUBSECTION:	206.03.02 Embankment
REVISION:	Replace the last paragraph with the following: When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A).
SUBSECTION:	213.03.03 Inspection and Maintenance.
REVISION:	Insert the following paragraph after the second paragraph: When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure compliance with the inspection and maintenance requirements of the permit. The Engineer will perform verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will provide copies of the inspection only when improvements to the BMP's are required. Verification inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete the work within 5 days.
SUBSECTION:	213.03.05 Temporary Control Measures.
PART:	F) Temporary Mulch.
REVISION:	Replace the last sentence with the following: Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and anchor it into the soil by mechanically crimping it into the soil surface or applying tackifier to provide a protective cover. Regardless of the anchoring method used, ensure the protective cover holds until disturbance is required or permanent controls are in installed.
SUBSECTION:	303.05 PAYMENT.
REVISION:	Replace the second paragraph of the section with the following: The Department will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay Adjustment Schedule for Specialty Mixtures in Section 402.
SUBSECTION:	401.02.04 Special Requirements for Dryer Drum Plants.
PART:	F) Production Quality Control.
REVISION:	Replace the first sentence with the following: Stop mixing operations immediately if, at any time, a failure of the automatic electronic weighing system of the aggregate feed, asphalt binder feed, or water injection system control occurs.
SUBSECTION:	401.02.04 Special Requirements for Dryer Drum Plants.
REVISION:	Add the following: Part G) **Water Injection System.** Provided each system has prior approval as specified in Subsection 402.01.01, the Department will allow the use of water injection systems for purposes of foaming the asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA). Ensure the equipment for water injection meets the following requirements: 1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted); 2) Injection equipment has variable controls that introduce water ratios based on production rates of mixtures; 3) Injects water into the flow of asphalt binder prior to contacting the aggregate; 4) Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate.
SUBSECTION:	401.03.01 Preparation of Mixtures.
REVISION:	Replace the last sentence of the second paragraph with the following: Do not use asphalt binder while it is foaming in a storage tank.

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SUBSECTION: 401.03.01 Preparation of Mixtures.
REVISION: Replace the third paragraph and Mixing and Laying Temperature table with the following:

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

MIXING AND LAYING TEMPERATURES (°F)

Material		Minimum	Maximum
Aggregates		240	330
Aggregates used with Recycled Asphalt Pavement (RAP)		240	—
Asphalt Binders	PG 64-22	230	330
	PG 76-22	285	350
Asphalt Mixtures at Plant (Measured in Truck)	PG 64-22 HMA	250	330
	PG 76-22 HMA	310	350
	PG 64-22 WMA	230	275
	PG 76-22 WMA	250	300
Asphalt Mixtures at Project (Measured in Truck When Discharging)	PG 64-22 HMA	230	330
	PG 76-22 HMA	300	350
	PG 64-22 WMA	210	275
	PG 76-22 WMA	240	300

SUBSECTION: 402.01 Description.
REVISION: Replace the paragraph with the following:

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

SUBSECTION 402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.
REVISION: Add the following subsection:

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

SUBSECTION: 402.05.02 Asphalt Mixtures and Mixtures With RAP.
REVISION: Replace Subsection Title as below:

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

SUBSECTION: 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
REVISION: Replace the paragraph with the following:

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

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

HMA, WMA, and RAP Mixtures Placed on Shoulders.

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

HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.

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

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

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

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

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

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

SUBSECTION: 403.03.03 Preparation of Mixture.
PART: C) Mix Design Criteria.
NUMBER: 1) Preliminary Mix Design.
REVISION: Replace the last two sentences of the paragraph and table with the following:

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

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

SUBSECTION: 403.03.09 Leveling and Wedging, and Scratch Course.
PART: A) Leveling and Wedging.
REVISION: Replace the first sentence of the first paragraph with the following:

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

SUBSECTION: 403.03.09 Leveling and Wedging, and Scratch Course.
PART: B) Scratch Course.
REVISION: Replace the second sentence of the first paragraph with the following:

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

SUBSECTION: 407.01 DESCRIPTION.
REVISION: Replace the first sentence of the paragraph with the following:

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

SUBSECTION: 409.01 DESCRIPTION.
REVISION: Replace the first sentence of the paragraph with the following:

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

SUBSECTION: 410.01 DESCRIPTION.
REVISION: Delete the second sentence of the paragraph.

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

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

SUBSECTION: 410.03.02 Ride Quality.
PART: B) Requirements.
NUMBER: 1) Category A.
REVISION: Replace the last sentence of the first paragraph with the following:

At the Department's discretion, a pay deduction of $1200 per 0.1-lane-mile section may be applied in lieu of corrective work.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SUBSECTION: 505.03.04 Detectable Warnings.
REVISION: Replace the first sentence with the following:

Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the Standard Drawings.

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

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

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

Code	Pay Item	Pay Unit
23158ES505	Detectable Warnings	Square Foot

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

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

SUBSECTION: 601.03.02 Concrete Producer Responsibilities.
REVISION: Add the following to the first paragraph:

If a concrete plant becomes unqualified during a project and there are no other qualified plants in the region, the Department will provide qualified personnel to witness and ensure the producer follows the required specifications. The Department will assess the Contractor a $100 per hour charge for this service.

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SUBSECTION:	606.02.11 Coarse Aggregate.
REVISION:	Replace with the following: Conform to Section 805, size No. 8 or 9-M.
SUBSECTION:	609.04.06 Joint Sealing.
REVISION:	Replace Subsection 601.04 with the following: Subsection 606.04.08.
SUBSECTION:	609.05 Payment.
REVISION:	Replace the Pay Unit for Joint Sealing with the following: See Subsection 606.05.
SUBSECTION:	701.03.06 Initial Backfill.
REVISION:	Replace the first sentence of the last paragraph with the following: When the Contract specifies, perform quality control testing to verify compaction according to KM 64-512.
SUBSECTION:	701.03.08 Testing of Pipe.
REVISION:	Replace and rename the subsection with the following: **701.03.08 Inspection of Pipe.** The engineer will visually inspect all pipe. The Department will require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining pipe structures on the project to provide for the minimum inspection requirement. The pipe will be selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be inspected is at least 50 percent of the total linear feet of all installed pipe on the project. Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete inspection is possible. Notify the Engineer immediately if distresses or locations of improper installation are discovered. When camera testing shows distresses or improper installation in the installed pipe, the Engineer may require additional sections to be tested. Provide the video and report to the Engineer when testing is complete in accordance with KM 64-114. Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation, sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and installation thresholds indicated in the table below, provide the Department with an evaluation of each location conducted by a Professional Engineer addressing the severity of the deflection, structural integrity, environmental conditions, design service life, and an evaluation of the factor of safety using Section 12, “Buried Structures and Tunnel Liners,” of the AASHTO LRFD Bridge Design Specifications. Based on the evaluation, the Department may allow the pipe to remain in place at a reduced unit price as shown in the table below. Provide 5 business days for the Department to review the evaluation. When the pipe shows deflection of 10 percent or greater, remove and replace the pipe. When the camera/video or laser inspection results are called into question, the Department may require direct measurements or mandrel testing. The Cabinet may elect to conduct Quality Assurance verifications of any pipe inspections.

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SUBSECTION: 701.04.07 Testing.
REVISION: Replace and rename the subsection with the following:

701.04.07 Pipeline Video Inspection. The Department will measure the quantity in linear feet along the pipe invert of the structure inspected. When inspection above the specified 50 percent is performed due to a disagreement or suspicion of additional distresses and the Department is found in error, the Department will measure the quantity as Extra Work according to Subsection 104.03. However, if additional distresses or non-conformance is found, the Department will not measure the additional inspection for payment.

SUBSECTION: 701.05 PAYMENT.
REVISION: Add the following pay item to the list of pay items:

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

SUBSECTION: 701.05 PAYMENT
TABLE: PIPE DEFLECTION DETERMINED BY CAMERA TESTING
REVISION: Replace this table with the following table and note:

PIPE DEFLECTION	
Amount of Deflection (%)	Payment
0.0 to 5.0	100% of the Unit Bid Price
5.1 to 9.9	50% of the Unit Bid Price [(1)]
10 or greater	Remove and Replace

[(1)] *Provide Structural Analysis as indicated above. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price.*

SUBSECTION: 701.05 PAYMENT
TABLE: PIPE DEFLECTION DETERMINED BY MANDREL TESTING
REVISION: Delete this table.

SUBSECTION: 713.02.01 Paint.
REVISION: Replace with the following:

Conform to Section 842 and Section 846.

SUBSECTION: 713.03 CONSTRUCTION.
REVISION: Replace the first sentence of the second paragraph with the following:

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

SUBSECTION: 713.03.03 Paint Application.
REVISION: Replace the second paragraph with the following table:

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

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

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

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

SUBSECTION: 717.03.06 Marking Removal.
REVISION: Replace the third sentence of the paragraph with the following:

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

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

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

SUBSECTION: 805.01 GENERAL.
REVISION: Replace the second paragraph with the following:

The Department's List of Approved Materials includes the Aggregate Source List, the list of Class A and Class B Polish-Resistant Aggregate Sources, and the Concrete Restriction List.

SUBSECTION: 805.04 CONCRETE.
REVISION: Replace the "AASHTO T 160" reference in first sentence of the third paragraph with "KM 64-629"

SUBSECTION: 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.
TABLE: AGGREGATE SIZE USE
PART: Cement Concrete Structures and Incidental Construction
REVISION: Replace "9-M for Waterproofing Overlays" with "8 or 9-M for Waterproofing Overlays"

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

SIZES OF COARSE AGGREGATES

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

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

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

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SUBSECTION: 805.16 SAMPLING AND TESTING.
REVISION: Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion Test.

Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.

SUBSECTION: 810.04.01 Coating Requirements.
REVISION: Replace the "Subsection 806.07" references with "Subsection 806.06"

SUBSECTION: 810.06.01 Polyvinyl Chloride (PVC) Pipe.
PART: B) Culvert and Entrance Pipe.
REVISION: Replace the title with the following:

B) Culvert Pipe, Storm Sewer, and Entrance Pipe.

SUBSECTION: 837.03 APPROVAL.
REVISION: Replace the last sentence with the following:

The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material.

SUBSECTION: 837.03.01 Composition.
REVISION: COMPOSITION Table:

Replace

Lead Chromate	0.0 max.	4.0 min.

with

Heavy Metals Content	Comply with 40 CFR 261

SECTION: DIVISION 800 MATERIAL DETAILS
REVISION: Add the following section in Division 800

SECTION 846 – DURABLE WATERBORNE PAINT

846.01 DESCRIPTION. This section covers quick-drying durable waterborne pavement striping paint for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete, bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.

846.02 Approval. Select materials that conform to the composition requirements below. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping operations. The initial sample may be sent from the manufacture of the paint. The Department will randomly sample and evaluate the paint each week that the striping operations are in progress.

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

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

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

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

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

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer.

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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12) Provide a photocell control to provide automatic dimming.
13) Allow an on-off flashing sequence at an adjustable rate.
14) Provide a sight to aim the message.
15) Provide a LED display color of approximately 590 nm amber.
16) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

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

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

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

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

2.4 Power.

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

    a) At least 24 spare bulbs available on the project for quick replacement of burned out bulbs.
    b) Black light at both top and bottom of each line to illuminate discs for visibility at night or under adverse weather conditions, for flip disk signs.
    c) Diesel generator and electric start assembly, including batteries and a fuel capacity adequate to provide at least 72 hours continuous operation without refueling.
    d) Fuel gage.
    e) Provide all other specific features, such as bulb size, protection from sun glare, and shock protection for electronics and bulbs, to the

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satisfaction of the Engineer.

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

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

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

When the sign is not needed, move it outside the clear zone or where the Engineer directs.

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

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

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

January 1, 2008

SPECIAL PROVISION FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES

This Special Provision will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Construct a soil, granular, or rock embankment with granular or cohesive pile core and place structure granular backfill, as the Plans require. Construct the embankment according to the requirements of this Special Provision, the Plans, Standard Drawing RGX 100 and 105, and the 2008 Standard Specifications.

2.0 MATERIALS.

2.1 Granular Embankment. Conform to Subsection 805.10. When Granular Embankment materials are erodible or unstable according to Subsection 805.03.04, use the Special Construction Methods found in 3.2 of the Special Provision.

2.2 Rock Embankment. Provide durable rock from roadway excavation that consists principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.

2.3 Granular Pile Core. Select a gradation of durable rock to facilitate pile driving that conforms to Subsection 805.11. If granular pile core material hinders pile driving operations, take appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.

2.4 Cohesive Pile Core. Conform to Section 206 of the Standard Specifications and use soil with at least 50 percent passing a No. 4 sieve having a minimum Plasticity Index (PI) of 10. In addition, keep the cohesive pile core free of boulders, larger than 6 inches in any dimension, or any other obstructions, which would interfere with drilling operations. If cohesive pile core material interferes with drilling operations, take appropriate means necessary to maintain excavation stability, at no expense to the Department.

2.5 Structure Granular Backfill. Conform to Subsection 805.11

2.6 Geotextile Fabric. Conform to Type I or Type IV in Section 214 and 843 as required in the plans.

3.0 CONSTRUCTION.

3.1 General. Construct roadway embankments at end bents according to Section 206 and in accordance with the Special Provision, the Plans, and Standard Drawings for the full embankment section. In some instances, granular or rock embankment will be required for embankment construction for stability purposes, but this special provision does not prevent the use of soil when appropriate. Refer to the plans for specific details regarding material requirements for embankment construction.

Place and compact granular or cohesive pile core, soil, granular or rock embankment, and structure granular backfill according to the applicable density requirements for the project. When constructing granular or rock embankments, use granular pile core for driven pile foundations and use cohesive pile core for pre-drilled pile or drilled shaft foundations. Place geotextile fabric, Type IV between cohesive pile core and structure granular backfill and granular or rock embankment.

When granular or rock embankment is required for embankment construction, conform to the general requirements of Subsection 206.03.02 B). In addition, place the material in no greater than 2-foot lifts and compact with a vibrating smooth wheel roller capable of producing a minimum centrifugal force of 15 tons. Apply these requirements to the full width of the embankment for a distance of half the embankment height or 50 feet, whichever is greater, as shown on Standard Drawing RGX-105.

When using granular pile core, install 8-inch perforated underdrain pipe at or near the elevation of the original ground in the approximate locations depicted on the standard drawing, and as the Engineer directs, to ensure positive drainage of the embankment. Wrap the perforated pipe with a fabric of a type recommended by the pipe manufacturer.

After constructing the embankment, excavate for the end bent cap, drive piling or install shafts, place the mortar bed, construct the end bent, and complete the embankment to finish grade according to the construction sequence shown on the Plans or Standard Drawings and as specified hereinafter.

After piles are driven or shafts installed (see design drawings), slope the bottom of the excavation towards the ends of the trench as noted on the plans for drainage. Using a separate pour, place concrete mortar, or any class concrete, to provide a base for forming and placing the cap. Place side forms for the end bent after the mortar has set sufficiently to support workmen and forms without being disturbed.

Install 4-inch perforated pipe in accordance with the plans and Standard Drawings. In the event slope protection extends above the elevation of the perforated pipe, extend the pipe through the slope protection.

After placing the end bent cap and removing adjacent forms, fill the excavation with structure granular backfill material to the level of the berm prior to placing beams for the bridge. For soil embankments, place Type IV geotextile fabric between embankment material and structure granular backfill. After completing the end bent backwall, or after completing the span end wall, place the structure granular backfill to subgrade elevation. If the original excavation is enlarged, fill the entire volume with compacted structure granular backfill at no expense to the Department. Do not place backfill before removing adjacent form work. Place structure granular backfill material in trench ditches at the ends of the excavation. Place Geotextile Fabric, Type IV over the surface of structure granular backfill prior to placing aggregate base course.

Tamp the backfill with hand tampers, pneumatic tampers, or other means the Engineer approves. Thoroughly compact the backfill under the overhanging portions of the structure to ensure that the backfill is in intimate contact with the sides of the structure.

Do not apply seeding, sodding, or other vegetation to the exposed granular embankment.

3.2 Special Construction Methods. Erodible or unstable materials may erode even when protected by riprap or channel lining; use the special construction method described below when using these materials.

Use fine aggregates or friable sandstone granular embankment at “dry land” structures only. Do not use them at stream crossings or locations subject to flood waters.

For erodible or unstable materials having 50 percent or more passing the No. 4 sieve, protect with geotextile fabric. Extend the fabric from the original ground to the top of slope over the entire area of the embankment slopes on each side of, and in front of, the end bent. Cover the fabric with at least 12 inches of non-erodible material.

For erodible or unstable materials having less than 50 percent passing a No. 4 sieve, cover with at least 12 inches of non-erodible material.

Where erodible or unstable granular embankment will be protected by riprap or channel lining, place geotextile fabric between the embankment and the specified slope protection.

4.0 MEASUREMENT.

4.1 Granular Embankment. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment any Granular Embankment that is not called for in the plans.

The Department will not measure for payment any special construction caused by using erodible or unstable materials and will consider it incidental to the Granular Embankment regardless of whether the erodible or unstable material was specified or permitted.

4.2 Rock Embankment. The Department will not measure for payment any rock embankment and will consider it incidental to roadway excavation or embankment in place, as applicable. (embankments requiring rock with none present within project excavation limits will be constructed using granular embankment)

4.3 Granular Pile Core. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment furnishing and placing 8-inch perforated underdrain pipe and will consider it incidental to the Granular pile core. The Department will not measure for payment any granular pile core that is necessary because the contractor elects to use granular or rock embankment when it is not specified in the plans.

4.4 Cohesive Pile Core. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204.

4.5 Structure Granular Backfill. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure any additional material required for backfill outside the limits shown on the Plans and Standard Drawings for payment and will consider it incidental to the work.

When following construction sequence "A", as shown on the Standard Drawings, the Department will not measure structure excavation at the end bent for payment and will consider it incidental to Structure Granular Backfill.

The Department will not measure for payment the 4-inch perforated underdrain pipe and will consider it incidental to the Structure Granular Backfill.

4.6 Geotextile Fabric. The Department will measure the quantities as specified in Section 214. The Department will not measure the quantity of fabric used for separating granular or rock embankment and cohesive pile core and will consider it incidental to cohesive pile core.

4.7 End Bent. The Department will measure the quantities according to the Contract. The Department will not measure furnishing and placing the 2-inch mortar or concrete bed for payment and will consider it incidental to the end bent construction.

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

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
20209EP69	Granular Pile Core	Cubic Yards
20210EP69	Cohesive Pile Core	Cubic Yards

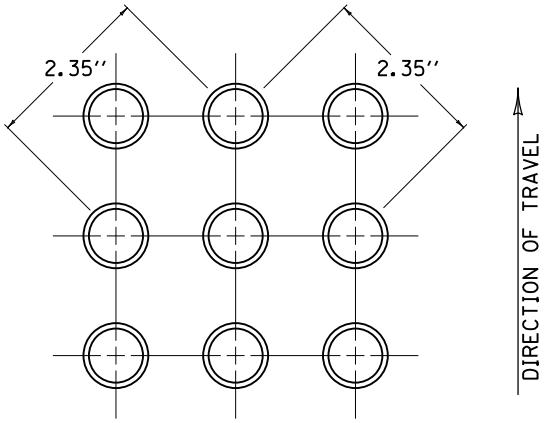
69

02231	Structure Granular Backfill	Cubic Yards
02596, 02599	Geotextile Fabric, Type	See Section 214

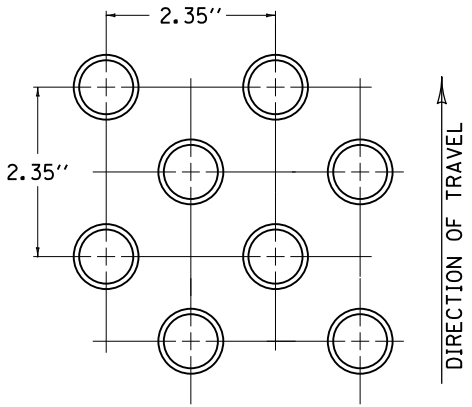
The Department will consider payment as full compensation for all work required in this provision.

April 24, 2008

COUNTY OF	ITEM NO.	SHEET NO.



SQUARE PATTERN (PARALLEL ALIGNMENT)



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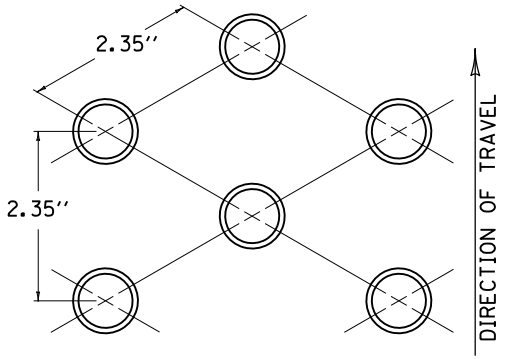

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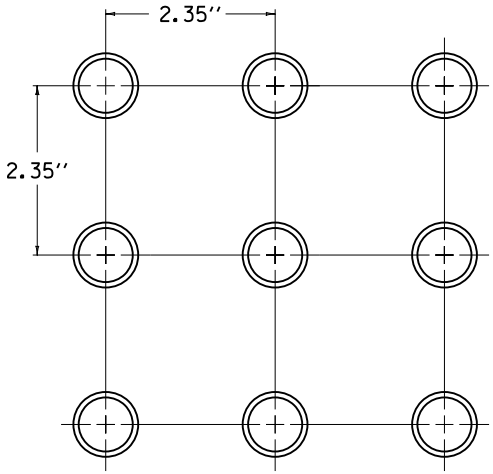

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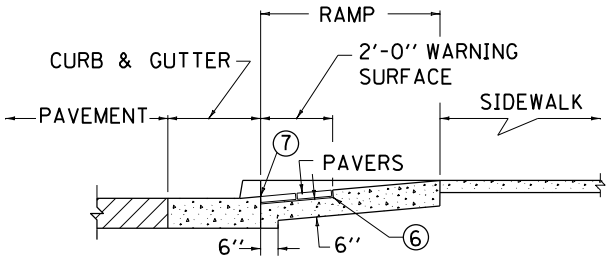
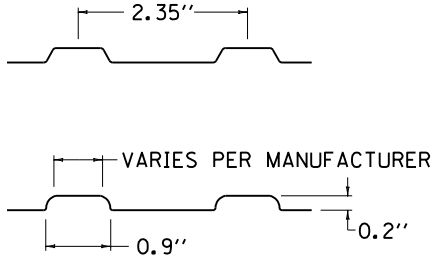


TYPICAL DETECTABLE WARNING INSTALLATION



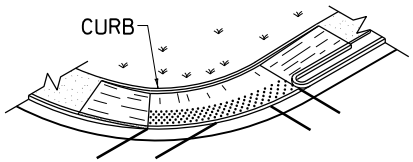
DETECTABLE WARNINGS PROFILE

NOTES

BID ITEM AND UNIT TO BID.
DETECTABLE WARNINGS - SQ. FT.

1. LANDINGS WILL PROVIDE A LEVEL AREA (LESS THAN 2% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4 FOOT SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.
2. ALL SIDEWALK RAMPS REQUIRE DETECTABLE WARNINGS.
3. COMMERCIAL DRIVEWAYS WITH TRAFFIC CONTROL DEVICES REQUIRE ADA SIDEWALK TREATMENTS WITH DETECTABLE WARNINGS.
4. PAVERS SHALL BE CONCRETE WITH A MINIMUM THICKNESS OF 2''.
5. PAVERS SHALL BE A COLOR HOMOGENOUS THROUGHOUT THE PAVER, THAT COLOR SHALL CONTRAST VISUALLY WITH THE ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE DEPARTMENT WILL ALLOW EITHER YELLOW OR RED AS COLORS.

⑥ PAVERS TO BE SET IN MORTAR.
⑦ DETECTABLE WARNING SURFACE BEGINS AT BACK OF CURB.



TYPICAL PLACEMENT
PARALLEL CURB RAMPS

USE WITH CUR. STD. DWGS.
RPM-160 AND RPM-170

KENTUCKY
DEPARTMENT OF HIGHWAYS

DETECTABLE WARNINGS

APPROVED _____ TRAFFIC DIVISION OF HIGHWAY DESIGN 03-13-09 DATE

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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 takecorrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

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

6. **Training and Promotion:**

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

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

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

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

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

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

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

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

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

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 ofprogress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable

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

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

b. Trainees:

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

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

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

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

c. Helpers:

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

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

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

6. **Withholding:**

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

7. **Overtime Requirements:**

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

8. **Violation:**

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

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

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

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

V. STATEMENTS AND PAYROLLS

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

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

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

2. **Payrolls and Payroll Records:**

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

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

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

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

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

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

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

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

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

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

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

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

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

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

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

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 provideall safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

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

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

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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 knowinglyrendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

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

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

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

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

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

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

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

* * * * *

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 administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

EXECUTIVE BRANCH CODE OF ETHICS

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

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

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

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

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

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

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES

	HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED

CRAFTS:

Breckinridge County:
Bricklayers.....26.97..... 11.78
Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer and Trimble Counties:
Bricklayers.....23.68..... 9.25
Bracken, Gallatin, Grant, Mason and Robertson Counties:
Bricklayers.....26.11..... 9.49
Boyd, Carter, Elliott, Fleming, Greenup, Lewis and Rowan Counties:
Bricklayers.....25.80..... 14.88
Anderson, Bath, Bourbon, Boyle, Clark, Fayette, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Owen, Scott, Washington and Woodford Counties:
Bricklayers.....23.93..... 9.25
Bricklayers (Layout Men) .....23.68..... 9.25
Refractory/Acid Brick/Glass……24.18……9.25
All Counties
Carpenters: .....24.84..... 10.23
  Divers.....37.64..... 10.23
  Piledrivermen.....25.09..... 10.23
Bracken and Grant Counties:
Millwrights .....21.90..... 7.92
Anderson, Bath, Bourbon, Boyle, Clark, Fayette, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Owen, Scott and Woodford Counties:
Millwrights .....22.77..... 12.73
Boyd, Carter, Elliott, Fleming, Greenup, Lewis, Mason, Robertson, and Rowan Counties:
Millwrights .....30.25..... 12.62
Breckinridge, Bullitt, Carroll, Gallatin, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:
Millwrights .....24.10..... 14.87
Bracken, Gallatin and Grant Counties:
Electricians .....26.11..... 12.72
Sound Communications:
  Technician .....20.45..... 6.95

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES

	HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED

CRAFTS: (continued)

Boyd, Carter, Elliott and Rowan Counties:
Electricians:
Cable Splicers ..... 32.68 ..... 18.13
Electricians ..... 31.12 ..... 18.08

Anderson, Bath, Bourbon, Boyle, Breckinridge, Bullitt, Carroll, Clark, Fayette, Franklin, Grayson, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Madison, Marion, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties:
Electricians ..... 28.30 ..... 12.55

Fleming, Greenup, Lewis and Mason Counties:
Electricians ..... 30.55 ..... 11.87

Bourbon (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);Carroll (Eastern third, including the Township of Ghent); Fleming (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);
Nicholas (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); Owen (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); Scott (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) & Bracken, Gallatin, Grant, Harrison & Robertson Counties:
Ironworkers:
Fence Erector ..... 23.55 ..... 16.72
Structural ..... 26.17 ..... 16.72

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

TRANSPORTATION CABINET
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COMPLIANCE SECTION
PROJECT WAGE RATES

	HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED

CRAFTS: (continued)

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

Ironworkers.....23.93..... 16.74

Bourbon (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); Carroll (Eastern third, including the Townships of Ghent); Fleming (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington); Nicholas (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); Owen (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); Scott (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall);
Bracken, Gallatin, Grant, Harrison & Robertson Counties:

Ironworkers:

Up to and including 30- mile radius of Hamilton County, Ohio Courthouse..... 25.65.....16.00
Beyond 30- mile radius of Hamilton County, Ohio Courthouse ..... 25.90.....16.00

Clark (Eastern third, including Townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); Fleming (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); Mason (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); Nicholas (Eastern eighth, including the Township of Moorefield Sprout); Bath, Boyd, Carter, Elliott, Greenup, Lewis, Montgomery & Rowan Counties:

Ironworkers:

Zone 1.....28.38..... 17.37
Zone 2.....28.78..... 17.37
Zone 3.....30.38..... 17.37

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

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES

	HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED
CRAFTS: (continued)		
Anderson, Breckinridge, Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, Larue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties:		
Painters:		
Brush & Roller	18.50	9.84
Spray, Sand Blast, Power Tools, Water Blast & Steam Cleaning	19.25	9.84
Bracken, Gallatin, Grant, Mason, and Owen Counties:		
Painters: (Heavy and Highway Bridges-Guardrails–Lightpoles-Striping):		
Bridge/Equipment Tender and Containment Builder	20.49	6.83
Brush and Roller	23.10	6.83
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	24.10	6.83
Sand Blasting & Water Blasting	23.85	6.83
Spray	23.60	6.83
Bath, Bourbon, Boyle, Clark, Fayette, Fleming, Franklin, Harrison, Jessamine, Madison, Mercer, Montgomery, Nicholas, Robertson, Scott and Woodford Counties		
Painters:		
Brush & Roller	21.30	5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	22.30	5.90
Sandblasting & Waterblasting	22.05	5.90
Spray	21.80	5.90
Bridge/Equipment Tender and/or Containment Builder	18.90	5.90
Boyd, Carter, Elliott, Greenup, Lewis and Rowan Counties		
Painters:		
Bridges	27.83	10.00
All Other Work	24.83	10.00

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
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PROJECT WAGE RATES

	HIGHWAY BASIC HOURLY RATES	FRINGE BENEFIT PAYMENTS COMBINED

CRAFTS: (continued)

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

Plumber ..... 30.00 ..... 12.67

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

Plumbers and Steamfitters ..... 29.20 ..... 14.29

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

Pipefitters and Plumbers ..... 28.39 ..... 14.30

LABORERS:

Bath, Bourbon, Boyd, Boyle, Bracken, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Greenup, Harrison, Jessamine, Lewis, Madison, Mason, Mercer, Montgomery, Nicholas, Owen, Robertson, Rowan, Scott, & Woodford Counties:

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

BASE RATE 19.86
FRINGE BENEFITS 9.55

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

BASE RATE 20.11
FRINGE BENEFITS 9.55

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
COMPLIANCE SECTION
PROJECT WAGE RATES

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

BASE RATE 20.16
FRINGE BENEFITS 9.55

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

BASE RATE 20.76
FRINGE BENEFITS 9.55

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

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

BASE RATE 20.01
FRINGE BENEFITS 9.40

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

BASE RATE 20.26
FRINGE BENEFITS 9.40

TRANSPORTATION CABINET
DIVISION OF CONSTRUCTION PROCUREMENT
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PROJECT WAGE RATES

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

BASE RATE 20.31
FRINGE BENEFITS 9.40

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

BASE RATE 20.91
FRINGE BENEFITS 9.40

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

BASE RATE 20.46
FRINGE BENEFITS 8.95

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

BASE RATE 20.71
FRINGE BENEFITS 8.95

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

BASE RATE 20.76
FRINGE BENEFITS 8.95

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

BASE RATE 21.36
FRINGE BENEFITS 8.95

TRUCK DRIVER CLASSIFICATIONS: **TEAMSTERS** **BASE RATE**
GROUP 1 - Mobile Batch Truck Tender..... ……..... 16.57

GROUP 2 - Greaser, Tire Changer and Mechanic Tender 16.68

GROUP 3 - Single Axle Dump, Flatbed, Semi-trailer or Pole Trailer when used to pull building materials and equipment, Tandem Axle Dump, Distributor, Mixer and
Truck Mechanic..... ..... 16.86

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy, Articulator Cat, 5-Axle Vehicle, Winch & A-Frame when used in transporting materials, Ross Carrier, Forklift when used to transport building materials and Pavement Breaker.....16.96

FRINGE BENEFITS.....7.34

OPERATING ENGINEERS:
A-Frame Winch Truck, Auto Patrol, Backfiller, Batcher Plant, Bituminous Paver, Bituminous Transfer Machine, Boom Cat, Bulldozer, Mechanic, Cableway, Carry-All Scoop, Carry Deck Crane, Central Compressor Plant, Clamshell, Concrete Mixer (21 Cu. Ft. or Over), Concrete Paver, Truck-Mounted Concrete Pump, Core Drill, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Operator, Dredge Engineer, Elevating Grader and Loaders, Grade-All, Gurries, Heavy Equipment Robotics Operator/Mechanic, High Lift, Hoe-Type Machine, Hoist (two or more drums), Hoisting Engine (two or more drums), Horizontal Directional Drill Operator, Hydrocrane, Hyster, Kecal Loader, Letourneau, Locomotive,

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

BASE RATE 23.60
FRINGE BENEFITS 12.40

Air Compressor (over 900 cu. ft. per min.), Bituminous Mixer, Boom Type Tamping Machine, Bull Float, Concrete Mixer (under 21 cu. ft.), Dredge Engineer, Electric Vibrator Compactor/Self-Propelled Compactor, Elevator (one drum or Buck Hoist), Elevator (when used to hoist building material), Finish Machine, Fireman & Hoist (one drum), Flexplane, Forklift (reguardless of lift height), Form Grader, Joint Sealing Machine, Outboard Motor Boat, Power Sweeper (riding type), Roller (rock), Ross Carrier, Skid Mounted Or Trailer Mounted Concrete Pump, Skid Steer Machine with all attachments, Switchman or Brakeman, Throttle Valve Person, Tractair and Road Widening Trencher, Tractor (50 H.P. or over), Truck Crane Oiler, Tugger, Welding Machine, Well Points and Whirley Oiler.

BASE RATE 21.18
FRINGE BENEFITS 12.40

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

BASE RATE 21.56
FRINGE BENEFITS 12.40

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

BASE RATE 20.92
FRINGE BENEFITS 12.40

Cranes - with Booms 150 ft. and over (including jib), and where the length of the Boom in combination with the length of the piling leads equals or exceeds 150 ft. - $1.00 over Group 1 rate.

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PROJECT WAGE RATES

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

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

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

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

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

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

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

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

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PROJECT WAGE RATES

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

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

OVERTIME:

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

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

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
11.2%	6.9%

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

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

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

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

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

PART IV

INSURANCE

INSURANCE
(Railroad Involvement)

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.

6. RAILROAD PROTECTIVE LIABILITY INSURANCE. The policy shall name the railroad as the Named Insured and the limit of liability shall be not less than $5,000,000 combined single limit for Bodily Injury and Property Damage per occurrence, subject to a $10,000,000 aggregate limit per annual policy period. If the project involves a rail facility where passenger trains operate, the insurance limits required that are not less than a combined single limit of $5,000,000 each occurrence and $10,000,000 in the aggregate applying separately to each annual period. The original of this policy must be submitted for the railroad’s approval and filing prior to the commencement of work on this project.

PART V

BID ITEMS

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 091038 PAGE: 1
COUNTY: JEFFERSON LETTING: 07/24/09
PROPOSAL: 056GR09D015 CALL NO: 201

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
	SECTION 0001	ROADWAY			
0010	00001	DGA BASE	1,615.000 TON		
0020	00190	LEVELING & WEDGING PG64-22	233.000 TON		
0030	00214	CL3 ASPH BASE 1.00D PG64-22	776.000 TON		
0040	00221	CL2 ASPH BASE 0.75D PG64-22	261.000 TON		
0050	00272	CL2 ASPH BIND 0.50D PG64-22	1,063.000 TON		
0060	00307	CL2 ASPH SURF 0.38B PG64-22	1,210.000 TON		
0070	00388	CL3 ASPH SURF 0.38B PG64-22	231.000 TON		
0080	00460	CULVERT PIPE-12 IN	12.000 LF		
0090	00461	CULVERT PIPE-15 IN	16.000 LF		
0100	00521	STORM SEWER PIPE-15 IN	436.000 LF		
0110	00522	STORM SEWER PIPE-18 IN	56.000 LF		
0120	01310	REMOVE PIPE	13.000 LF		
0130	01455	CURB BOX INLET TYPE A TRAPPED	5.000 EACH		
0140	01456	CURB BOX INLET TYPE A	2.000 EACH		
0150	01480	CURB BOX INLET TYPE B	8.000 EACH		
0160	01482	CURB BOX INLET TYPE B TRAPPED	2.000 EACH		
0170	01487	CURB BOX INLET TYPE F	1.000 EACH		
0180	01541	DROP BOX INLET TYPE 10	1.000 EACH		
0190	01543	DROP BOX INLET TYPE 10 TRAPPED	1.000 EACH		
0200	01585	REMOVE DROP BOX INLET	2.000 EACH		

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CONTRACT ID: 091038 PAGE: 2
COUNTY: JEFFERSON LETTING: 07/24/09
PROPOSAL: 056GR09D015 CALL NO: 201

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	01641	JUNCTION BOX-15 IN	4.000 EACH		
0220	01718	REMOVE INLET	12.000 EACH		
0230	01719	ADJUST INLET	1.000 EACH		
0240	01720	RECONSTRUCT INLET	2.000 EACH		
0250	01756	MANHOLE TYPE A	1.000 EACH		
0260	01761	MANHOLE TYPE B	1.000 EACH		
0270	01787	REMOVE MANHOLE	1.000 EACH		
0280	01789	RECONSTRUCT MANHOLE	1.000 EACH		
0290	01792	ADJUST MANHOLE	5.000 EACH		
0300	01810	STANDARD CURB AND GUTTER	5,909.000 LF		
0310	01812	REMOVE CURB AND GUTTER	388.000 LF		
0320	01875	STANDARD HEADER CURB	165.000 LF		
0330	01880	BARRIER HEADER CURB	1,375.000 LF		
0340	01895	VALLEY GUTTER	181.000 LF		
0350	01904	REMOVE CURB	154.000 LF		
0360	01921	STANDARD BARRIER MEDIAN TYPE 4	213.000 SQYD		
0370	01923	STANDARD BARRIER MEDIAN TYPE 5	141.000 SQYD		
0380	01941	MOUNTABLE MEDIAN TYPE 4	2.000 SQYD		
0390	02014	BARRICADE-TYPE III	66.000 EACH		
0400	02091	REMOVE PAVEMENT	395.000 SQYD		
0410	02101	CEM CONC ENT PAVEMENT-8 IN	47.000 SQYD		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0420	02200	ROADWAY EXCAVATION	2,547.000 CUYD		
0430	02242	WATER	386.000 MGAL		
0440	02267	REMOVE & RESET FENCE	80.000 LF		
0450	02351	GUARDRAIL-STEEL W BEAM-S FACE	25.000 LF		
0460	02360	GUARDRAIL TERMINAL SECTION NO 1	2.000 EACH		
0470	02545	CLEARING AND GRUBBING 5.26 ACRES	(1.00) LS		
0480	02551	CONCRETE-CLASS A FOR STEPS	5.000 CUYD		
0490	02555	CONCRETE-CLASS B	30.000 CUYD		
0500	02562	SIGNS	2,364.000 SQFT		
0510	02585	EDGE KEY	121.000 LF		
0520	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	583.000 SQYD	2.00	1,166.00
0530	02606	FIRE HYDRANT	2.000 EACH		
0540	02650	MAINTAIN & CONTROL TRAFFIC (US 60A) BRO	(1.00) LS		
0550	02650	MAINTAIN & CONTROL TRAFFIC (US 60A) TE ARRA	(1.00) LS		
0560	02650	MAINTAIN & CONTROL TRAFFIC I-65	(1.00) LS		
0570	02653	LANE CLOSURE	1.000 EACH		
0580	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.000 EACH		
0590	02676	MOBILIZATION FOR MILL & TEXT (US 60A) TE ARRA	(1.00) LS		
0600	02676	MOBILIZATION FOR MILL & TEXT I-65	(1.00) LS		
0610	02677	ASPHALT PAVE MILLING & TEXTURING	1,264.000 TON		
0620	02690	SAFELOADING	8.000 CUYD		

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PROPOSAL: 056GR09D015 CALL NO: 201

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0630	02701	TEMP SILT FENCE	4,348.000	LF		
0640	02705	SILT TRAP TYPE C	32.000	EACH		
0650	02708	CLEAN SILT TRAP TYPE C	96.000	EACH		
0660	02709	CLEAN TEMP SILT FENCE	8,704.000	LF		
0670	02720	SIDEWALK-4 IN CONCRETE	1,399.000	SQYD		
0680	02721	REMOVE CONCRETE SIDEWALK	96.000	SQYD		
0690	02723	SIDEWALK-6 IN CONCRETE	2,913.000	SQYD		
0700	02726	STAKING (US 60A) TE ARRA	(1.00)	LS		
0710	02726	STAKING I-65	(1.00)	LS		
0720	02775	ARROW PANEL	1.000	EACH		
0730	03240	BASE FAILURE REPAIR	100.000	SQYD		
0740	03289	SIDEWALK RAMP TYPE 3	16.000	EACH		
0750	03425	ADJUST WATER VALVE	4.000	EACH		
0760	05985	SEEDING AND PROTECTION	989.000	SQYD		
0770	06407	SBM ALUM SHEET SIGNS .125 IN	450.000	SQFT		
0780	06410	STEEL POST TYPE 1	2,980.000	LF		
0790	06510	PAVE STRIPING-TEMP PAINT-4 IN	8,666.000	LF		
0800	06513	PAVE STRIPING-TEMP PAINT-12 IN	50.000	LF		
0810	06514	PAVE STRIPING-PERM PAINT-4 IN	6,326.000	LF		
0820	06515	PAVE STRIPING-PERM PAINT-6 IN	1,280.000	LF		
0830	06550	PAVE STRIPING-TEMP REM TAPE-W	400.000	LF		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0840	06551	PAVE STRIPING-TEMP REM TAPE-Y	3,700.000 LF		
0850	06565	PAVE MARKING-THERMO X-WALK-6 IN	350.000 LF		
0860	06566	PAVE MARKING-THERMO X-WALK-12 IN	1,300.000 LF		
0870	06568	PAVE MARKING-THERMO STOP BAR-24IN	252.000 LF		
0880	06572	PAVE MARKING-DOTTED LANE EXTEN	456.000 LF		
0890	06573	PAVE MARKING-THERMO STR ARROW	4.000 EACH		
0900	06574	PAVE MARKING-THERMO CURV ARROW	19.000 EACH		
0910	06585	PAVEMENT MARKER TY IVA-MW TEMP	30.000 EACH		
0920	06588	PAVEMENT MARKER TY IVA-BY TEMP	15.000 EACH		
0930	06591	PAVEMENT MARKER TYPE V-BY	19.000 EACH		
0940	06593	PAVEMENT MARKER TYPE V-B Y/R	17.000 EACH		
0950	08100	CONCRETE-CLASS A	49.000 CUYD		
0960	20904ED	RECONSTRUCT CURB BOX INLET	1.000 EACH		
0970	20914ED	ROLLED CURB AND GUTTER	157.000 LF		
0980	22664EN	WATER BLASTING EXISTING STRIPE	4,450.000 LF		
0990	23131ER701	PIPELINE VIDEO INSPECTION	254.000 LF		
1000	23158ES505	DETECTABLE WARNINGS	250.000 SQFT		
1010	23398EC	STRUCTURAL SIDEWALK	18.000 SQYD		
1020	23399EC	REPAIR PARKING LOT PAVEMENT	56.000 SQYD		
1030	23400EC	PEDESTRIAN UNDERPASS MODIFICATION (US 60A) TE ARRA	(1.00) LS		
1040	23401EC	PEDESTRIAN UNDERPASS WATERPROOFING (US 60A) TE ARRA	(1.00) LS		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
1050	23402EC	SEGMENTAL RETAINING WALL	898.000	LF		
1060	23403EC	BUS SHELTER	2.000	EACH		
1070	23404EC	BENCH	2.000	EACH		
1080	23405EC	TRASH RECEPTACLE	4.000	EACH		
1090	23406EC	OLMSTED WALL AND FENCE	642.000	LF		
1100	23407EC	ORNAMENTAL FENCE	526.000	LF		
1110	23408EC	EMERGENCY PHONE	2.000	EACH		
1120	23426EC	PAINT SYMBOL-BICYCLE LANE	22.000	EACH		
	SECTION 0002	BRIDGE				
1130	02403	REMOVE CONCRETE MASONRY	1,258.000	CUYD		
1140	02998	MASONRY COATING	11,482.000	SQYD		
1150	03299	ARMORED EDGE FOR CONCRETE	40.000	LF		
1160	04797	CONDUIT-3 IN	4,606.000	LF		
1170	04811	JUNCTION BOX TYPE B	53.000	EACH		
1180	08100	CONCRETE-CLASS A	410.900	CUYD		
1190	08151	STEEL REINFORCEMENT-EPOXY COATED	53,299.000	LB		
1200	08160	STRUCTURAL STEEL 5100 LBS	(1.00)	LS		
1210	08435	JACK & SUPPORT BRIDGE SPAN (US 60A) BRO	(1.00)	LS		
1220	08469	EXPANSION DAM-1.5 IN NEOPRENE	104.000	LF		
1230	08471	EXPANSION DAM-2.5 IN NEOPRENE	52.000	LF		
1240	08472	EXPANSION DAM-4 IN NEOPRENE	52.000	LF		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
1250	08510	REM EPOXY BIT FOREIGN OVERLAY	4,940.000	SQYD		
1260	08711	BRIDGE CHAIN LINK FENCE-6 FT	153.000	LF		
1270	20186ED	REINFORCED CONCRETE SLAB	6,014.000	SQYD		
1280	21119ED	CONCRETE FORM LINER	28.000	SQYD		
1290	22146EN	CONCRETE PATCHING REPAIR	512.000	SQFT		
1300	23379EC	STAMPED CONCRETE	1,044.000	SQYD		
1310	23380EC	BEARING PADS	128.000	EACH		
1320	23381EC	REINFORCED SIDEWALK	3,226.000	LF		
1330	23382EC	CONCRETE HANDRAIL	3,226.000	LF		
1340	23383EC	REMOVE AND REINSTALL LIGHTS (US 60A) BRO	(1.00)	LS		
1350	23385EC	CONCRETE MEDIAN	1,059.000	SQYD		
	SECTION 0003	SIGNING				
1360	06405	SBM ALUMINUM PANEL SIGNS	1,443.500	SQFT		
1370	06406	SBM ALUM SHEET SIGNS .080 IN	141.630	SQFT		
1380	06407	SBM ALUM SHEET SIGNS .125 IN	125.500	SQFT		
1390	06410	STEEL POST TYPE 1	108.000	LF		
1400	06411	STEEL POST TYPE 2	193.000	LF		
1410	06451	REMOVE SIGN SUPPORT BEAM	4.000	EACH		
1420	06490	CLASS A CONCRETE FOR SIGNS	0.920	CUYD		
1430	21373ND	REMOVE SIGN	10.000	EACH		
1440	21596ND	GMSS TYPE D	4.000	EACH		
	SECTION 0004	SIGNALIZATION				

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
1450	04700	POLE 30 FT MTG HT	72.000 EACH		
1460	04740	POLE BASE	48.000 EACH		
1470	04761	LIGHTING CONTROL EQUIPMENT	3.000 EACH		
1480	04770	HPS LUMINAIRE	75.000 EACH		
1490	04780	FUSED CONNECTOR KIT	75.000 EACH		
1500	04791	CONDUIT-3/4 IN	50.000 LF		
1510	04792	CONDUIT-1 IN	60.000 LF		
1520	04793	CONDUIT-1 1/4 IN	615.000 LF		
1530	04795	CONDUIT-2 IN	3,275.000 LF		
1540	04797	CONDUIT-3 IN	100.000 LF		
1550	04811	JUNCTION BOX TYPE B	22.000 EACH		
1560	04820	TRENCHING AND BACKFILLING	3,545.000 LF		
1570	04821	OPEN CUT ROADWAY	240.000 LF		
1580	04830	LOOP WIRE	1,875.000 LF		
1590	04835	WIRE-NO. 4	6,349.000 LF		
1600	04840	CABLE-INTERCONNECT	500.000 LF		
1610	04844	CABLE-NO. 14/5C	2,460.000 LF		
1620	04845	CABLE-NO. 14/7C	201.000 LF		
1630	04850	CABLE-NO. 14/1 PAIR	1,925.000 LF		
1640	04885	MESSENGER-10800 LB	220.000 LF		
1650	04894	PREFORMED LOOP/LEAD-IN	82.000 LF		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
1660	04895	LOOP SAW SLOT AND FILL	980.000 LF		
1670	04899	ELECTRICAL SERVICE	1.000 EACH		
1680	04920	SIGNAL CONTROLLER-TYPE 170	1.000 EACH		
1690	04931	INSTALL CONTROLLER TYPE 170	2.000 EACH		
1700	04932	INSTALL STEEL STRAIN POLE	4.000 EACH		
1710	20093NS835	INSTALL PEDESTRIAN HEAD-LED	16.000 EACH		
1720	20188NS835	INSTALL LED SIGNAL-3 SECTION	11.000 EACH		
1730	20189NS835	INSTALL LED SIGNAL-5 SECTION	2.000 EACH		
1740	20452ES835	PREFORMED LOOPS	24.000 LF		
1750	20453ES835	PREFORMED QUADRAPOLE LOOPS	306.000 LF		
1760	20495NS835	AUDIBLE PEDESTRIAN DETECTOR	10.000 EACH		
1770	21729EN	PVC CONDUIT-4 IN	1,100.000 LF		
1780	21743NN	INSTALL PEDESTRIAN DETECTOR	6.000 EACH		
1790	23157EN	TRAFFIC SIGNAL POLE BASE	12.040 CUYD		
1800	23222EC	INSTALL SIGNAL PEDESTAL	1.000 EACH		
1810	23409EC	TRAFFIC SIGNAL POLE	5.000 EACH		
1820	23410EC	OVER HEIGHT WARNING SYSTEM	2.000 EACH		
	SECTION 0005	LIGHTING			
1830	04740	POLE BASE	2.000 EACH		
1840	04760	POLE W/SECONDARY CONTROL EQUIP	1.000 EACH		
1850	04780	FUSED CONNECTOR KIT	4.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
1860	04793	CONDUIT-1 1/4 IN	80.000 LF		
1870	04795	CONDUIT-2 IN	20.000 LF		
1880	04811	JUNCTION BOX TYPE B	3.000 EACH		
1890	04820	TRENCHING AND BACKFILLING	80.000 LF		
1900	04832	WIRE-NO. 12	180.000 LF		
1910	04833	WIRE-NO. 8	340.000 LF		
1920	04940	REMOVE LIGHTING I-65	(1.00) LS		
1930	04942	REMOVE STORE & REINSTALL POLE	2.000 EACH		
	SECTION 0006	LANDSCAPING			
1940	05985	SEEDING AND PROTECTION	750.000 SQYD		
1950	05990	SODDING	1,423.000 SQYD		
1960	05997	TOPSOIL FURNISHED AND PLACED	239.000 CUYD		
1970	20028ES724	GROW-LOW FRAGRANT SUMAC	1,040.000 EACH		
1980	21428NS724	LACEBARK ELM	5.000 EACH		
1990	23411EC	IRRIGATION SYSTEM (US 60A) TE ARRA	(1.00) LS		
2000	23412EC	METAL TREE GRATE	5.000 EACH		
2010	23413EC	SOIL PLANTING MIX	1,636.000 CUYD		
2020	23414EC	STRUCTURAL SOIL	260.000 CUYD		
2030	23415EC	EDGING	1,340.000 LF		
2040	23416EC	IMPERIAL HONEYLOCUST	5.000 EACH		
2050	23417EC	CHANTICLEER FLOWERING PEAR	2.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT	UNIT PRICE	AMOUNT
2060	23418EC	PURPLELEAF WINTERCREEPER	7,235.000	EACH		
2070	23419EC	NEARLY WILD ROSE	676.000	EACH		
2080	23420EC	CRANBERRY COTONEASTER	610.000	EACH		
2090	23421EC	KARL FOERSTER'S FEATHER REED GRASS	483.000	EACH		
2100	23422EC	DWARF JAPANESE HOLLY	1,042.000	EACH		
2110	23423EC	SIX HILLS GIANT NEPETA	117.000	EACH		
2120	23424EC	DWARF HONEYSUCKLE	520.000	EACH		
2130	23425EC	HAPPY RETURNS DAYLILY	1,455.000	EACH		
	SECTION 0007	DEMOBILIZATION				
2140	02568	MOBILIZATION (NO MORE THAN 5%)		LUMP		
2150	02569	DEMOBILIZATION (AT LEAST 1.5%)		LUMP		
		TOTAL BID				