



**CALL NO. 203**

**CONTRACT ID. 224318**

**SPENCER - FRANKLIN - SHELBY COUNTIES**

**FED/STATE PROJECT NUMBER 121GR22T013-HSIP**

**DESCRIPTION VARIOUS ROUTES**

**WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB**

**PRIMARY COMPLETION DATE 7/31/2023**

**LETTING DATE: June 23,2022**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME June 23,2022. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**DBE CERTIFICATION REQUIRED - 10%**

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

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**PART I**  
**SCOPE OF WORK**

## ADMINISTRATIVE DISTRICT - 05

**CONTRACT ID - 224318**

**121GR22T013-HSIP**

**COUNTY - FRANKLIN**

**PCN - 0503700602201**

**HSIP 1601(028)**

VERSAILLES ROAD (US 60) (MP 13.400) IMPROVEMENTS AT THE INTERSECTION OF US 60 & KY 1681 (MP 13.820), A DISTANCE OF 0.42 MILES.SIGNS-LIGHTING-SIGNALS SYP NO. 05-09018.10.

GEOGRAPHIC COORDINATES LATITUDE 38:10:11.55 LONGITUDE 84:48:35.80

ADT 28,107

**COUNTY - SHELBY**

**PCN - 0510600552202**

**HSIP 1551(029)**

FREEDOM'S WAY (KY 55) (MP 12.000) IMPROVEMENTS AT THE INTERSECTION OF KY 55 & KY 55X (MP 12.500), A DISTANCE OF 0.50 MILES.SIGNS-LIGHTING-SIGNALS SYP NO. 05-09018.40.

GEOGRAPHIC COORDINATES LATITUDE 38:14:25.18 LONGITUDE 85:11:59.31

ADT 9,265

**COUNTY - SPENCER**

**PCN - 0510801552201**

**HSIP 5125(017)**

TAYLORSVILLE ROAD (KY 155) (MP 0.000) IMPROVEMENTS AT THE INTERSECTION OF KY 155 & KY 55 (MP 0.250), A DISTANCE OF 0.25 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 05-09018.20.

GEOGRAPHIC COORDINATES LATITUDE 38:06:15.39 LONGITUDE 85:22:11.78

ADT 12,279

**COMPLETION DATE(S):**

COMPLETED BY 07/31/2023

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 electronic bidding software. The Bidder must download the bid file located on the Bid Express website ([www.bidx.com](http://www.bidx.com)) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

### **JOINT VENTURE BIDDING**

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

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

### **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

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

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

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

### **SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT**

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

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

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

### **HARDWOOD REMOVAL RESTRICTIONS**

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

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

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

### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

### **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 Rating          | 102.08 Preparation and Delivery of Proposals |
| 102.13 Irregular Bid Proposals | 102.14 Disqualification of Bidders           |
| 102.09 Proposal Guaranty       |  |

### **CIVIL RIGHTS ACT OF 1964**

The Kentucky Transportation Cabinet, Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, disability, income- level, or Limited English Proficiency (LEP) in consideration for an award.

### **NOTICE TO ALL BIDDERS**

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

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

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

### **SECOND TIER SUBCONTRACTS**

Second tier subcontracts are acceptable per Section 108.01 of the Standard Specifications for Road and Bridge Construction. Sub-Contractors fulfilling a disadvantaged business enterprise goal on a project may enter into a 2<sup>nd</sup> tier subcontract with a Non-DBE Subcontractor. However, in this instance, none of the work subcontracted to the Non-DBE Contractor will count toward fulfilling the established Disadvantaged Goal for the project.

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

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

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

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

### **DBE GOAL**

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

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

### **OBLIGATION OF CONTRACTORS**

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

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

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

### **CERTIFICATION OF CONTRACT GOAL**

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

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

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

### **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **5** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

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. The Proposal Line Number, Category Number, and the Project Line Number can be found in the “material listing” on the Construction Procurement website under the specific letting;
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.

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

Contractors must submit the signed subcontract between the contractor and the DBE contractor, along with the DBE's certificate of insurance. If the DBE is a supplier of materials for the project, a signed purchase order must be submitted to the Division of Construction Procurement.

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

#### **CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS**

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

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

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

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



### **FAILURE TO MEET GOOD FAITH REQUIREMENT**

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

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

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

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

### **SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT**

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

- Suspension of Prequalification;
- 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 and Non-DBE Subcontractors 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 complete and submit a **signed and notarized** Affidavit of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

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.

\*\*\*\*\* IMPORTANT \*\*\*\*\*

**Please mail the original, signed and completed TC (18-7) Affidavit of Subcontractor Payment form and all copies of checks for payments listed above to the following address:**

Office for Civil Rights and Small Business Development  
6<sup>th</sup> Floor West 200 Mero Street  
Frankfort, KY 40622

The prime contractor should notify the KYTC Office for Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact in this office is Mr. Melvin Bynes. Mr. Bynes' current contact information is email address – [melvin.bynes2@ky.gov](mailto:melvin.bynes2@ky.gov) and the telephone number is (502) 564-3601.

### **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.

### **PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES**

In accordance with the FY 2019 National Defense Authorization Act (NDAA), 2 CFR 200.216, and 2 CFR 200.471, Federal agencies are prohibited, after August 13, 2020, from obligating or expending financial assistance to obtain certain telecommunications and video surveillance services and equipment from specific producers. As a result of these regulations, contractors and subcontractors are prohibited, on projects with federal funding participation, from providing telecommunication or video surveillance equipment, services, or systems produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities)

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).**

**(REV 12-17-15) (1-16)**

SECTION 7 is expanded by the following new Article:

102.10 **Cargo Preference Act – Use of United States-flag vessels.**

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**ASPHALT MIXTURE**

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

**DGA BASE**

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

**OPTION B**

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

## Special Notes Applicable to Project – General Notes & Description of Work

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### **CAUTION**

The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

### **STATIONING**

The contractor is advised that the planned locations of work were established from the following stations:

- **5-9018.10** – Franklin Co. - US 60 (Versailles Road) @ KY 1681 (Duncan Road):  
US 60 Station 188+13.39 is the center of the intersection of US 60 and KY 1681 in Franklin County. This location is MP 13.60 along US 60.
- **5-9018.20** – Spencer Co. - KY 155 (Taylorsville Rd) @ KY 55 (Shelbyville Rd) & KY 1633 (Elk Creek Rd):  
KY 155 Station 383+00 is the center of the intersection of KY 155 and KY 55 and KY 1633 in Spencer County. This location is MP 0.00 along KY 155.
- **5-9018.40** – Shelby Co. - KY 55 (Freedom's Way) @ KY 55X (Eminence Pike):  
KY 55 Station 338+21.96 is the center of the intersection of KY 55 and KY 55X in Shelby County. This location is MP 12.41 along KY 55.

**Note:** The existing mile marker signs may not correspond to the proposed work locations.

### **LIDAR**

All survey information was obtained from available KYTC Aerial LIDAR data and should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

### **ON-SITE INSPECTION**

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

### **RIGHT OF WAY LIMITS**

The Department has not established the exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured and environmentally cleared by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

General Notes & Description of Work  
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**CONTROL**

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

**DESCRIPTION OF WORK**

Except as specified herein, perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, applicable Special Notes and Special Provisions, and applicable Standard and Sepia Drawings, current editions. Furnish all materials, labor, equipment, and incidentals for the following work:

**5-9018.10 – US 60 (Versailles Road) @ KY 1681 (Duncan Road):**

Traffic Signals. Replace all existing signals with signal heads that have reflective backplates and LED indications. The existing 5-section signal for US 60 NB will be converted to a 4-section Flashing Yellow Arrow Signal for the left turn lane and a 3-Section signal head for US 60 NB inside thru lane. Removal of existing signal heads will be paid under the bid item REMOVE SIGNAL EQUIPMENT. Refer to the Special Notes, Summary Sheets, and Signal Modification Plan Sheet for more information.

Striping. The US 60 southbound auxiliary lane drop is to be restriped to include 12" thermoplastic striping. Existing stop bars and thermoplastic pavement marking arrows are proposed to be refreshed and/or modified per KYTC standards. Refer to the Special Notes, Summary Sheets, and Striping Plan for more information.

Advance Warning Flasher. An overhead "Be Prepared to Stop" advance warning flasher is to be installed for the US 60 northbound approach. Refer to the Special Notes, Summary Sheets, and Signal Plan Sheet for more information

**5-9018.20 – KY 155 (Taylorsville Road) @ KY 55 (Shelbyville Road) and KY 1633 (Elk Creek Road):**

Traffic Signals. Replace all existing signals with signal heads that have reflective backplates and LED indications. Removal of existing signal heads will be paid under the bid item REMOVE SIGNAL EQUIPMENT. Install 2070 controller and associated components as noted on the Project Materials Release Form. Refer to the Special Notes, Summary Sheets, and Signal Modification Plan Sheet for more information.

Resurface. The northern approach of the intersection, KY 155 (Taylorsville Road), is proposed to be resurfaced. Work includes asphalt pavement milling and texturing and placing an asphalt surface course. Non-tracking asphalt tack coat shall also be used. Refer to the Special Notes, Summary Sheets, and Plan Sheets for more information.

General Notes & Description of Work  
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Thermo Rumble Strips Type 2. A quantity of 240 linear feet of Thermo Rumble Strips Type 2 has been included in the contract for construction of transverse, raised thermoplastic rumble strips at the approximate locations identified elsewhere in the proposal. The Engineer shall determine the exact locations of each thermo rumble strip unit at the time of construction. Construct the Thermoplastic Rumble Strips Type 2 according to the detail sheet.

Guardrail. Existing guardrail within the project limits will be replaced. Refer to the Guardrail summary for the approximate locations for guardrail replacement and the proposed end treatments to be installed. See the Special Note for Guardrail for more information on Guardrail Replacement.

When the plans call for a Type 1 or Type 4 End Treatment, a MASH eligibility letter from FHWA is required for these end terminals. When a MASH tested eligibility letter is not available for the end terminal being utilized, the most recent NCHRP 350 eligibility letter from FHWA for that terminal will apply. Acceptance of the terminal will be at the discretion of the engineer.

Full Depth Pavement. There are two locations where the addition of full depth pavement is proposed. The work involves placing DGA, asphalt base courses, and asphalt surface. Non-tracking asphalt tack coat shall also be used between each lift of asphalt. Refer to the Special Notes, Summary sheets, and Plan Sheets for more information.

Striping. The KY 155 north approach (Taylorsville Rd) is to be restriped following paving operations to eliminate the two way left turn lane. Refer to the Special Notes, Summary Sheets, and the Striping Plan Sheet for more information.

Access Management. Install a mountable median along the KY 155 southbound left turn lane. Flexible Delineator Posts shall be installed on top of mountable median. Refer to the Plan Sheets and Summaries for more information.

Intersection Lighting. Roadway lighting is proposed to be installed at the intersection. Refer to the Special Notes, Lighting Plan Sheet, and summaries for more information.

**5-9018.40 - KY 55 (Freedom's Way) @ KY 55X (Eminence Pike):**

Traffic Signals. Replace KY 55 (Freedom's Way) existing signals with signal heads that have reflective backplates and LED indications. Removal of existing signal heads will be paid under the bid item REMOVE SIGNAL EQUIPMENT. Install 2070 controller and associated components as noted on Install List. Install Video Detection Kit on Signal Pole B. Refer to the Special Notes, Summary Sheets, and Signal Modification Plan Sheet for more information.

**NOTE:** For pickup of Video Detection Cameras and related hardware, please contact David Huber or Zachary Neihof at KYTC District 5 Traffic. Contract information is listed in the Special Note for Pickup of Video Detection Cameras and on the Signal Plan Sheet.

## General Notes & Description of Work

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Full Depth Concrete. Replace a portion of the existing asphalt median on KY 55 with full depth concrete. Refer to the Paving Summary and Concrete Plan Sheet for details and more information.

Striping. Restripe the KY 55 (Freedom's Way) westbound receiving lane for northbound KY 55X (Eminence Pike) left turn lane. Relocate the KY 55X (Eminence Pike) northbound stop bar closer to the intersection and extend double yellow and white lane lanes. The addition of shoulder cross hatching is proposed for the KY 55 (Freedom's Way) approach. Refer to the Special Notes, Summary Sheets, and the Striping Plan Sheet for more information.

Signing. Install proposed signing as shown on the Signing Plan Sheet. Refer to the Special Notes, Summary Sheets, and Signing Plan Sheet for more information.

Intersection Lighting. Roadway lighting is proposed to be installed at the intersection. Refer to the Special Notes, Lighting Plan Sheet, and summaries for more information.



## Special Note for Erosion Control

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### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with any other notes in the Proposal, the Department's Standard and Interim Supplemental Specifications, the Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions, or as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

### II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, applicable Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

### III. CONSTRUCTION

Be advised, these Erosion Control Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site-specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, the construction phasing, methods, and the techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, Interim Supplemental Specifications, Special Provisions and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing

## Erosion Control

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vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. All silt control devices shall be sized to retain a volume of 3,600 cubic feet per disturbed contributing acre. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

As work progresses, add or remove erosion control measures as required by the BMP, applicable to the Contractor's project phasing, construction methods, and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

The required volume at each Silt Trap shall be computed based on the Up Gradient Contributing Areas that are disturbed and/or stabilized to the satisfaction of the Engineer. The required volume calculation for each Silt Trap shall be determined by the Contractor and verified by the Engineer. The required volume at each Silt Trap may be reduced by the following amounts:

- Up Gradient Areas not disturbed (acres)
- Up Gradient Areas that have been reclaimed and protected by Erosion Control Blanket or other ground protection material such as Temporary Mulch (acres)
- Up Gradient Areas that have been protected by Silt Fence (acres) – Areas protected by Silt Fence shall be computed at a maximum rate of 100 square feet per linear foot of Silt Fence
- Up Gradient Areas that have been protected by Silt Traps (acres)

The use of Temporary Mulch is encouraged.

Silt Trap Type B shall always be placed at the collection point prior to discharging into a Blue Line Stream or onto an adjacent Property Owner. Where overland flow exists, a Silt Fence or other filter devices may be used.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right-of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

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#### **IV. MEASUREMENT**

The Department will measure the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

#### **V. Basis of Payment**

The Department will make payment for the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

### SPECIAL NOTE FOR STAKING

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

1. Contrary to Section 201, perform items 1-2 usually performed by the Engineer.
2. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations, the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer, and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.
3. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed lane separator curb, striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
4. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
5. Perform any and all other staking operations required to control and construct the work.

### Special Note for Signage

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All sign sheeting shall be from the Cabinet's List of Approved Materials.

All permanent signs and sign components shall be fabricated using Type XI sheeting.

The following signs and sign components shall be fabricated using Type XI fluorescent yellow sheeting:

- Horizontal Alignment Signs and Plaques, including signs shown in Figure 2C-1 of the MUTCD
- All Advisory Speed (W13-1P) plaques

The following signs shall be fabricated using Type XI fluorescent yellow-green sheeting:

- School and school bus warning signs, including the fluorescent yellow-green signs shown in Figures 7B-1 and 7B-6 of the MUTCD and other school-related warning signs that are not included in the MUTCD.
- Bicycle Warning (W11-1) signs and SHARE THE ROAD (W16-1P) plaques or diagonal downward pointing arrow (W16-7P) plaques that supplement Bicycle Warning signs.
- Pedestrian Warning signs and diagonal downward pointing arrow plaques that supplement Pedestrian Warning signs.
- In-Street Pedestrian Crossing (R1-6) signs and Overhead pedestrian Crossing (R1-9) signs
- Supplemental plaques to any of the previously listed signs

## Special Note for Signing

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### I. DESCRIPTION

Except as provided herein, this work shall be performed in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the Department's current Standard Specifications and Interim Supplemental Specifications, applicable Standard and Sepia Drawings, and applicable Special Provisions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Furnish, Fabricate, and Erect Signs; and (3) All other work specified in the Contract.

### II. MATERIALS

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

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

**B. Erosion Control.** See Special Note for Erosion Control.

### III. CONSTRUCTION METHODS

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

**B. Site Preparation.** Be responsible for all site preparation including, but not limited to: clearing and grubbing, staking, excavation, backfill, and removal of obstructions or any other material not covered by other items. Perform all site preparation only as approved or directed by the Engineer.

**C. Staking.** See Special Note for Staking.

**D. Signs and Posts.** Before beginning installation, the Contractor shall furnish to the Engineer drawings, descriptions, manufacturer's cuts, etc. covering all material to be used. Mill test reports for beams, steel panels, and each different gauge of aluminum or steel sheeting used must be submitted to the Division of Construction and approved prior to erection.

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of the sheet to be used as the sign face to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting used as background material for sign faces is to be the color specified and visually in accordance with the standard requirements of ASTM D-4956, and meet the requirements of Section 830 of the Standard Specifications. Contrary to Section 830.02.06, only the types and colors of sheeting as specified in the proposal will be

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accepted. All retroreflective material shall be fabricated and assembled in accordance with the specifications and/or recommendations of the manufacturer(s).

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and posts shall be of sufficient lengths to extend from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., or installations on existing asphalt, such as flush medians, Type I steel posts shall be mounted on a Type D Surface Mount. For Type D Surface Mounts use only Kleen Break Model 425 by Xcessories Squared of Auburn, IL. If the Surface Mount is to be installed on sufficiently cured concrete, use part number XKBSM42520-G. If the Surface Mount is to be installed on asphalt surface, use part numbers XKB42520-G and AXT225-36-G. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D Surface Mount(s). Install the Type D Surface Mount(s) according to all the applicable requirements of the manufacturer (see shop drawings). All steel post shall meet the requirements of Section 832. All hardware including, but not limited to, sign post anchors, soil stabilizer plates, nuts, bolts, washers, fasteners, fittings, and bracing, or any other incidentals necessary to erect the signs shall be furnished by the Contractor and will be incidental to the work.

New concrete bases, posts, support anchors, signs, etc. are to be installed prior to dismantling any existing sign(s). The removal of existing signs, posts, and support anchors is to be performed concurrently with the installation of new signs, posts, and support anchors, under the same lane closure during the same work shift. Completely remove existing sign support anchors or remove them to a minimum depth of six (6) inches below existing ground line and backfill the disturbed area to the existing ground line.

When listed in the summaries, Reflective Sign Post Panels shall be 2" wide x 60" tall (or 84" tall for urban installations) and shall have three 3/8" holes (one hole in the top 3", one hole near the center, and one hole in the bottom 3") that align with the holes on the Type I steel post. Sheeting for the Reflective Sign Post Panels shall be the same Type and color as the sign installed on the post. Examples include:

- Red, fluorescent yellow, and fluorescent yellow-green (Type XI Sheeting)
- White and yellow (Type XI Sheeting).

All manufactured sheeting signs shall be free of visual defects including, but not limited to: cracks, tears, ridges, humps, discoloration, etc., and defective signs shall be replaced at no additional cost to the Department.

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All sign blanks shall be hole punched by the manufacturer for either horizontal or vertical installation. Attach all aluminum sheeting signs to square post with 3/8" all steel rivets and nylon washers.

Post will be attached to the anchor with 5/16" corner bolts and 5/16" flanged nuts, and all post and anchor cuts shall be treated with a Cold Galvanizing Compound spray.

Sign posts shall be erected vertically by using a bubble level. The tolerance shall be a two (2) degree angle in any direction. For locations where more than one sign is mounted beside each other, the posts shall be spaced to provide approximately six inches (6") of spacing between signs.

- E. Property Damage.** The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.
- F. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.
- G. Caution.** The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.
- H. Control.** Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department



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will not honor any claims for money or time extension created by the operations of such other parties.

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

- I. **Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed concrete, debris, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for disposal of waste and debris from the project. Existing anchors, signs, posts, and any other hardware or material removed from the site are to become the property of the Contractor. See Special Provision for Waste and Borrow Sites.
- J. **Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- K. **Erosion Control.** See Special Note for Erosion Control.

#### IV. METHOD OF MEASUREMENT

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- C. **Signs.** The Department will measure the finished in-place area of signs in Square Feet.
- D. **Sign Posts.** The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.
- E. **Type D Breakaway Sign Supports.** The Department will measure Type D sign supports as Each support installed.
- F. **Type D Surface Mounts.** The Department will measure Type D Surface Mounts as Each surface mount installed.
- G. **Class A Concrete for Signs.** The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.

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- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See Special Note for Erosion Control.
- J. Remove Sign.** The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.
- K. Items Provided by KYTC.** The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.

#### V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Signs.** The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- C. Sign Posts.** The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the proposal.
- D. Type D Breakaway Sign Supports.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.
- E. Type D Surface Mounts.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D (SURFACE MOUNT). The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.  
NOTE: The permissible Type D Surface Mount alternative is: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL
- F. Class A Concrete for Signs.** The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work

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and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.

- G. Remove Sign.** The Department will make payment for the completed and accepted quantities under the bid item REMOVE SIGN. The Department will consider payment full compensation for all work and incidentals necessary to remove the existing signs, posts, anchors, and any other sign material or hardware, from the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
  
- H. Erosion Control.** See Special Note for Erosion Control.

### Special Note for Completion Dates & Liquidated Damages

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The ultimate fixed completion date for this project will be July 31, 2023. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **\$1,000** per hour for each hour, or fraction of an hour, for any and all lane closures that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

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

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

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

## **SPECIAL PROVISION FOR WASTE AND BORROW SITES**

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

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

### SPECIAL NOTE FOR NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can “break” within 15 minutes under conditions listed in 3.2.

2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 – 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue <sup>1</sup> , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

<sup>1</sup> Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.

2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1<sup>st</sup> to May 15<sup>th</sup>. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 °F. After the initial heating, between 170 – 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1<sup>st</sup> to May 15<sup>th</sup>. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20 – 100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 – 0.94	0.90 – 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24970EC	Asphalt Material for Tack Non-Tracking	Ton

Revised: May 23, 2022



## **COORDINATION OF WORK WITH OTHER CONTRACTS**

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

1-3193 Coordination Contracts  
01/02/2012

## Special Note for Guardrail

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### I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications, Special Notes and Special Provisions, and the Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and Control Traffic; and (6) all other work specified as part of this contract.

### II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail.** Furnish guardrail system components according to Section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.
- C. Delineators for Guardrail.** Furnish white and/or yellow Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- D. Erosion Control.** See the Special Note for Erosion Control.

### III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site Preparation.** Remove existing guardrail system, including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with the existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail; filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal of excess, waste materials, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as

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approved or directed by the engineer.

- C. **Guardrail.** Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings, current editions. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on the current Standard and Sepia Drawings, or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- D. **Delineators for Guardrail.** Construct Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- E. **Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- F. **Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.
- G. **Right of Way Limits.** The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- H. **Clean Up, Disposal of Waste.** Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

Guardrail  
Page 3 of 3

- I. **Final Dressing, Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- J. **Erosion Control.** See the Special Note for Erosion Control.

**IV. METHOD OF MEASUREMENT**

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site preparation.** Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.
- C. **Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will measure according to Section 719.04.
- D. **Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- E. **Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection.** The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.
- F. **Erosion Control.** See the Special Note for Erosion Control.

**V. BASIS OF PAYMENT**

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will make payment according to Section 719.05.
- C. **Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- D. **Erosion Control.** See the Special Note for Erosion Control.

### **SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING**

Begin paving operations within **48 hours** of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

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

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

## TRAFFIC CONTROL PLAN

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### TRAFFIC CONTROL GENERAL

Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic" as set forth in the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions, unless otherwise provided in these notes. The lump sum bid price to "Maintain and Control Traffic" shall also include, but is not limited to, the following items and operations:

- A. All labor and materials necessary for construction and maintenance of traffic control devices and markings.
- B. All flag persons and traffic control devices such as, but not limited to, flashers, signs, barricades and vertical panels, plastic drums (steel drums will not be permitted), and cones, necessary for the control and protection of vehicular and pedestrian traffic as specified in these notes, the proposal, the Manual on Uniform Traffic Control Devices (MUTCD) current edition, or the Engineer.

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor when no longer needed. Traffic control devices will conform to current MUTCD.

Maintain access to all entrances, side streets and roads, schools, churches, and commercial properties at all times during construction. Access to fire hydrants must also be maintained at all times. The Contractor will be responsible to notify adjacent property owners when work affecting the entrances will be performed.

### PROJECT PHASING & CONSTRUCTION PROCEDURES

For all construction activities, utilize a lane closure, and maintain at least one lane of travel in each direction. Provide a minimum clear lane width of 11 feet, however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

Do NOT erect lane closures during the following days and/or hours:

#### Normal Weekday Rush-Hours

Monday-Friday, 6:30 am – 8:30 am and 3:00 pm – 5:30 pm, daily

Temporary lane closures between 8:30am and 3:00pm will be allowed on Monday through Friday, with approval from the Engineer. Traffic stoppages of 15 minutes or less will be allowed between 9:00am and 2:30pm on Monday through Friday with approval from the Engineer.

#### Holiday & Special Events

Independence Day                      3 pm Friday, July 1, 2022 – 11 pm Monday, July 4, 2022

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Labor Day Weekend	3 pm Friday, September 2, 2022 – 8 pm Monday, September 5, 2022
Thanksgiving Holiday	3 pm Wednesday, November 23, 2022 – 8 pm Sunday, November 27, 2022
Christmas Holiday	3 pm Friday, December 23, 2022 – 8 pm Sunday, December 25, 2022
New Year’s Day Holiday	7 am Saturday, December 31, 2022 – 8 pm Sunday, January 1, 2023
Easter Weekend	3 pm Friday, April 7, 2023 – 8 pm Sunday, April 9, 2023
Memorial Day Weekend	3 pm Friday, May 26, 2023 – 8 pm Monday, May 29, 2023
Independence Day	7 am Saturday, July 1, 2023 – 11 pm Tuesday, July 4, 2023

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

The Department will provide public notification regarding approved lane closures. The Engineer must be notified 2 weeks prior to any lane closure. Notify the Engineer immediately and obtain approval of any deviations from the previously approved closure schedule. The contractor shall be responsible for signs; work zone and pavement condition signs; advanced warning signs; changeable message signs; and/or additional signs as directed by the Engineer.

Liquidated Damages will be assessed for any and all lane closures that exceed the approved lane closure time limits in accordance with the Special Note for Completion Dates & Liquidated Damages.

The Contractor shall completely cover any signs, existing, permanent, or temporary which do not properly apply to the current traffic phasing and shall maintain the covering until signs are applicable or are removed. In general, all traffic control devices shall be placed starting and proceeding in the direction of the flow of traffic and removed starting and proceeding in the direction opposite the flow of traffic.

**LANE AND SHOULDER CLOSURES**

Do not leave lane closures in place during prohibited periods. No long-term lane closures will be allowed; therefore, lane closures will not be measured for payment.

**SIGNS**

The Engineer and the Contractor, or their authorized representative, shall review the signing before traffic is allowed to use any lane closures, crossovers, or detours. All signing shall be approved by the Engineer before work can be started by the Contractor.

Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but shall be incidental to Maintain and Control Traffic. Individual signs will be measured only once for payment, regardless of how many times they are set, reset, relocated, and removed during the duration of the project. Replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity will not be measured for payment.

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### **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message sign (PCMS) at least two weeks prior to construction at the locations approved by the Engineer. The messages required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS within 6 hours of discovering a failed PCMS or after being notified of a failed PCMS. The Department will not take possession of the signs upon completion of the work. The Department will measure for payment the maximum number of PCMS in concurrent use at the same time on a single day on all sections of the contract. PCMS will be paid for once, no matter how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged changeable message signs directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment.

### **BARRICADES**

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used for construction and to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

### **PAVEMENT MARKINGS**

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of final surface course. Removal of pavement markings will be by water blasting process to the satisfaction of the Engineer. Place temporary and permanent striping in accordance with Section 112 with following exception for Temporary Striping:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course or existing surface to remain in place, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

### **PAVEMENT EDGE DROP-OFFS**

Do not allow a pavement edge between opposing directions of traffic or lanes that is expected to cross in a lane change situation with an elevation difference greater than 1 ½". Place Warning signs (MUTC W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both



## Traffic Control Plan

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sides of the traveled way. Wedge all transverse transitions between resurfaced and unsurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" – Not protection required. Warning signs should be placed in advance and throughout the drop-off area.

2" to 4" – Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Spacing of devices on tapered sections shall be in accordance with MUTCD, current edition. When work is not active in the drop-off area, wedge the drop-off with DGA or asphalt mixture for leveling and wedging with 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours.

Greater than 4" – Positive separation or wedge with a 3:1 or flatter slope. If there is five feet or more distance between the edge of pavement and drop-off, then drums, panels, or barricades may be used. If the drop-off is greater than 12 inches, positive separation is strongly encouraged. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations. Barricades may be used if the drop-off is greater than 12 inches.

## USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

### Application

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

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

### **CMS should not be used for:**

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

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### **Messages**

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

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

### **Placement**

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

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

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**Standard Abbreviations**

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

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

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**Standard Abbreviations (cont.)**

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/ DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

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

<u>Abbrev</u>	<u>Intended Word</u>	<u>Word Erroneously Given</u>
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)
LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard
TEMP	Temporary	Temperature
WRNG	Warning	Wrong

**Typical Messages**

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

<u>Reason/Problem</u>	<u>Action</u>
CRASH AHEAD	ALL TRAFFIC EXIT RT
CRASH/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT

Traffic Control Plan  
Page 9 of 9

**Typical Messages (cont.)**

**Reason/Problem**

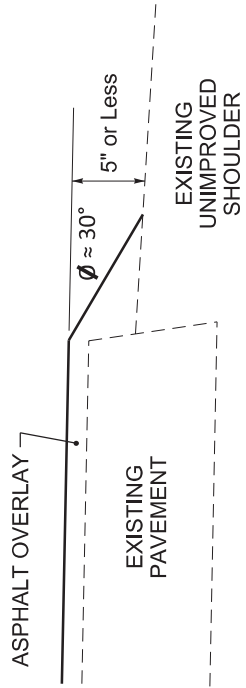
FOG XX MILES  
FREEWAY CLOSED  
FRESH OIL  
HAZMAT SPILL  
ICE  
INCIDENT AHEAD  
LANES (NARROW, SHIFT, MERGE, ETC.)  
LEFT LANE CLOSED  
LEFT LANE NARROWS  
LEFT 2 LANES CLOSED  
LEFT SHOULDER CLOSED  
LOOSE GRAVEL  
MEDIAN WORK XX MILES  
MOVING WORK ZONE, WORKERS IN ROADWAY  
NEXT EXIT CLOSED  
NO OVERSIZED LOADS  
NO PASSING  
NO SHOULDER  
ONE LANE BRIDGE  
PEOPLE CROSSING  
RAMP CLOSED  
RAMP (SLIPPERY, ICE, ETC.)  
RIGHT LANE CLOSED  
RIGHT LANE NARROWS  
RIGHT SHOULDER CLOSED  
ROAD CLOSED  
ROAD CLOSED XX MILES  
ROAD (SLIPPERY, ICE, ETC.)  
ROAD WORK  
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)  
ROAD WORK XX MILES  
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)  
NEW SIGNAL XX MILES  
SLOW 1 (OR 2) - WAY TRAFFIC  
SOFT SHOULDER  
STALLED VEHICLES AHEAD  
TRAFFIC BACKUP  
TRAFFIC SLOWS  
TRUCK CROSSING  
TRUCKS ENTERING  
TOW TRUCK AHEAD  
UNEVEN LANES  
WATER ON ROAD  
WET PAINT  
WORK ZONE XX MILES  
WORKERS AHEAD

**Action**

PASS TO RIGHT  
PREPARE TO STOP  
REDUCE SPEED  
SLOW  
SLOW DOWN  
STAY IN LANE  
STOP AHEAD  
STOP XX MILES  
TUNE RADIO 1610 AM  
USE NN ROAD  
USE CENTER LANE  
USE DETOUR ROUTE  
USE LEFT TURN LANE  
USE NEXT EXIT  
USE RIGHT LANE  
WATCH FOR FLAGGER

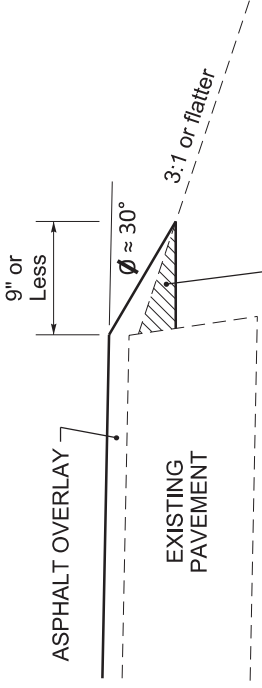
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of 5 inches or less)



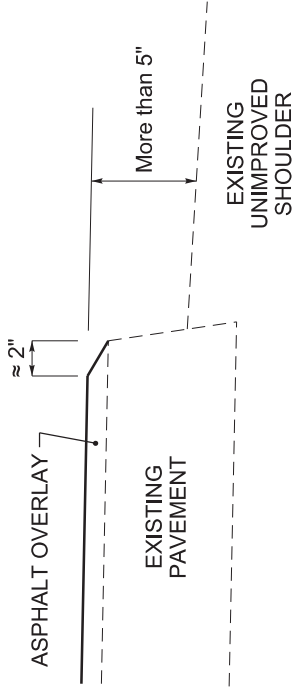
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to fill slope or ditch foreslope that is 3:1 or less)



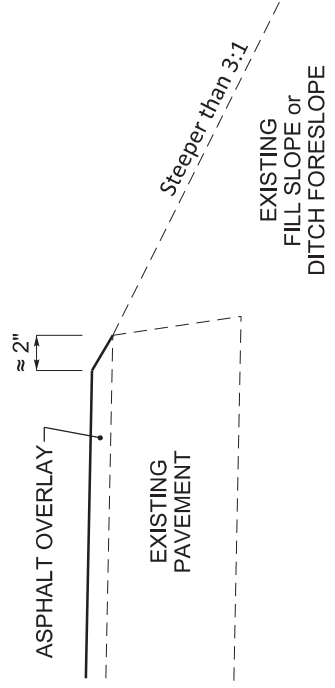
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of more than 5 inches)



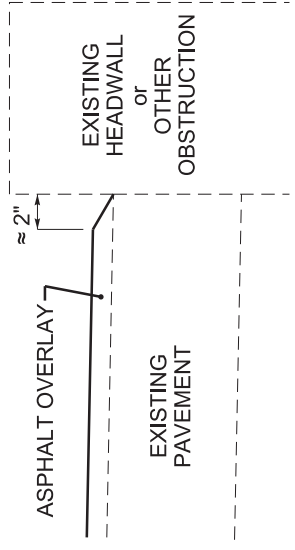
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to fill slope or ditch foreslope that is steeper than 3:1)



DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to an obstruction, such as an existing headwall)



PREPARE SHOULDER ACCORDING TO STANDARD SPECIFICATIONS

NOTES

1. DETAILS DO NOT APPLY TO OVERLAYS LESS THAN 1 INCH THICK.
2. THE DURABLE PAVEMENT EDGE DEVICE MAY BE DISENGAGED AT DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT, AS APPROVED BY THE ENGINEER.

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

## SPECIAL NOTE FOR TRAFFIC SIGNAL LOOP DETECTORS

**1.0 DESCRIPTION.** Be advised that there are existing traffic signal loop detectors within the construction limits of this project. Except as specified herein, perform traffic signal loop replacement in accordance with the Department's Standard/Supplemental Specifications, Special Provisions, Special Notes, and Standard/Sepia Drawings, current editions and as directed by the Engineer. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for replacement of traffic signal loop installation(s) and all other work specified as part of this contract.

**1.1 Pre-bid Requirements.** Conform to Subsection 723.03.17

**2.0 MATERIALS.** Except as specified herein, furnish materials in accordance with Subsection 732.02 and Section 835. Provide for materials to be sampled and tested in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in this Special Note.

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

**2.2 Sand.** Furnish natural sand meeting the requirements of Subsection 804.04.01.

**2.3 Seeding.** Furnish Seed Mix Type I.

**2.4 Loop Saw Slot and Fill.** Furnish loop sealant, backer rod, and non-shrink grout according to the Saw Slot Detail.

**2.5 Junction Boxes.** Furnish junction box type B, #57 aggregate, and geotextile filter type IV according to junction box detail.

**2.6 Cable No. 14/1 Pair (Lead-in).** Furnish cable that is specified in Section 835. Cable shall be ran splice free. This shall include splice kits to connect to the loop wire.

**2.7 Conduit.** Furnish and install appropriate conduit from transitions to the roadway, junction boxes and poles. See details below.

**3.0 CONSTRUCTION.** Except as specified herein, install and test Traffic Signal Loop Detectors in accordance with Section 723 and the drawings.

**3.1 Testing.** Conform to Subsection 723.03.17 (A)

**3.2 Coordination.** Conform to Subsection 723.03.17 (B)

**3.3 Connection.** Conform to Subsection 723.03.17 (C)

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

**3.5 Milling.** Conform to Subsection 723.03.17 (F)

**3.6 Loop Saw Slot and Fill.** Conform to Subsection 723.03.13 (A).



Traffic Signal Loop Detectors  
Page 2 of 9

**3.7 Backfilling and Disturbed Areas.** Conform to Subsection 723.03.11.

**3.8 Removal.** Conform to Subsection 723.03.16.

**3.9 Property/Roadway Damage.** Conform to Subsection 723.03.17 (J).

**3.10 Right-of-Way Limits.** Conform to Subsection 723.03.17 (K).

**3.11 Utility Clearance.** Conform to Subsection 716.03.01.

**3.12 Control.** Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to permit other contractors, state forces, public utility companies, and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. The Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to ensure the completion of the work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

**3.13 Bore and Jack.** Conform to Subsection 723.03.06 (I).

**3.14 Open Cut Roadway.** Conform to Subsection 723.03.06 (I).

**4.0 MEASUREMENT.** See Subsection 723.04 for bid item notes. Additional bid items include the following:

**4.1 Loop Test.** The Department will measure the quantity as each individual unit loop tested. The Department will not measure disconnection, reconnection, traffic control, re-splicing per specifications, before and after testing per note above, and any associated hardware for payment and will consider them incidental to this item of work.

**4.2 Remove Signal Equipment.** The department will measure the quantity by each. The department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles 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 quantities of listed items according to Subsection 723.05 in addition to the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
Conduit 1"	4792	Linear Foot
PVC Conduit – 1 ¼ inch – sch 80	24900EC	Linear Foot

Traffic Signal Loop Detectors  
Page 3 of 9

PVC Conduit – 2 inch – sch 80	24901EC	Linear Foot
Conduit 2”	4795	Linear Foot
Electrical Junction Box type B	4811	Each
Loop Test	24963ED	Each
Trenching and Backfilling	4820	Linear Foot
Loop Wire	4830	Linear Foot
Cable-No. 14/1 Pair	4850	Linear Foot <sup>1</sup>
Loop Saw Slot and Fill	4895	Linear Foot <sup>1</sup>
Bore and Jack Conduit	21543EN	Linear Foot <sup>3</sup>
Open Cut Roadway	4821	Linear Foot <sup>3</sup>
Remove Signal Equipment	24955ED	each

The Department will consider payment as full compensation for all work required under these notes and the Standard Specifications.

Contrary to section 723:

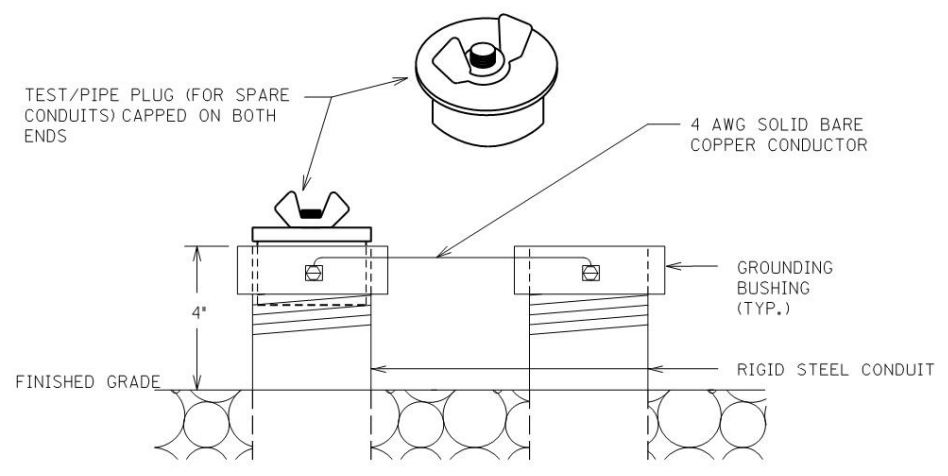
SUBSECTION: 03.13 Loop Installation.

REVISION: Replace first sentence note with the following:

twist unshielded loop wire (imsa 51-7) with 3 to 5 turns from the start of homerun to the inside conduit, junction box, cabinet, or pole. Twist unshielded loop wires (imsa 51-7) with 3 to 5 turns per foot from the start of the homerun to the junction box, cabinet, or pole. Slot can be widen to .5" to .625" to help with the installation of the twisted wire.

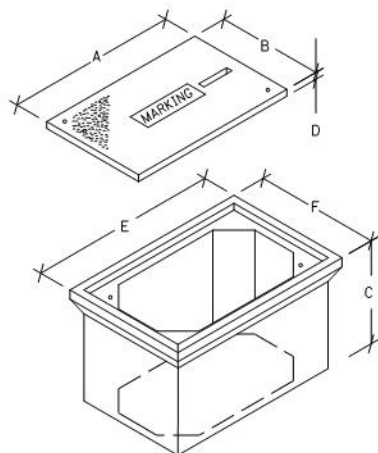
# Traffic Signal Loop Detectors

Page 4 of 9



TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL

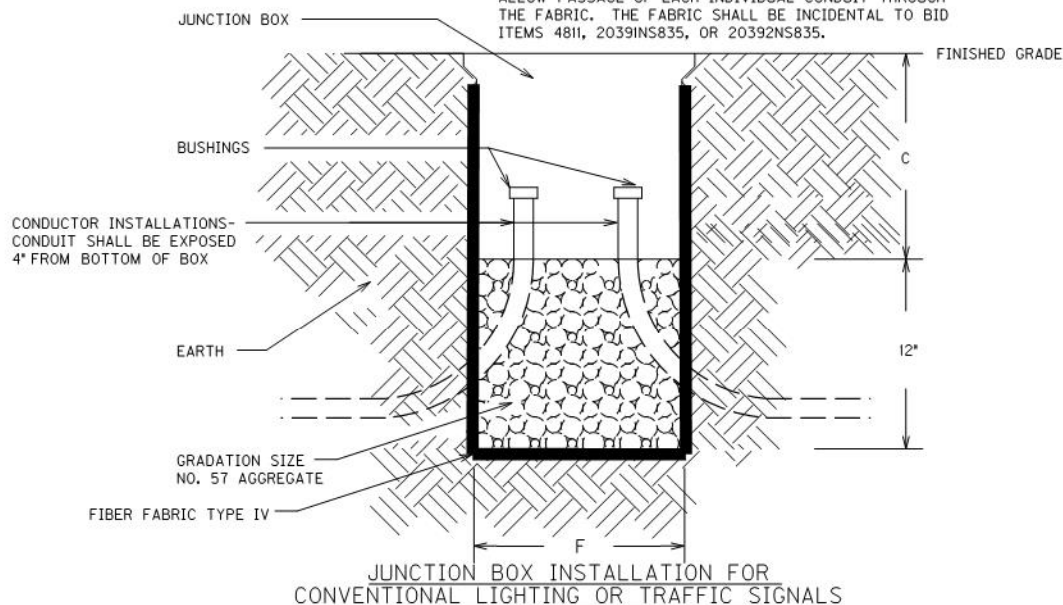
Traffic Signal Loop Detectors  
Page 5 of 9



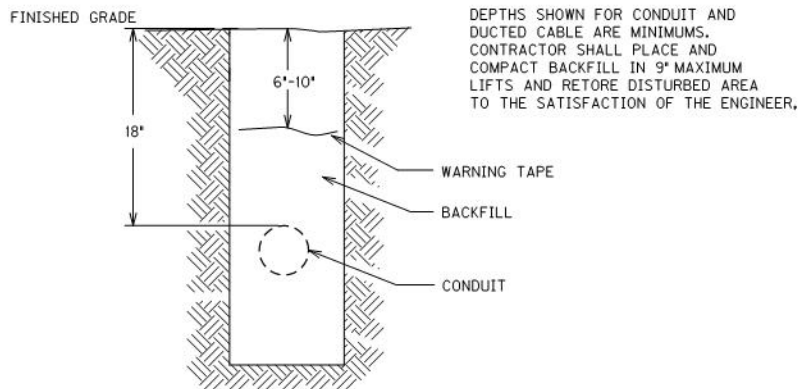
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 3/4"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

• MINIMUM  
NOTE: STACKABLE BOXES ARE PERMITTED

BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE 'X CUT' ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 481I, 2039INS835, OR 20392NS835.

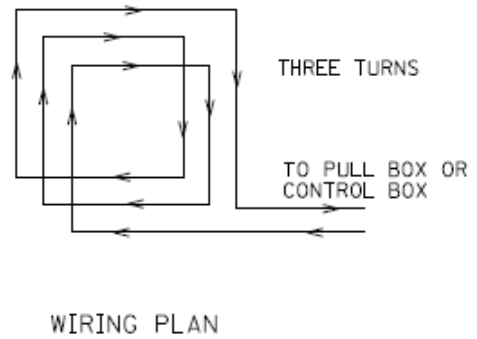
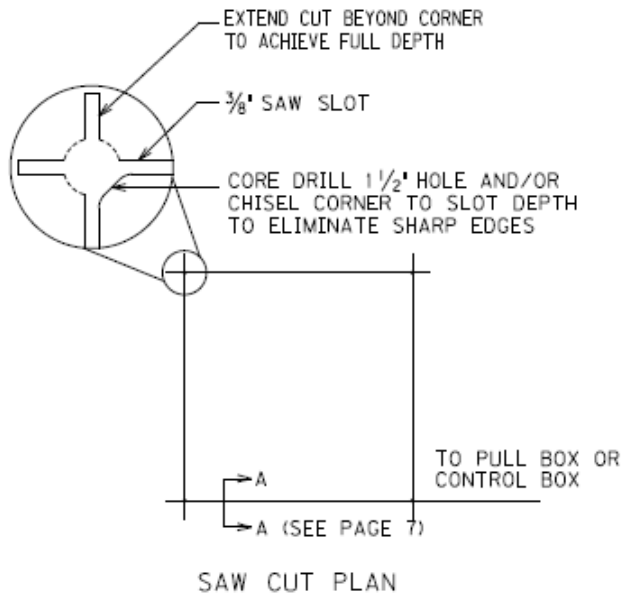


JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING OR TRAFFIC SIGNALS

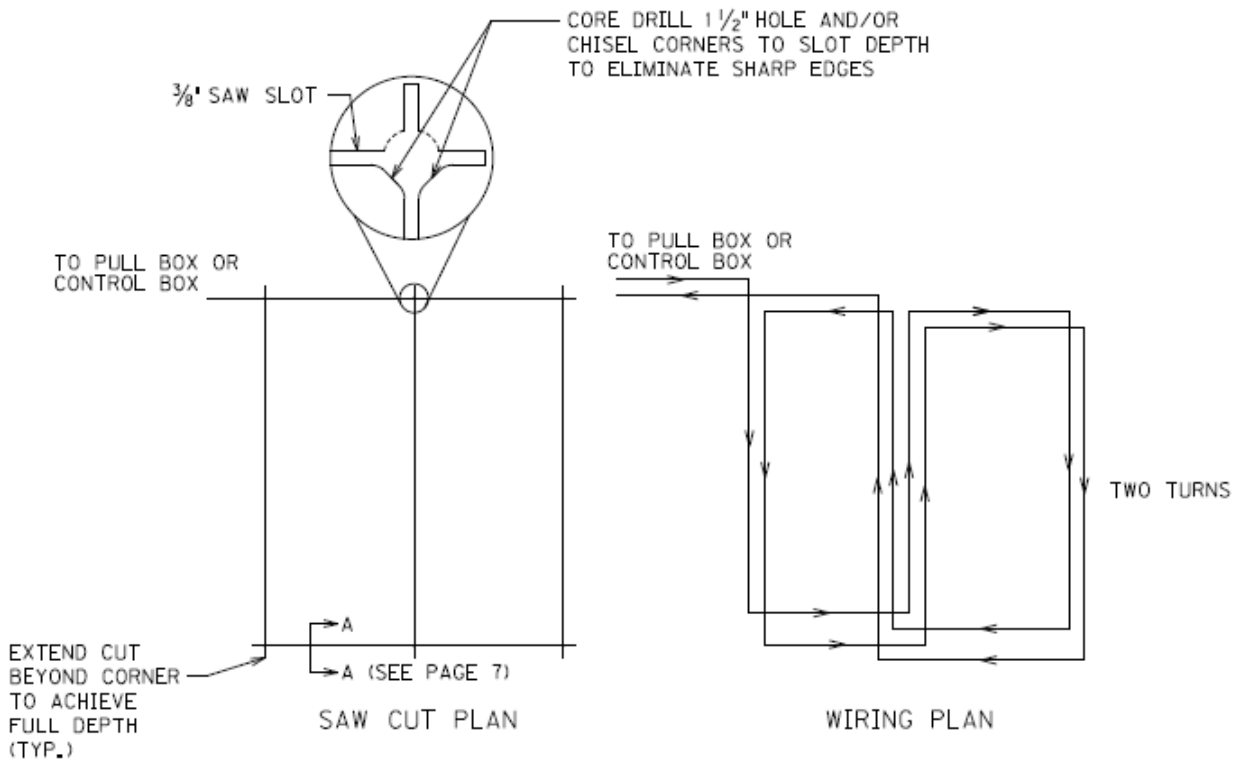


CONDUIT AND WARNING TAPE TRENCH

### Traffic Signal Loop Detectors Page 6 of 9



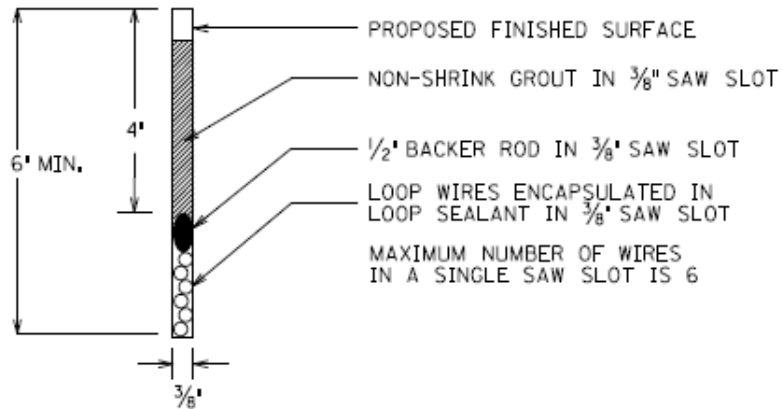
6'X6' LOOP



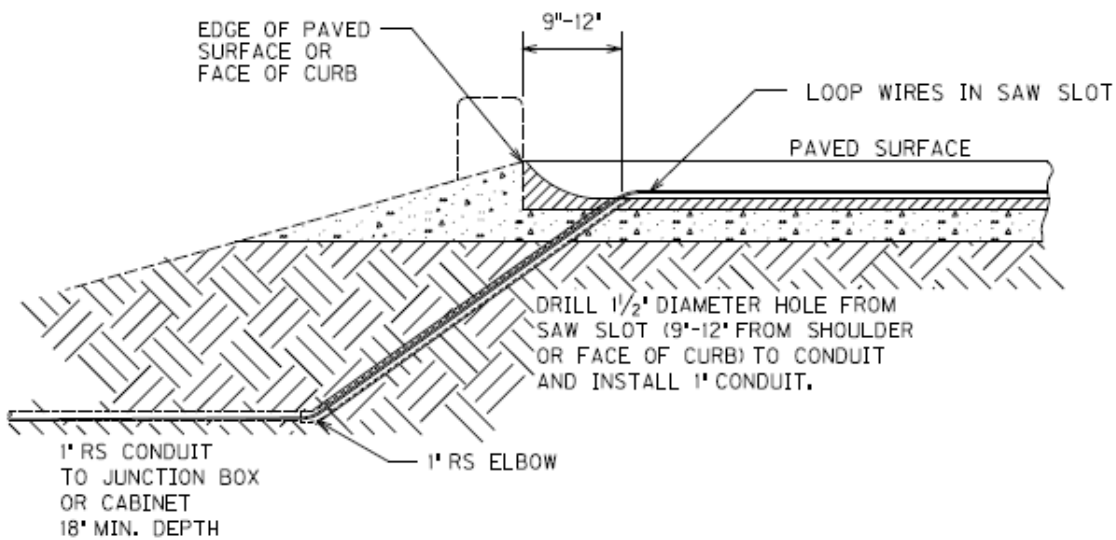
6'X30' QUADRAPOLE LOOP

# Traffic Signal Loop Detectors

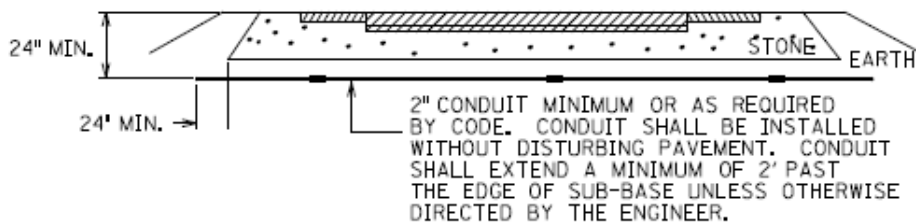
Page 7 of 9



SECTION A-A (SAW SLOT DETAIL)



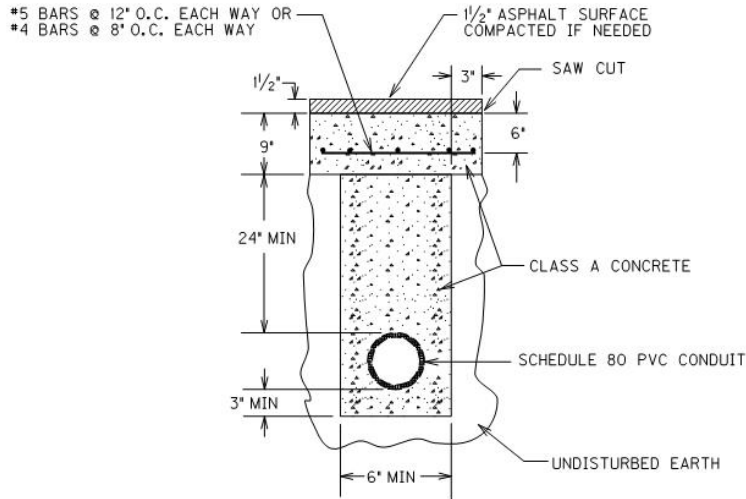
SAW SLOT EDGE OF PAVEMENT TRANSITION



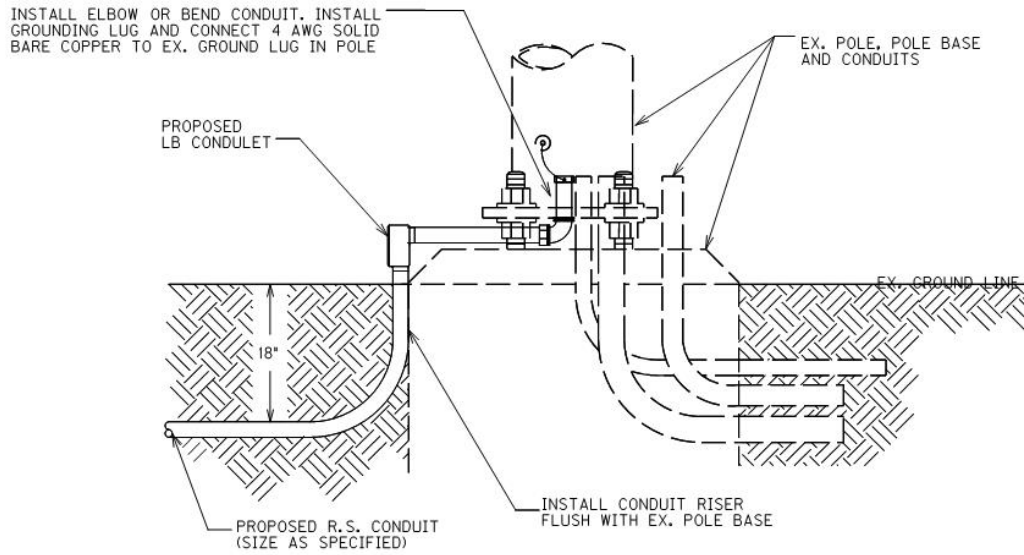
CONDUIT UNDER EXISTING PAVEMENT DETAIL

# Traffic Signal Loop Detectors

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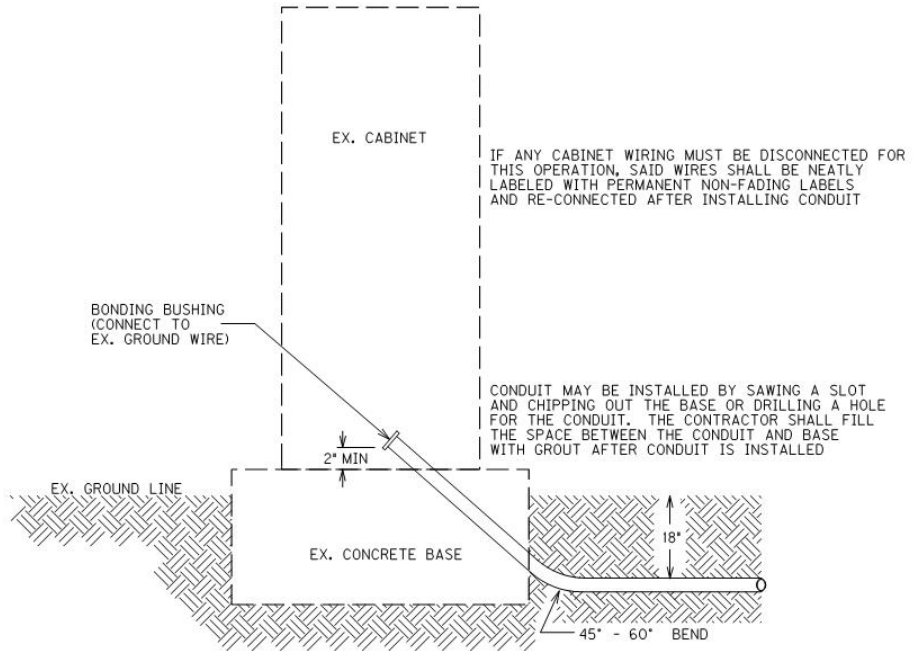
OPEN CUT PAVEMENT DETAIL



CONDUIT INSTALLATION IN EX. POLE BASE

# Traffic Signal Loop Detectors

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CONDUIT INSTALLATION IN EX. CABINET BASE

Update: 4-5-2022



	KENTUCKY TRANSPORTATION CABINET Department of Highways <b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b>  <b>RIGHT OF WAY CERTIFICATION</b>	TC 62-226 Rev. 01/2016 Page 1 of 1
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<input checked="" type="checkbox"/>	<b>Original</b>	<input type="checkbox"/>	<b>Re-Certification</b>	<b>RIGHT OF WAY CERTIFICATION</b>
<b>ITEM #</b>		<b>COUNTY</b>		<b>PROJECT # (STATE)</b>
5-9018.10		Franklin		FD52 037 0060 013-014
<b>PROJECT DESCRIPTION</b>		<b>PROJECT # (FEDERAL)</b>		
		HSIP 1601(028)		

Upgrade the Traffic Signal to include Reflective Backplates, Flashing Yellow Arrow, and an Advance Warning Flasher for the NB Direction and Update the Striping at the Intersection of US 60 & KY 1681

**No Additional Right of Way Required**

Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

**Condition # 1 (Additional Right of Way Required and Cleared)**

All necessary right 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 all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.

**Condition # 2 (Additional Right of Way Required with Exception)**


The right of way has 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. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract

**Condition # 3 (Additional Right of Way Required with Exception)**

The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.

Total Number of Parcels on Project	0	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
<b>Number of Parcels That Have Been Acquired</b>			
Signed Deed			
Condemnation			
Signed ROE			

**Notes/ Comments (Use Additional Sheet if necessary)**

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	
Signature		Signature	Tom Boykin <small>Digitally signed by Tom Boykin Date: 2022.03.20 20:52:06 -0400</small>
Date		Date	
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name		Printed Name	
Signature	 <small>Digitally signed by Kelly R. Divine Date: 2022.03.21 07:47:47 -05'00'</small>	Signature	<b>No Signature Required as per FHWA-KYTC Current Stewardship Agreement</b>
Date		Date	

	KENTUCKY TRANSPORTATION CABINET Department of Highways <b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b>	TC 62-226 Rev. 01/2016 Page 1 of 1
<b>RIGHT OF WAY CERTIFICATION</b>		

<input checked="" type="checkbox"/>	<b>Original</b>	<input type="checkbox"/>	<b>Re-Certification</b>	<b>RIGHT OF WAY CERTIFICATION</b>
<b>ITEM #</b>		<b>COUNTY</b>		<b>PROJECT # (STATE)</b>
5-9018.20		Spencer		FD52 108 0055 011-012
<b>PROJECT DESCRIPTION</b>		<b>PROJECT # (FEDERAL)</b>		
		HSIP 5125(017)		

Upgrade the Traffic Signal to include Reflective Backplates and Flashing Yellow Arrow, Install Lighting on the Existing Signal Poles, Install Median Access Control, and Update the Striping at the Intersection of KY 155 & KY 55.

**No Additional Right of Way Required**

Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

**Condition # 1 (Additional Right of Way Required and Cleared)**

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**Condition # 3 (Additional Right of Way Required with Exception)**

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Total Number of Parcels on Project	0	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
<b>Number of Parcels That Have Been Acquired</b>			
Signed Deed			
Condemnation			
Signed ROE			

**Notes/ Comments (Use Additional Sheet if necessary)**

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	
Signature		Signature	Tom Boykin <small>Digitally signed by Tom Boykin Date: 2022.03.20 20:45:24 -04'00'</small>
Date		Date	
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name		Printed Name	
Signature	 <small>Digitally signed by Kelly R. Divine Date: 2022.03.21 07:44:42 -05'00'</small>	Signature	<b>No Signature Required as per FHWA-KYTC Current Stewardship Agreement</b>
Date		Date	

	KENTUCKY TRANSPORTATION CABINET Department of Highways <b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b>	TC 62-226 Rev. 01/2016 Page 1 of 1
<b>RIGHT OF WAY CERTIFICATION</b>		

<input checked="" type="checkbox"/>	<b>Original</b>	<input type="checkbox"/>	<b>Re-Certification</b>	<b>RIGHT OF WAY CERTIFICATION</b>
<b>ITEM #</b>		<b>COUNTY</b>		<b>PROJECT # (STATE)</b>
5-9018.40		Shelby		FD52 106 0055 012-013
<b>PROJECT DESCRIPTION</b>		<b>PROJECT # (FEDERAL)</b>		
		HSIP 1551(029)		

Upgrade the Traffic Signal to include Reflective Backplates, Install Lighting, and Update the Signing and Striping at the Intersection of KY 55X & KY 55.

**No Additional Right of Way Required**

Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

**Condition # 1 (Additional Right of Way Required and Cleared)**

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**Condition # 2 (Additional Right of Way Required with Exception)**


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**Condition # 3 (Additional Right of Way Required with Exception)**

The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.

Total Number of Parcels on Project	0	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
<b>Number of Parcels That Have Been Acquired</b>			
Signed Deed			
Condemnation			
Signed ROE			

**Notes/ Comments (Use Additional Sheet if necessary)**

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	
Signature		Signature	Tom Boykin <small>Digitally signed by Tom Boykin Date: 2022.03.20 20:46:47 -04'00'</small>
Date		Date	
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name		Printed Name	
Signature	 <small>Digitally signed by Kelly R. Divine Date: 2022.03.21 07:46:13 -05'00'</small>	Signature	<b>No Signature Required as per FHWA-KYTC Current Stewardship Agreement</b>
Date		Date	

## UTILITIES AND RAIL CERTIFICATION NOTE

### Improvements at Various Intersections in Franklin, Spencer, and Shelby Counties

**Item No. 5-9018.10 - HSIP 1601(028)**

**Item No. 5-9018.20 – HSIP 5125(017)**

**Item No. 5-9018.40 – HSIP 1551(029)**

#### GENERAL PROJECT NOTE ON UTILITY PROTECTION

*Utility coordination efforts determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.*

#### NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

##### 5-9018.10 – Shelby County – US 60 @ KY 1681

*Water:* Frankfort Plant Board 6" Water main crosses US 60 approximately 1420' south of the KY 1681 intersection. 12" Water main runs parallel along US 60 approximately 150' west offset from Centerline to behind the gas station and runs back along KY 1681.

*Communication:* Kentucky Wired has underground communications that runs along west side of US 60 approximately 80' offset to the KY 1681 intersection and then runs back along KY 1681. Frankfort Plant Board and Windstream has overhead telecom facilities that run along the power poles along west side of US 60.

*Overhead Electric:* Frankfort Plant Board has overhead electric facilities that run along the power poles along west side of US 60.

*Gas:* Columbia Gas has a gas main that runs along Bizzack Blvd.

##### 5-9018.20 – Spencer County – KY 155 @ KY 55 and KY 1633

*Communication:* AT&T and Charter has aerial communication that runs along KY 155 on the east side and crosses over KY 155 just south of the gas station. Kentucky Wired has aerial communication that runs along KY 155 on the east side.

*Overhead Electric:* LG&E has overhead electric facilities that run along the power poles along east side of KY 155 and crosses over KY 155 south of the intersection and south of the gas station.

*Water:* Taylorsville Water Works has 12" water main that runs along KY 155 on the east side at approximately 90' offset. There is a 6" water main that runs along south side of KY 1633.

*Sewer:* Taylorsville Wastewater has 12" sewer main that runs along KY 155 on the east side.

##### 5-9018.40 – Shelby County – KY 55 @ KY 55X

*Communication:* AT&T and Charter has aerial communication that runs along KY 55X on the east side and crosses over KY 55X just north of the intersection. There is also buried communication that crosses under KY 55X just north of the intersection. Kentucky Wired has aerial communication that runs along KY 155 on the east side.

*Overhead Electric:* LG&E has overhead electric that runs along KY 55X on the east side and crosses over KY 55X just north of the intersection.

## UTILITIES AND RAIL CERTIFICATION NOTE

### Improvements at Various Intersections in Franklin, Spencer, and Shelby Counties

**Item No. 5-9018.10 - HSIP 1601(028)**

**Item No. 5-9018.20 – HSIP 5125(017)**

**Item No. 5-9018.40 – HSIP 1551(029)**

*Water:* North Shelby Water has 4” PVC Water Main that runs parallel to KY 55X on the east side and crosses under KY 55X just north of the intersection and converts to 2 – 1” PE Service Lines that runs along the entrance.

*Sewer:* Shelbyville Municipal Water and Sewer has 8” PVC sewer main that runs parallel to KY 55X along the west side of KY 55X.

**\*The Contractor is fully responsible for protection of all utilities listed above\***

**THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION**

N/A

**THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY’S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT**

N/A

**THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT**

N/A

**THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED**

No Rail Involved       Minimal Rail Involved (See Below)       Rail Involved (See Below)

## UTILITIES AND RAIL CERTIFICATION NOTE

### Improvements at Various Intersections in Franklin, Spencer, and Shelby Counties

**Item No. 5-9018.10 - HSIP 1601(028)**

**Item No. 5-9018.20 – HSIP 5125(017)**

**Item No. 5-9018.40 – HSIP 1551(029)**

### **UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

### **SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES**

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

***Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.***

## UTILITIES AND RAIL CERTIFICATION NOTE

**Improvements at Various Intersections in Franklin, Spencer, and Shelby Counties**  
**Item No. 5-9018.10 - HSIP 1601(028)**  
**Item No. 5-9018.20 – HSIP 5125(017)**  
**Item No. 5-9018.40 – HSIP 1551(029)**

### AREA UTILITIES CONTACT LIST

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
1. AT&T KY	Frank Ambrose  Scott Roche	<a href="mailto:FA2207@ATT.com">FA2207@ATT.com</a> (502) 867-8240  <a href="mailto:sr8832@att.com">sr8832@att.com</a> (502) 348-4528
2. Frankfort Plant Board – Electric	Vent Foster	<a href="mailto:vfoster@fewpb.com">vfoster@fewpb.com</a> (502) 352-4402
3. Frankfort Plant Board – CATV	Shane Holt	<a href="mailto:sholt@fewpb.com">sholt@fewpb.com</a> (502) 352-4546
4. Frankfort Plant Board – Water	David Billings	<a href="mailto:dbillings@fewpb.com">dbillings@fewpb.com</a> (502) 352-4546
5. Kentucky Wired	Chad Blevins	<a href="mailto:blevinscm@bv.com">blevinscm@bv.com</a> (913) 458-4921
6. Windstream	Mark Ware James Galvin	<a href="mailto:mark.ware@windstream.com">mark.ware@windstream.com</a> <a href="mailto:james.galvin@windstream.com">james.galvin@windstream.com</a> (270) 765-1818
7. Columbia Gas	David Lemons	<a href="mailto:dnlemons@nisource.com">dnlemons@nisource.com</a> (859) 288-0249
8. Charter	Kevin Mercer	<a href="mailto:kevin.mercer@charter.com">kevin.mercer@charter.com</a> (502) 357-4724
9. LG&E - Electric	Caroline Justice	<a href="mailto:caroline.justice@lge-ku.com">caroline.justice@lge-ku.com</a> (502) 627-3708
10. City of Taylorsville Sewer & Water	Harold Compton	<a href="mailto:hcompton@taylorsvillewater.org">hcompton@taylorsvillewater.org</a> (502) 477-3235
11. North Shelby Water	Pete Hedges	<a href="mailto:petehedges@bellsouth.net">petehedges@bellsouth.net</a> (502) 747-8942

***NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.***



# MATERIAL SUMMARY

**CONTRACT ID: 224318**

**121GR22T013-HSIP**

**0503700602201**

VERSAILLES ROAD (US 60) IMPROVEMENTS AT THE INTERSECTION OF US 60 & KY 1681 SIGNS-LIGHTING-SIGNALS, A DISTANCE OF .42 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02650	MAINTAIN & CONTROL TRAFFIC - (FRANKLIN US 60 @ KY 1681)	1.00	LS
0010	02671	PORTABLE CHANGEABLE MESSAGE SIGN - (ADDED 4-22-22)	2.00	EACH
0015	02726	STAKING - (FRANKLIN US 60 @ KY 1681)	1.00	LS
0020	06546	PAVE STRIPING-THERMO-12 IN W	429.00	LF
0025	06568	PAVE MARKING-THERMO STOP BAR-24IN	113.00	LF
0030	06574	PAVE MARKING-THERMO CURV ARROW	21.00	EACH
0035	06576	PAVE MARKING-THERMO ONLY	2.00	EACH
0040	06598	PAVEMENT MARKING REMOVAL	155.00	SQFT
0045	04811	ELECTRICAL JUNCTION BOX TYPE B	3.00	EACH
0050	04820	TRENCHING AND BACKFILLING	900.00	LF
0055	04844	CABLE-NO. 14/5C	2,250.00	LF
0060	04845	CABLE-NO. 14/7C	438.00	LF
0065	20188NS835	INSTALL LED SIGNAL-3 SECTION	7.00	EACH
0070	20266ES835	INSTALL LED SIGNAL- 4 SECTION	1.00	EACH
0075	20408ES835	INSTALL LED BEACON-12 IN	4.00	EACH
0080	23157EN	TRAFFIC SIGNAL POLE BASE	4.50	CUYD
0085	24525EC	ADVANCE WARNING FLASHER	1.00	EACH
0090	24900EC	PVC CONDUIT-1 1/4 IN-SCHEDULE 80	900.00	LF
0095	24955ED	REMOVE SIGNAL EQUIPMENT - (FRANKLIN US 60 @ KY 1681)	1.00	EACH
0100	02569	DEMOBILIZATION	1.00	LS



# MATERIAL SUMMARY

**CONTRACT ID: 224318****121GR22T013-HSIP****0510600552202**

FREEDOM'S WAY (KY 55) IMPROVEMENTS AT THE INTERSECTION OF KY 55 &amp; KY 55X SIGNS-LIGHTING-SIGNALS, A DISTANCE OF .5 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	38.00	TON
0010	02069	JPC PAVEMENT-10 IN	82.00	SQYD
0015	20550ND	SAWCUT PAVEMENT	137.00	LF
0020	02200	ROADWAY EXCAVATION	41.00	CUYD
0025	02650	MAINTAIN & CONTROL TRAFFIC - (SHELBY KY 55 @ KY 55X)	1.00	LS
0030	02671	PORTABLE CHANGEABLE MESSAGE SIGN - (ADDED 4-22-22)	2.00	EACH
0035	02726	STAKING - (SHELBY KY 55 @ KY 55X)	1.00	LS
0040	06542	PAVE STRIPING-THERMO-6 IN W	15.00	LF
0045	06543	PAVE STRIPING-THERMO-6 IN Y	39.00	LF
0050	06556	PAVE STRIPING-DUR TY 1-6 IN W	50.00	LF
0055	06557	PAVE STRIPING-DUR TY 1-6 IN Y	80.00	LF
0060	06560	PAVE STRIPING-DUR TY 1-12 IN W	284.00	LF
0065	06568	PAVE MARKING-THERMO STOP BAR-24IN	25.00	LF
0070	06598	PAVEMENT MARKING REMOVAL	299.00	SQFT
0075	22664EN	WATER BLASTING EXISTING STRIPE	101.00	LF
0080	23253ES717	PAVE MARK TY 1 TAPE CROSS-HATCH	653.00	SQFT
0085	23256ES717	PAVE MARK TY 1 TAPE -ONLY	6.00	EACH
0090	23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	45.00	LF
0095	23270ES717	PAVE MARK TY 1 TAPE-CURV ARROW	8.00	EACH
0100	06406	SBM ALUM SHEET SIGNS .080 IN	58.63	SQFT
0105	06407	SBM ALUM SHEET SIGNS .125 IN	80.67	SQFT
0110	06410	STEEL POST TYPE 1	202.00	LF
0115	06472	INSTALL SPAN MOUNTED SIGN	2.00	EACH
0120	24631EC	BARCODE SIGN INVENTORY	18.00	EACH
0125	04845	CABLE-NO. 14/7C	80.00	LF
0130	20188NS835	INSTALL LED SIGNAL-3 SECTION	3.00	EACH
0135	20266ES835	INSTALL LED SIGNAL- 4 SECTION	1.00	EACH
0140	20275EC	VIDEO DETECTION-INSTALL	1.00	EACH
0145	24908EC	INSTALL SIGNAL CONTROLLER-TY ATC	1.00	EACH
0150	24955ED	REMOVE SIGNAL EQUIPMENT - (SHELBY KY 55 @ KY 55X)	1.00	EACH
0155	04722	BRACKET 8 FT	4.00	EACH
0160	04761	LIGHTING CONTROL EQUIPMENT	1.00	EACH
0165	04820	TRENCHING AND BACKFILLING	20.00	LF
0170	04832	WIRE-NO. 12	2,600.00	LF
0175	24589ED	LED LUMINAIRE	4.00	EACH
0180	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	20.00	LF
0185	02569	DEMOBILIZATION	1.00	LS

**CONTRACT ID: 224318****121GR22T013-HSIP****0510801552201**

# MATERIAL SUMMARY

TAYLORSVILLE ROAD (KY 155) IMPROVEMENTS AT THE INTERSECTION OF KY 155 & KY 55 ASPHALT PAVEMENT & ROADWAY REHAB, A DISTANCE OF .25 MILES.

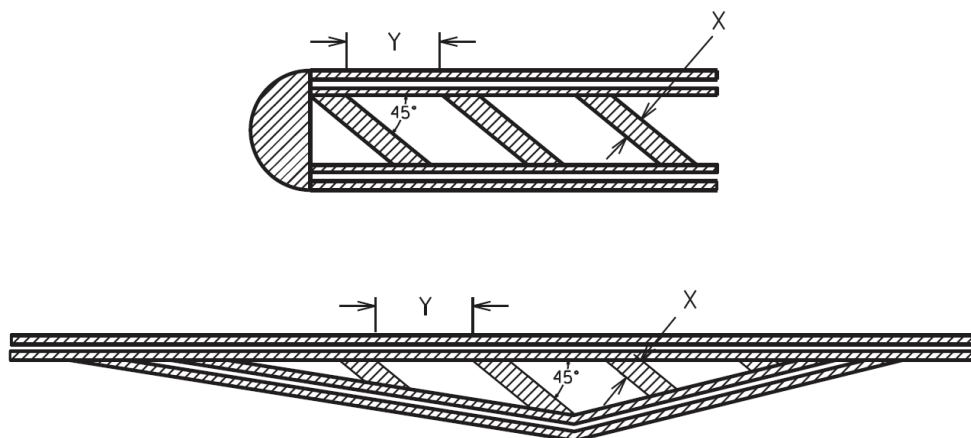
Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	98.00	TON
0010	00214	CL3 ASPH BASE 1.00D PG64-22	125.00	TON
0015	00388	CL3 ASPH SURF 0.38B PG64-22	488.00	TON
0020	02676	MOBILIZATION FOR MILL & TEXT - (SPENCER KY 155 @ KY 55)	1.00	LS
0025	02677	ASPHALT PAVE MILLING & TEXTURING	469.00	TON
0030	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	3.20	TON
0035	01941	MOUNTABLE MEDIAN TYPE 4	61.00	SQYD
0040	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH
0045	02159	TEMP DITCH	663.00	LF
0050	02160	CLEAN TEMP DITCH	331.00	LF
0055	02650	MAINTAIN & CONTROL TRAFFIC - (SPENCER KY 155 @ KY 55)	1.00	LS
0060	02671	PORTABLE CHANGEABLE MESSAGE SIGN - (ADDED 4-22-22)	2.00	EACH
0065	02697	EDGELINE RUMBLE STRIPS	2,500.00	LF
0070	02701	TEMP SILT FENCE	663.00	LF
0075	02703	SILT TRAP TYPE A	2.00	EACH
0080	02704	SILT TRAP TYPE B	2.00	EACH
0085	02705	SILT TRAP TYPE C	2.00	EACH
0090	02706	CLEAN SILT TRAP TYPE A	2.00	EACH
0095	02707	CLEAN SILT TRAP TYPE B	2.00	EACH
0100	02708	CLEAN SILT TRAP TYPE C	2.00	EACH
0105	02726	STAKING - (SPENCER KY 155 @ KY 55)	1.00	LS
0110	05952	TEMP MULCH	4,923.00	SQYD
0115	05953	TEMP SEEDING AND PROTECTION	3,692.00	SQYD
0120	05963	INITIAL FERTILIZER	.01	TON
0125	05964	MAINTENANCE FERTILIZER	.01	TON
0130	05985	SEEDING AND PROTECTION	285.00	SQYD
0135	05992	AGRICULTURAL LIMESTONE	.18	TON
0140	06404	FLEXIBLE DELINEATOR POST-M/Y	55.00	EACH
0145	06540	PAVE STRIPING-THERMO-4 IN W	3,238.00	LF
0150	06541	PAVE STRIPING-THERMO-4 IN Y	3,050.00	LF
0155	06547	PAVE STRIPING-THERMO-12 IN Y	60.00	LF
0160	06568	PAVE MARKING-THERMO STOP BAR-24IN	36.00	LF
0165	06569	PAVE MARKING-THERMO CROSS-HATCH	775.00	SQFT
0170	06572	PAVE MARKING-DOTTED LANE EXTEN	55.00	LF
0175	06574	PAVE MARKING-THERMO CURV ARROW	12.00	EACH
0180	20458ES403	CENTERLINE RUMBLE STRIPS	920.00	LF
0185	21373ND	REMOVE SIGN	2.00	EACH
0190	24097EC	THERMO RUMBLE STRIPS TY 2	96.00	LF
0195	04792	CONDUIT-1 IN	15.00	LF
0200	04811	ELECTRICAL JUNCTION BOX TYPE B	1.00	EACH
0205	04820	TRENCHING AND BACKFILLING	40.00	LF
0210	04830	LOOP WIRE	304.00	LF
0215	04845	CABLE-NO. 14/7C	635.00	LF
0220	04850	CABLE-NO. 14/1 PAIR	240.00	LF

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0225	04895	LOOP SAW SLOT AND FILL	107.00	LF
0230	20188NS835	INSTALL LED SIGNAL-3 SECTION	9.00	EACH
0235	24900EC	PVC CONDUIT-1 1/4 IN-SCHEDULE 80	25.00	LF
0240	24908EC	INSTALL SIGNAL CONTROLLER-TY ATC	1.00	EACH
0245	24955ED	REMOVE SIGNAL EQUIPMENT - (SPENCER KY 155 @ KY 55)	1.00	EACH
0250	04722	BRACKET 8 FT	4.00	EACH
0255	04761	LIGHTING CONTROL EQUIPMENT	1.00	EACH
0260	04820	TRENCHING AND BACKFILLING	20.00	LF
0265	04832	WIRE-NO. 12	2,250.00	LF
0270	24589ED	LED LUMINAIRE	4.00	EACH
0275	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	20.00	LF
0280	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0285	02381	REMOVE GUARDRAIL	538.00	LF
0290	02391	GUARDRAIL END TREATMENT TYPE 4A	3.00	EACH
0295	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	561.00	LF
0300	02569	DEMOBILIZATION	1.00	LS

### CROSS-HATCH PAVEMENT MARKINGS DETAIL

#### TYPICAL CROSS-HATCH MARKINGS



The cross-hatch pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each cross-hatch installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the cross-hatch pavement markings as necessary so that a minimum of three (3) cross-hatch markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

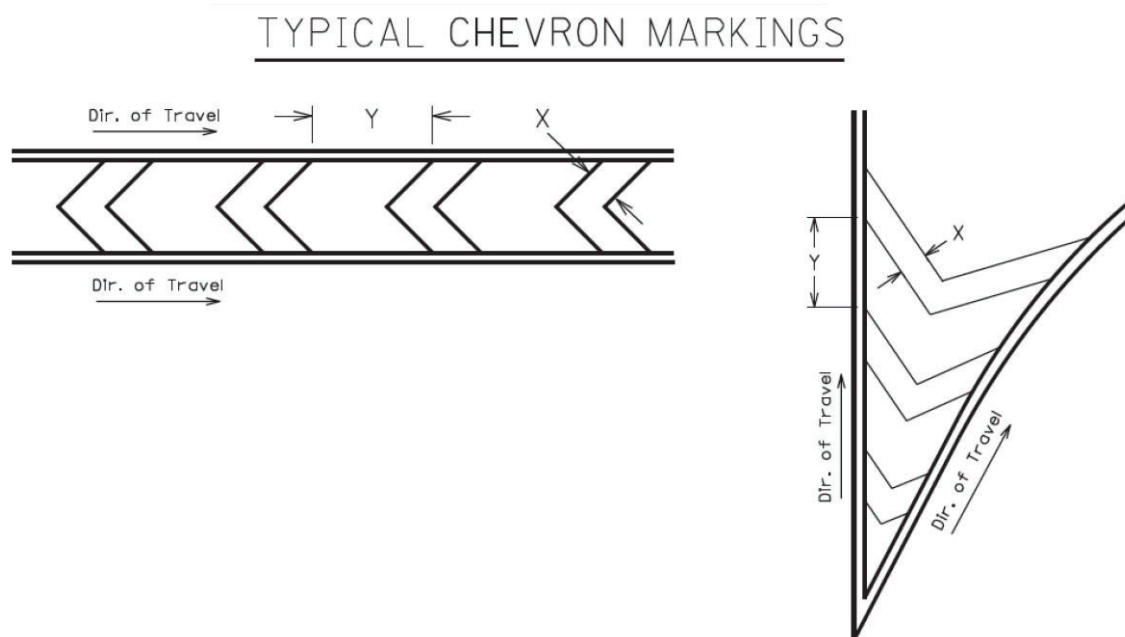
Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the finished in-place area of Cross-Hatch Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between cross-hatching. See Section 717.04 for additional measurement information.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Cross-Hatch Pavement Markings under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
06569	Pave Marking-Thermo Cross-Hatch	Square Foot
23253ES717	Pave Mark TY 1 Tape Cross Hatch	Square Foot

**CHEVRON PAVEMENT MARKINGS DETAIL**



The chevron pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each chevron installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the chevron pavement markings as necessary so that a minimum of three (3) chevron markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

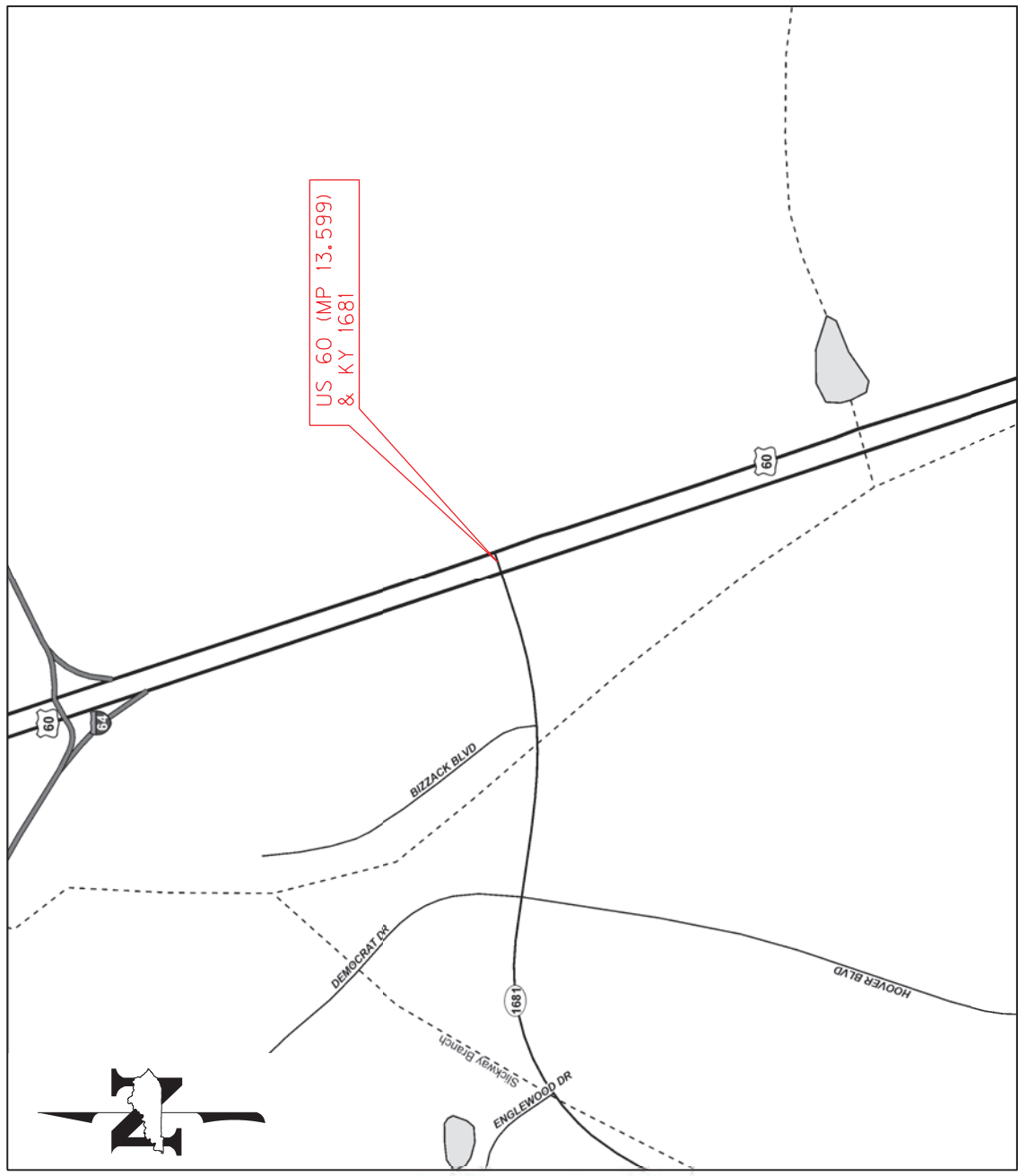
Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the finished in-place area of Chevron Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between the chevrons. See Section 717.04 for additional measurement information.

When listed as a bid item, the Department will make payment for the completed and accepted quantities of Chevron Pavement Markings under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24679ED	Pave Mark Thermo Chevron	Square Foot
26166ES717	Pave Mark TY 1 Tape Chevron	Square Foot

COUNTY OF	ITEM NO.
FRANKLIN	5-9018.10



Commonwealth of Kentucky  
 DEPARTMENT OF HIGHWAYS

PLANS OF  
 PROPOSED PROJECT  
**FRANKLIN COUNTY**  
 US 60 & KY 1681



<b>FRANKLIN COUNTY</b> <b>US 60 (VERSAILLES ROAD) @ KY 1681 (DUNCAN ROAD)</b> <b>ITEM NO. 5-9018.10</b> <b>GENERAL SUMMARY</b>			
ITEM NUMBER	ITEM	UNIT	QUANTITY
2569	DEMOBILIZATION	LS	1
2650	MAINTAIN & CONTROL TRAFFIC (US 60 @ KY 1681)	LS	1
2726	STAKING (US 60 @ KY 1681)	LS	1
4811	ELECTRICAL JUNCTION BOX TYPE B (4)	EACH	3
4820	TRENCHING AND BACKFILLING (4)	LF	900
4844	CABLE-NO. 14/5C (4)	LF	2,250
4845	CABLE-NO. 14/7C (3)	LF	438
6546	PAVE STRIPING-THERMO-12 IN W (2)	LF	429
6568	PAVE MARKING-THERMO STOP BAR-24IN (2)	LF	113
6574	PAVE MARKING-THERMO CURV ARROW (2)	EACH	21
6576	PAVE MARKING-THERMO ONLY (2)	EACH	2
6598	PAVEMENT MARKING REMOVAL (2)	SQFT	155
20188NS835	INSTALL LED SIGNAL - 3 SECTION (1)	EACH	7
20266ES835	INSTALL LED SIGNAL - 4 SECTION (1)	EACH	1
20408ES835	INSTALL LED BEACON-12 IN (4)	EACH	4
23157EN	TRAFFIC SIGNAL POLE BASE (4)	CUYD	4.5
24900EC	PVC CONDUIT-1 1/4 IN-SCHEDULE 80 (4)	LF	900
24525EC	ADVANCE WARNING FLASHER (4)	EACH	1
24955ED	REMOVE SIGNAL EQUIPMENT (US 60 @ KY 1681)	EACH	1

- ① CARRIED OVER FROM THE SIGNAL SUMMARY
- ② CARRIED OVER FROM THE STRIPING / PAVEMENT MARKING SUMMARY
- ③ FOR THE WIRING OF THE PROPOSED 4-SECTION FLASHING YELLOW SIGNAL HEAD AND 3-SECTION SIGNAL HEAD
- ④ CARRIED OVER FROM THE ADVANCE WARNING FLASHER TRAFFIC SIGNAL PLANS ESTIMATE OF QUANTITIES

FRANKLIN COUNTY US 60 (VERSAILLES RD) & KY 1681 (DUNCAN RD) ITEM NO. 5-9018.10 STRIPING / PAVEMENT MARKING SUMMARY					
PROPOSED STRIPING					
BEGIN		END		LENGTH	LF
STATION	OFFSET	STATION	OFFSET		
<b>US 60 SOUTHBOUND APPROACH</b>					
12" Dotted Lane Line Extensions (PAVE STRIPING-THERMO-12 IN W)					
181+25	32' RIGHT	183+90	32' RIGHT	265	67
12" Single Solid White Line (PAVE STRIPING-THERMO-12 IN W)					
183+90	32' RIGHT	187+52	32' RIGHT	362	362
<b>REFRESH EXISTING STOP BARS (THERMO STOP BAR - 24 IN) - WHITE</b>					
STATION	OFFSET	DESCRIPTION			LF
187+50	8' RIGHT TO 47' RIGHT	US 60 SOUTHBOUND APPROACH @ DUNCAN RD			39
188+60	32' LEFT TO 2' RIGHT	US 60 NORTHBOUND APPROACH @ DUNCAN RD			34
49+40	0' TO 40' LEFT	KY 1681 EASTBOUND APPROACH @ US 60			40
<b>PAVEMENT MARKINGS - ARROWS</b>					
DESCRIPTION					EACH
<b>US 60 SOUTHBOUND APPROACH @ DUNCAN RD</b>					
Thermoplastic Curve Arrow					3
Thermoplastic "ONLY"					2
<b>US 60 NORTHBOUND APPROACH @ DUNCAN RD</b>					
Thermoplastic Curve Arrow					4
<b>KY 1681 EASTBOUND APPROACH @ US 60</b>					
Thermoplastic Curve Arrow					14
<b>PAVEMENT MARKING REMOVAL</b>					
STATION	OFFSET	DESCRIPTION			SF
188+92	4' LEFT	US 60 NORTHBOUND LEFT TURN ARROW			15.5
189+76	4' LEFT	US 60 NORTHBOUND LEFT TURN ARROW			15.5
190+56	4' LEFT	US 60 NORTHBOUND LEFT TURN ARROW			15.5
46+69	31' RIGHT	KY 1681 EASTBOUND RIGHT TURN ARROW			15.5
47+80	7' RIGHT	KY 1681 EASTBOUND LEFT TURN ARROW			15.5
47+80	19' RIGHT	KY 1681 EASTBOUND LEFT TURN ARROW			15.5
47+80	31' RIGHT	KY 1681 EASTBOUND RIGHT TURN ARROW			15.5
49+16	7' RIGHT	KY 1681 EASTBOUND LEFT TURN ARROW			15.5
49+16	19' RIGHT	KY 1681 EASTBOUND LEFT TURN ARROW			15.5
49+16	31' RIGHT	KY 1681 EASTBOUND RIGHT TURN ARROW			15.5
<b>STRIPING / PAVEMENT MARKING SUMMARY</b>					
BID ITEM	DESCRIPTION		UNIT	QUANTITY	
6546	PAVE STRIPING-THERMO-12 IN W		LF	429	
6568	PAVE MARKING-THERMO STOP BAR-24 IN		LF	113	
6574	PAVE MARKING-THERMO CURV ARROW		EACH	21	
6576	PAVE MARKING-THERMO ONLY		EACH	2	
6598	PAVEMENT MARKING REMOVAL		SQFT	155	



**Signal Head Replacements for: US 60 & KY 1681**

**REPLACE EXISTING SIGNAL HEADS**

SIGNAL HEAD NUMBER	STATION*	OFFSET*	DESCRIPTION
5A	187+78	0'	4 Section with LT Turn Arrows and Reflective Backplate
2A	187+80	12' LT	3 Section with Reflective Backplate
2B	187+82	24' LT	3 Section with Reflective Backplate
8A	188+16	62' LT	3 Section with LT Turn Arrows and Reflective Backplate
8B	188+28	62' LT	3 Section with LT Turn Arrows and Reflective Backplate
8C	188+40	62' LT	3 Section with Reflective Backplate
6A	188+70	14' RT	3 Section with Reflective Backplate
6B	188+72	26' RT	3 Section with Reflective Backplate

\* STATION AND OFFSET ARE APPROXIMATE AND ARE FOR INFORMATION ONLY. ALIGN SIGNAL HEADS WITH EXISTING SPAN WIRES AND DRIVING LANES.

NOTE: THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. FINAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

**SIGNAL HEAD REPLACEMENTS**

Signal Heads For NB US 60

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
4 Section with LT Turn Arrows and Reflective Backplate (5A)		1		2		1
3 Section with Reflective Backplate (2A)	1		1		1	
3 Section with Reflective Backplate (2B)	1		1		1	
<b>Totals</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>

ALL QUANTITIES ARE CARRIED OVER TO GENERAL SUMMARY

Signal Heads For SB US 60

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with Reflective Backplate (6A)	1		1		1	
3 Section with Reflective Backplate (6B)	1		1		1	
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>

Signal Heads For EB KY 1681

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with LT Turn Arrows and Reflective Backplate (8A)		1		1		1
3 Section with LT Turn Arrows and Reflective Backplate (8B)		1		1		1
3 Section with Reflective Backplate (8C)	1		1		1	
<b>Totals</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>

Tim Tharpe - Director

**DIVISION OF TRAFFIC OPERATIONS  
PROJECT MATERIALS RELEASE FORM  
FOR SIGNALS AND LIGHTING**

Phone (502) 564-3020  
FAX (502) 564-7759

**Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.**

Item Number: 5-9018.10

County: Franklin

Description: US 60 @ KY 1681

Signal Enhancements & Advance Warning Flasher

**Cabinets      Master code**

**Signals**

7	T-02-0009	Siemen 3 Section, 12 inch Signal
7	T-02-0032	Siemen 3 Section Backplate
1	T-02-0033	Siemen 4 Section 12 inch Signal (poly)
1	T-02-0043	Siemen 4 Section Straight Signal Backplate
4	T-02-0080	12 inch Beacon
3	T-02-0300	LED Module 12" Red Arrow
4	T-02-0310	LED Module 12" Yellow Arrow
3	T-02-0320	LED Module 12" Green Arrow
5	T-02-0330	LED Module 12" Red
9	T-02-0340	LED Module 12" Yellow
5	T-02-0350	LED Module 12" Green

**Special Items**

2	T-02-0645	Mast Arm Sign Hangers 48"
1	T-02-0646	Mast Arm Dampers

**Poles**

**REQUIRED**

Electrical Contractor Name \_\_\_\_\_

Electrical Contractor Supervisor \_\_\_\_\_

Contact number for Supervisor \_\_\_\_\_

Project Engineer \_\_\_\_\_

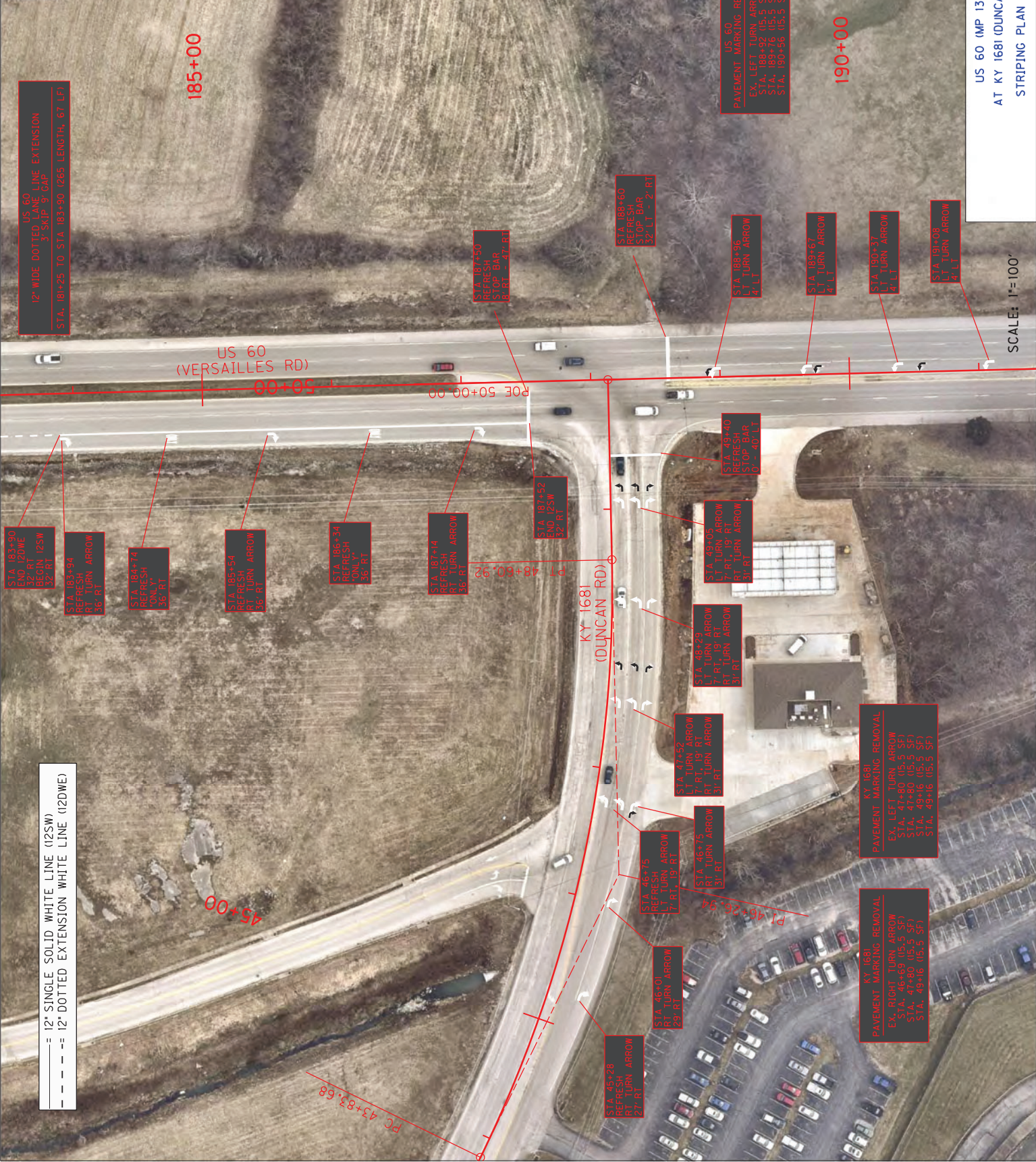
Contact number for Project Engineer \_\_\_\_\_

Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project

Signature of Project Engineer or Designee \_\_\_\_\_



COUNTY OF	FRANKLIN
ITEM NO.	5-9018.10



== 12" SINGLE SOLID WHITE LINE (12SW)  
 --- 12" DOTTED EXTENSION WHITE LINE (12DWE)

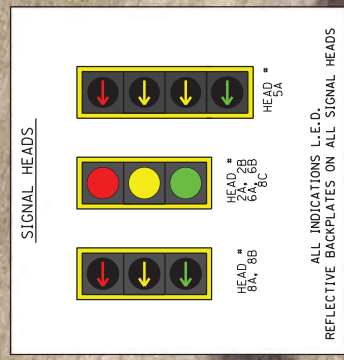
US 60  
 12" WIDE DOTTED LANE LINE EXTENSION  
 3' SKIP 9' GAP  
 STA. 181+25 TO STA. 183+90 (265 LENGTH, 67 LF)

US 60 (MP 13.599)  
 AT KY 1681 (DUNCAN ROAD)  
 STRIPING PLAN SHEET

SCALE: 1"=100'



COUNTY OF	ITEM NO.
FRANKLIN	5-9018.10

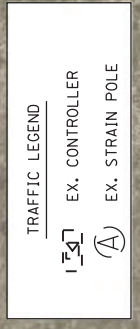


**REPLACE EXISTING SIGNAL HEADS**

SIGNAL HEAD #	STATION	OFFSET	FACING TRAFFIC	TYPE
5A	187+78	0'	NB	4 SECT. FLASHING YELLOW ARROW W/ REFLECT. BP
2A	187+80	12' LT	NB	3 SECTION W/ REFLECT. BP
2B	187+82	24' LT	NB	3 SECTION W/ REFLECT. BP
8A	188+16	62' LT	EB	3 SECTION W/ LT TURN ARROWS & REFLECT. BP
8B	188+28	62' LT	EB	3 SECTION W/ LT TURN ARROWS & REFLECT. BP
8C	188+40	62' LT	EB	3 SECTION W/ REFLECT. BP
6A	188+70	14' RT	SB	3 SECTION W/ REFLECT. BP
6B	188+72	26' RT	SB	3 SECTION W/ REFLECT. BP

**WIRING SCHEDULE**

CABLE	ORIGIN	ENDING	CONNECTING
1-#14/7C	CONTROLLER	SH #5A	SH #5A
1-#14/7C	CONTROLLER	SH #2A	SH #2A



US 60 (MP 13.599)  
 AT KY 1681 (DUNCAN ROAD)  
 SIGNAL MODIFICATION PLAN SHEET

SCALE: 1"=100'



121GR22T013-LSIP

COUNTY OF  
**FRANKLIN**

ITEM NO.  
**5-908.10**

SHEET  
**11**

**TRAFFIC SIGNAL ESTIMATE OF QUANTITIES**

TOTAL UNITS CODE ITEM DESCRIPTION

3	EACH	4811	ELECTRICAL JUNCTION BOX TYPE B
900	LIN FT	4820	TRENCHING AND BACKFILLING
2,250	LIN FT	4844	CABLE-NO. 14/5C
4	EACH	20408E5835	INSTALL LED BEACON-12 IN
4.5	CU YD	23157EN	TRAFFIC SIGNAL POLE BASE
900	LIN FT	24900EC	PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80
1	EACH	24525EC	ADVANCE WARNING FLASHER

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTCS DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTCS PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT TED SWANSEGAR OR KERRY ROBERTS WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (5502-782-5540/502-782-5536) OR EMAIL (TED.SWANSEGAR@KY.GOV/KERRY.ROBERTS@KY.GOV).
2. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.
3. CONTRACTOR SHALL ALSO CONTACT THE SIGNAL SYSTEM BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL JOE.THOMPSON@KY.GOV/LARRY.JRISH@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.
4. MATERIALS FOR THE DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP TO FACILITATE THIS PROCESS. ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

**MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723**

ADVANCE WARNING FLASHER - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE 18x68 INCH STEEL STRAPLINE POSTS, 24x44 INCH SPAN DENIED SIGN, CONDUIT FITTINGS AND STRAPS OR ANY ASSOCIATED SIGN MOUNTING HARDWARE AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK.

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION 03.02 POLES AND BASES INSTALLATION. B) REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING:

MAXIMUM SERVICE FORCES	DIAMETER (IN.)	DRILLED SHAFT DATA				VERTICAL BARS TOTAL	TIES OR SPIRAL BAR SIZE	SPACING OR PITCH (IN.)
		SOIL	ROCK	SOIL	ROCK			
0-9.9	36	6	6	6.5	8	4	12	
10-19.9	36	8	6	6.5	8	4	12	
20-29.9	36	9.5	6	6.5	8	4	12	
30-39.9	36	11	6	6.5	8	4	12	
40-49.9	36	12.5	6	6.5	8	4	12	
50-59.9	36	15	6	6.5	8	4	12	
60-69.9	36	17.5	6	6.5	8	4	12	
70-79.9	36	21.5	6	6.5	8	4	12	
80-89.9	36	25.5	6	6.5	8	4	12	
90-99.9	36	29.5	6	6.5	8	4	12	
100-199.9	48	21.5	7.5	7.5	9	4	12	
200-299.9	48	25.5	7.5	7.5	9	4	12	
300-399.9	48	29.5	7.5	7.5	9	4	12	
400-499.9	48	33.5	7.5	7.5	9	4	12	
500-599.9	48	37.5	7.5	7.5	9	4	12	
600-699.9	48	41.5	7.5	7.5	9	4	12	
700-799.9	48	45.5	7.5	7.5	9	4	12	
800-899.9	48	49.5	7.5	7.5	9	4	12	
900-999.9	48	53.5	7.5	7.5	9	4	12	
1000-1099.9	48	57.5	7.5	7.5	9	4	12	
1100-1199.9	48	61.5	7.5	7.5	9	4	12	
1200-1299.9	48	65.5	7.5	7.5	9	4	12	
1300-1399.9	48	69.5	7.5	7.5	9	4	12	
1400-1499.9	48	73.5	7.5	7.5	9	4	12	
1500-1599.9	48	77.5	7.5	7.5	9	4	12	
1600-1699.9	48	81.5	7.5	7.5	9	4	12	
1700-1799.9	48	85.5	7.5	7.5	9	4	12	
1800-1899.9	48	89.5	7.5	7.5	9	4	12	
1900-1999.9	48	93.5	7.5	7.5	9	4	12	
2000-2099.9	48	97.5	7.5	7.5	9	4	12	
2100-2199.9	48	101.5	7.5	7.5	9	4	12	
2200-2299.9	48	105.5	7.5	7.5	9	4	12	
2300-2399.9	48	109.5	7.5	7.5	9	4	12	
2400-2499.9	48	113.5	7.5	7.5	9	4	12	
2500-2599.9	48	117.5	7.5	7.5	9	4	12	
2600-2699.9	48	121.5	7.5	7.5	9	4	12	
2700-2799.9	48	125.5	7.5	7.5	9	4	12	
2800-2899.9	48	129.5	7.5	7.5	9	4	12	
2900-2999.9	48	133.5	7.5	7.5	9	4	12	
3000-3099.9	48	137.5	7.5	7.5	9	4	12	
3100-3199.9	48	141.5	7.5	7.5	9	4	12	
3200-3299.9	48	145.5	7.5	7.5	9	4	12	
3300-3399.9	48	149.5	7.5	7.5	9	4	12	
3400-3499.9	48	153.5	7.5	7.5	9	4	12	
3500-3599.9	48	157.5	7.5	7.5	9	4	12	
3600-3699.9	48	161.5	7.5	7.5	9	4	12	
3700-3799.9	48	165.5	7.5	7.5	9	4	12	
3800-3899.9	48	169.5	7.5	7.5	9	4	12	
3900-3999.9	48	173.5	7.5	7.5	9	4	12	
4000-4099.9	48	177.5	7.5	7.5	9	4	12	
4100-4199.9	48	181.5	7.5	7.5	9	4	12	
4200-4299.9	48	185.5	7.5	7.5	9	4	12	
4300-4399.9	48	189.5	7.5	7.5	9	4	12	
4400-4499.9	48	193.5	7.5	7.5	9	4	12	
4500-4599.9	48	197.5	7.5	7.5	9	4	12	
4600-4699.9	48	201.5	7.5	7.5	9	4	12	
4700-4799.9	48	205.5	7.5	7.5	9	4	12	
4800-4899.9	48	209.5	7.5	7.5	9	4	12	
4900-4999.9	48	213.5	7.5	7.5	9	4	12	
5000-5099.9	48	217.5	7.5	7.5	9	4	12	
5100-5199.9	48	221.5	7.5	7.5	9	4	12	
5200-5299.9	48	225.5	7.5	7.5	9	4	12	
5300-5399.9	48	229.5	7.5	7.5	9	4	12	
5400-5499.9	48	233.5	7.5	7.5	9	4	12	
5500-5599.9	48	237.5	7.5	7.5	9	4	12	
5600-5699.9	48	241.5	7.5	7.5	9	4	12	
5700-5799.9	48	245.5	7.5	7.5	9	4	12	
5800-5899.9	48	249.5	7.5	7.5	9	4	12	
5900-5999.9	48	253.5	7.5	7.5	9	4	12	
6000-6099.9	48	257.5	7.5	7.5	9	4	12	
6100-6199.9	48	261.5	7.5	7.5	9	4	12	
6200-6299.9	48	265.5	7.5	7.5	9	4	12	
6300-6399.9	48	269.5	7.5	7.5	9	4	12	
6400-6499.9	48	273.5	7.5	7.5	9	4	12	
6500-6599.9	48	277.5	7.5	7.5	9	4	12	
6600-6699.9	48	281.5	7.5	7.5	9	4	12	
6700-6799.9	48	285.5	7.5	7.5	9	4	12	
6800-6899.9	48	289.5	7.5	7.5	9	4	12	
6900-6999.9	48	293.5	7.5	7.5	9	4	12	
7000-7099.9	48	297.5	7.5	7.5	9	4	12	
7100-7199.9	48	301.5	7.5	7.5	9	4	12	
7200-7299.9	48	305.5	7.5	7.5	9	4	12	
7300-7399.9	48	309.5	7.5	7.5	9	4	12	
7400-7499.9	48	313.5	7.5	7.5	9	4	12	
7500-7599.9	48	317.5	7.5	7.5	9	4	12	
7600-7699.9	48	321.5	7.5	7.5	9	4	12	
7700-7799.9	48	325.5	7.5	7.5	9	4	12	
7800-7899.9	48	329.5	7.5	7.5	9	4	12	
7900-7999.9	48	333.5	7.5	7.5	9	4	12	
8000-8099.9	48	337.5	7.5	7.5	9	4	12	
8100-8199.9	48	341.5	7.5	7.5	9	4	12	
8200-8299.9	48	345.5	7.5	7.5	9	4	12	
8300-8399.9	48	349.5	7.5	7.5	9	4	12	
8400-8499.9	48	353.5	7.5	7.5	9	4	12	
8500-8599.9	48	357.5	7.5	7.5	9	4	12	
8600-8699.9	48	361.5	7.5	7.5	9	4	12	
8700-8799.9	48	365.5	7.5	7.5	9	4	12	
8800-8899.9	48	369.5	7.5	7.5	9	4	12	
8900-8999.9	48	373.5	7.5	7.5	9	4	12	
9000-9099.9	48	377.5	7.5	7.5	9	4	12	
9100-9199.9	48	381.5	7.5	7.5	9	4	12	
9200-9299.9	48	385.5	7.5	7.5	9	4	12	
9300-9399.9	48	389.5	7.5	7.5	9	4	12	
9400-9499.9	48	393.5	7.5	7.5	9	4	12	
9500-9599.9	48	397.5	7.5	7.5	9	4	12	
9600-9699.9	48	401.5	7.5	7.5	9	4	12	
9700-9799.9	48	405.5	7.5	7.5	9	4	12	
9800-9899.9	48	409.5	7.5	7.5	9	4	12	
9900-9999.9	48	413.5	7.5	7.5	9	4	12	

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT (CONSTRUCTION ONLY)  
REVISION: REPLACE THE PARAGRAPH WITH THE FOLLOWING:  
THE DEPARTMENT WILL MEASURE THE QUANTITY BY EACH. THE DEPARTMENT WILL NOT MEASURE BACKFILLING AND THE DISPOSAL OR TRANSPORTATION OF EQUIPMENT AND MATERIALS ASSOCIATED WITH ANY STRUCTURAL OR ELECTRICAL COMPONENT OF THE SIGNAL SYSTEM INCLUDING, BUT NOT LIMITED TO POLE BASES, POLES, JUNCTION BOXES, AND THE DISPOSAL OF POLES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

MATERIAL NOTES THAT ARE CONTRARY TO SECTION 835

SUBSECTION: 835.21 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33:  
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL) THICK.

DESIGNED BY: CHARLIE #  
DATE SUBMITTED: 3/4/2022

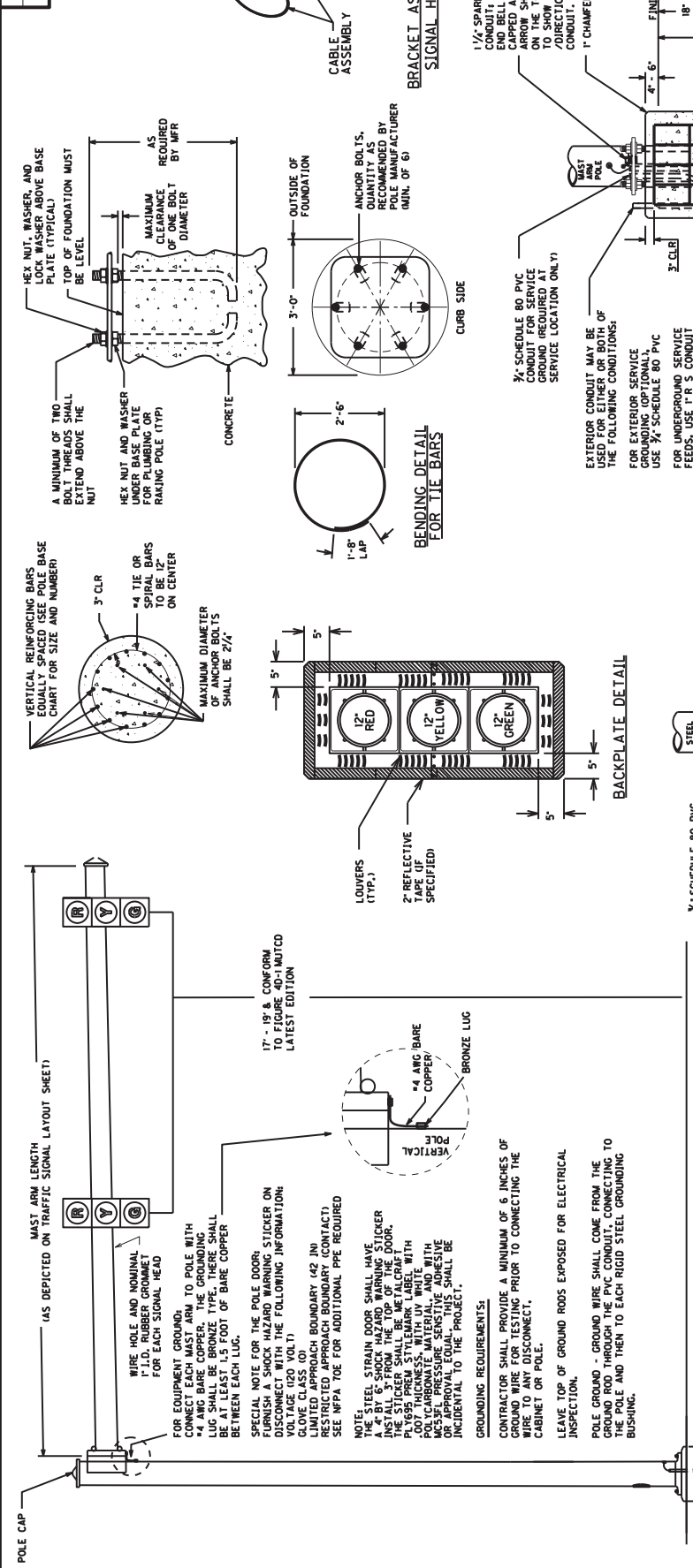
**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

COUNTY OF  
**FRANKLIN**

PROJECT NUMBER:  
\_\_\_\_\_

TRAFFIC SIGNAL ESTIMATE OF QUANTITIES MEASUREMENT, CONST. AND MISC NOTES

COUNTY OF	FRANKLIN
ITEM NO.	5-90184-10
SHEET	T2



**MONOTUBE MAST ARM POLE DETAIL**

SEE MAST ARM POLE BASE DETAIL FOR MATERIALS AND INSTALLATION REQUIREMENTS

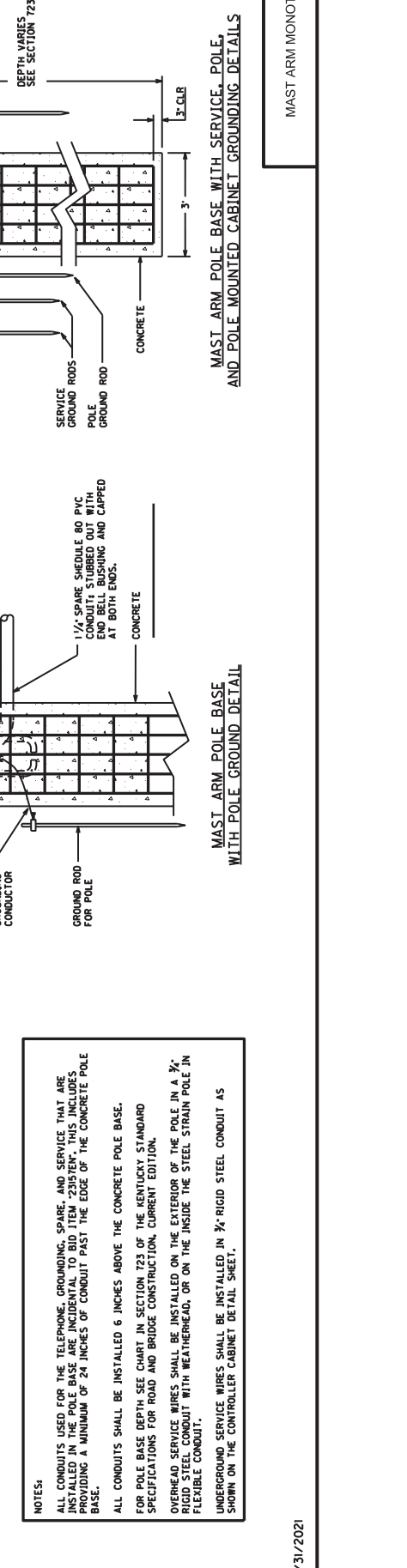
**NOTES:**  
ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED IN THE POLE SHALL BE RIGID STEEL CONDUIT WITH THE EXCEPTED END PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE BASE.  
ALL CONDUITS SHALL BE INSTALLED 6 INCHES ABOVE THE CONCRETE POLE BASE.  
FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.  
OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A 3/4" RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE CONDUIT.  
UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN 3/4" RIGID STEEL CONDUIT AS SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.

FOR EQUIPMENT GROUND SIGNAL/PEL HEADS:  
CONNECT GREEN WIRE FROM SC7/C INSA CABLE TO CONNECTOR THAT WILL BE INSTALLED UNDER ONE OF THE BOLTS FOR THE TRI STUD ASSEMBLY THAT CONNECTS THE HEADS. WE RECOMMEND BUT NOT A CLOSED BARREL FOR THIS CONNECTION.

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.

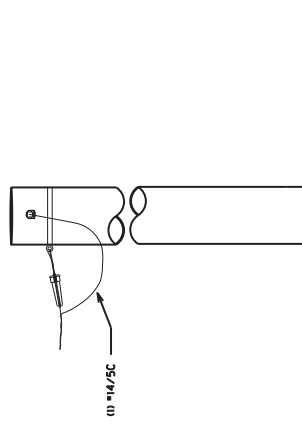
POLE GROUND - GROUND WIRE SHALL COME FROM THE POLE FROM WHICH THE PVC CONDUIT CONNECTING TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.



8/31/2021



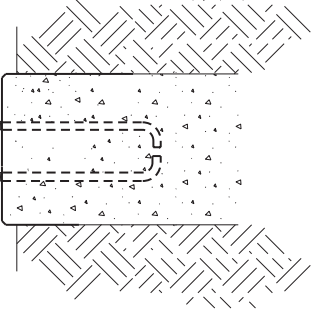
COUNTY OF	FRANKLIN
ITEM NO.	5-900B.10
SHEET	14



SEE PLAN SHEET FOR  
 POLE AND ATTACHMENT  
 HEIGHTS

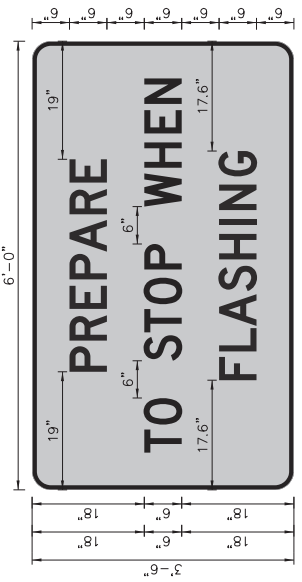
(2) 1/2" (MIN.) RIGID STEEL CONDUITS  
 FOR SIGNAL WIRES. CONTRACTOR SHALL  
 MODIFY SIZE/QUANTITY OF CONDUITS  
 IN ORDER TO COMPLY WITH NEC  
 REQUIREMENTS

SEE POLE BASE DETAIL SHEET  
 FOR SPARE CONDUIT REQUIREMENTS  
 AND GROUNDING DETAILS



STEEL POLE FOR OVERHEAD AWF

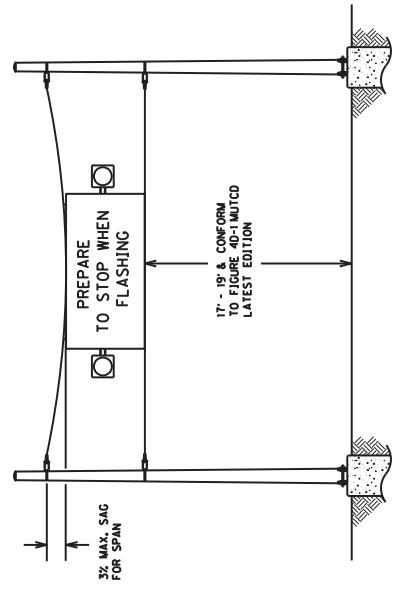
ADVANCED WARNING FLASHER DETAIL



SPECIAL  
 72" X 44"  
 .125 GA. ALUM.  
 BLACK LEGEND  
 6" SERIES 'D' LETTERS  
 YELLOW BACKGROUND  
 TYPE XI  
 YELLOW (SEE APPROVED  
 PRODUCTS LIST)

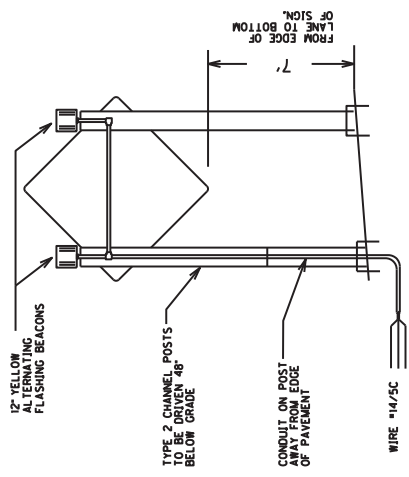


SPECIAL  
 48" X 48"  
 .125 GA. ALUM.  
 BLACK LEGEND  
 6" SERIES 'C' LETTERS  
 YELLOW BACKGROUND  
 TYPE XI  
 YELLOW (SEE APPROVED  
 PRODUCTS LIST)



ADVANCED WARNING FLASHER SPAN DETAIL

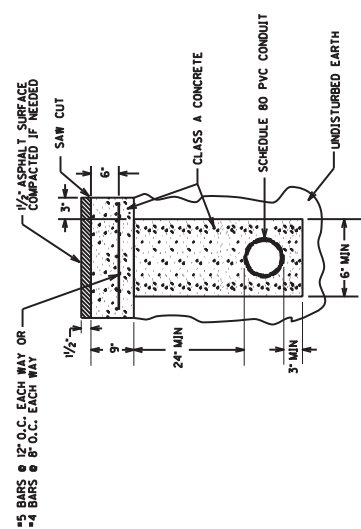
\*\* FOR MAST ARM INSTALLATION, INSTALL SIGN/BEACONS  
 ON ARM WITH SUPPLIED HANGERS 17-19' ABOVE FINISHED  
 GRADE.



ADVANCE WARNING FLASHER DETAIL

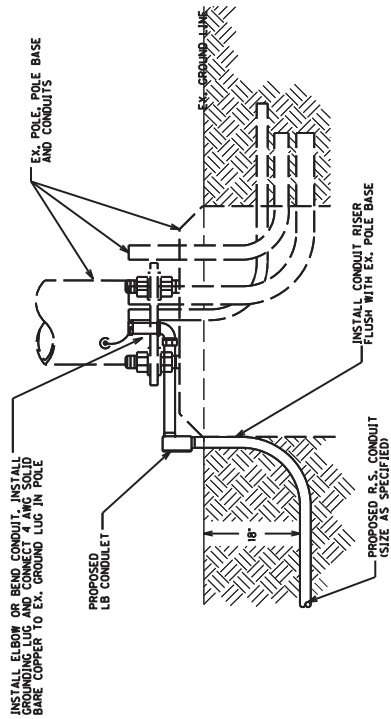


COUNTY OF	ITEM NO.	SHEET
FRANKLIN	5-9008.10	15



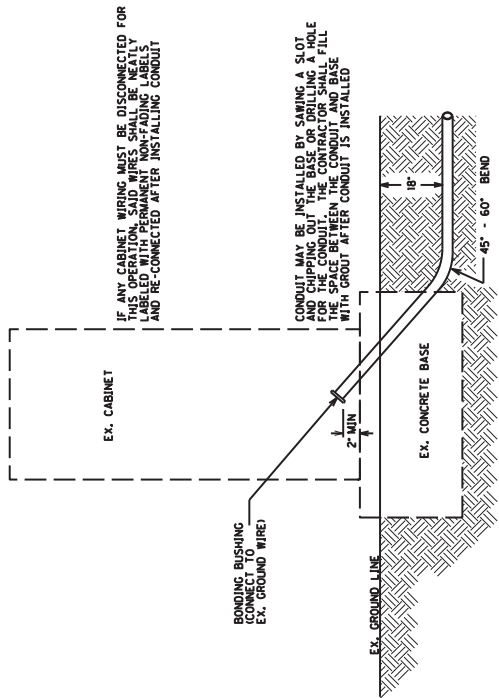
OPEN CUT PAVEMENT DETAIL

1/2" ASPHALT SURFACE  
COMPACTED IF NEEDED  
SAW CUT  
CLASS A CONCRETE  
SCHEDULE 80 PVC CONDUIT  
UNDISTURBED EARTH  
6" MIN  
3" MIN  
24" MIN  
3" MIN



CONDUIT INSTALLATION IN EX. POLE BASE

INSTALL ELBOW OR BEND CONDUIT, INSTALL GROUNDING LUG AND CONNECT 4 AWG SOLID BARE COPPER TO EX. GROUND LUG IN POLE  
EX. POLE, POLE BASE AND CONDUITS  
EX. GROUND LINE  
PROPOSED LB CONDUIT  
PROPOSED R.S. CONDUIT (SIZE AS SPECIFIED)  
INSTALL CONDUIT RISER FLUSH WITH EX. POLE BASE  
18"



CONDUIT INSTALLATION IN EX. CABINET BASE


IF ANY CABINET WIRING MUST BE DISCONNECTED FOR THIS OPERATION, SAID WIRES SHALL BE NEATLY TIED TOGETHER AND RE-CONNECTED AFTER INSTALLING CONDUIT  
CONDUIT MAY BE INSTALLED BY SAWING A SLOT AND CHIPPING OUT THE BASE OR DRILLING A HOLE IN THE CONDUIT AND FILL THE SPACE BETWEEN THE CONDUIT AND BASE WITH GROUT AFTER CONDUIT IS INSTALLED  
24" MIN  
18"  
45° - 60° BEND  
EX. GROUND LINE  
EX. CONCRETE BASE  
BONDING BUSHING (CONNECT TO EX. GROUND WIRE)

CONDUIT INSTALLATIONS IN EXISTING LOCATIONS

121GR22T013-LSIP

COUNTY OF	FRANKLIN
ITEM NO.	5-9018-20
SHEET NO.	T6

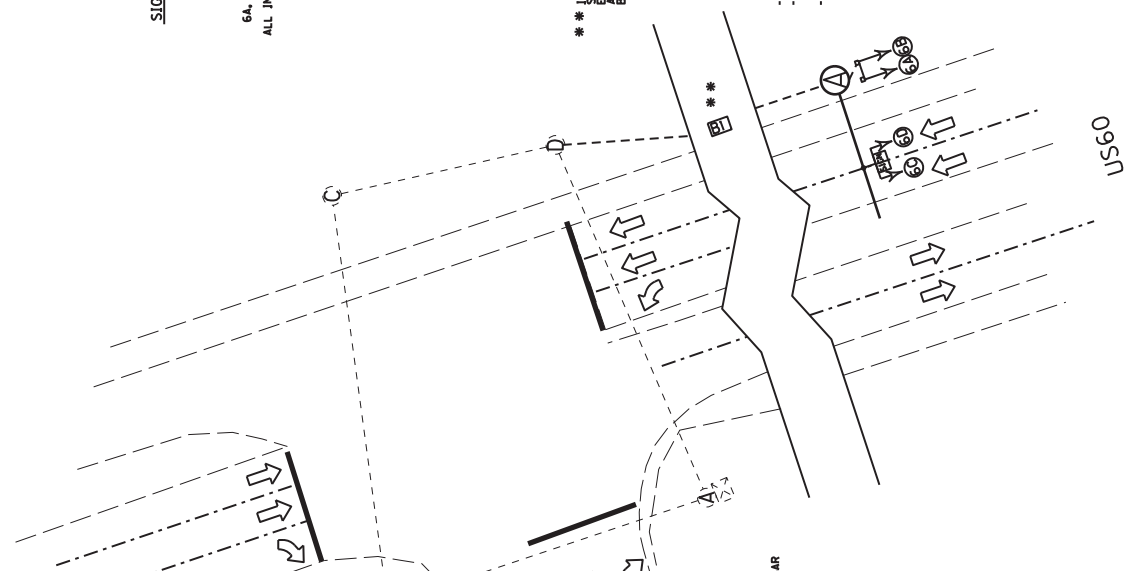
**MAST ARM POLE FOR ADVANCED WARNING FLASHERS**  
**POLE HEIGHT ATT. HT. CALC. SERV. MOMENT BASE**  
 A EX. 60' EX. 60 KIP-FT 3Z

**SIGNAL HEADS**  
  
 HEAD 6A, 6B, 6C, & 6D  
 ALL INDICATIONS L.E.D.

\*\* INSTALL 3 JUNCTION BOXES, TYPE B  
 BETWEEN EXISTING STREET POLE AND  
 EXISTING STREET POLE. \*\*  
 AND MAST ARM POLE. FIRST BOX SHALL  
 BE 250' FROM EX. POLE 'D'

-INSTALL MAST ARM POLE "A"  
 -INSTALL ADVANCED WARNING FLASHERS AND SIGN  
 PER DETAIL.  
 -INSTALL SIDE MOUNTED ADVANCED WARNING FLASHER  
 AS PER DETAIL ON SHEET T4

-MAST ARM POLE WILL BE LOCATED AT THE  
 FRANKFORT POLE YARD FOR PICKUP  
 -THIS IS A USED POLE. CONTRACTOR WILL  
 BE RESPONSIBLE FOR DETERMINING BOLT  
 CIRCLE/PATTERN AND SUPPLYING APPROVED  
 ANCHOR BOLTS.  
 -THIS POLE REQUIRES 4 ANCHOR BOLTS  
 PER EACH SIDE. THE ANCHOR BOLTS AND  
 WASHERS WILL BE NEEDED.  
 -ANCHOR BOLT HARDWARE WILL BE INCIDENTAL  
 TO INSTALL MAST ARM POLE  
 -IF ARM EXTENDS MORE THAN 2' INTO MEDIUM,  
 CUT OFF EXCESS AND CAP END WITH METAL CAP.  
 THIS WILL BE INCIDENTAL TO  
 INSTALL MAST ARM POLE  
 -INSTALL DAMPER BETWEEN POLE AND ARM  
 ATTACHMENT. THIS WILL BE INCIDENTAL TO  
 INSTALL MAST ARM POLE










POLE A IS LOCATED APPROXIMATELY 900' FROM STOP BAR

POLE	NORTHING/ EASTING COORDINATES	NPS COORDINATES
A	N 3950036.24 E 5918374.89	Lot=38°10'2.8128"N Lon=84°48'51.5548"W

**WIRING SCHEDULE**

CABLE	ORIGIN	ENDING	CONNECTING
1-14/5C	CONTROLLER	SH 6A	SH 6A & 6B
1-14/5C	CONTROLLER	SH 6C	SH 6C & 6D

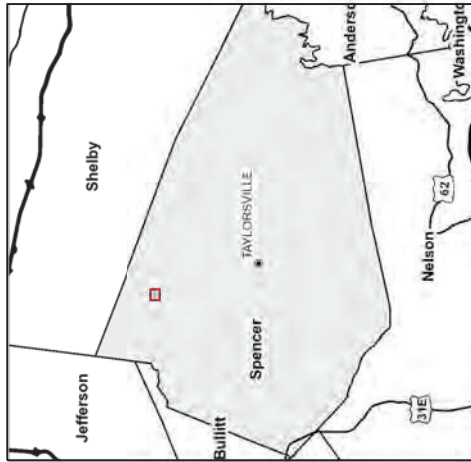
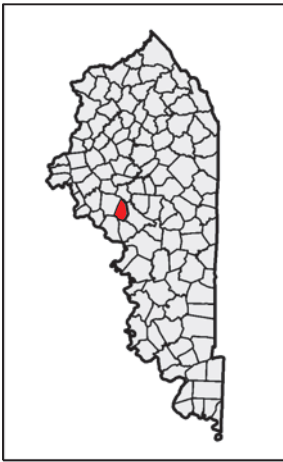
**LEGEND**

	EXISTING POLE MOUNTED CONTROLLER
	EXISTING STEEL STRAIN POLE
	MAST ARM POLE
	JUNCTION BOXES (AS DESIGNATED)
	ROADSIDE ADVANCED WARNING FLASHER ASSEMBLY
	OVERHEAD ADVANCED WARNING FLASHER ASSEMBLY
	1/4\" PVC SCHEDULE 80 (UNLESS OTHERWISE NOTED)

ADVANCED WARNING FLASHER  
 PLAN SHEET  
 US 60 @ KY 1681

SCALE: 1"=20'

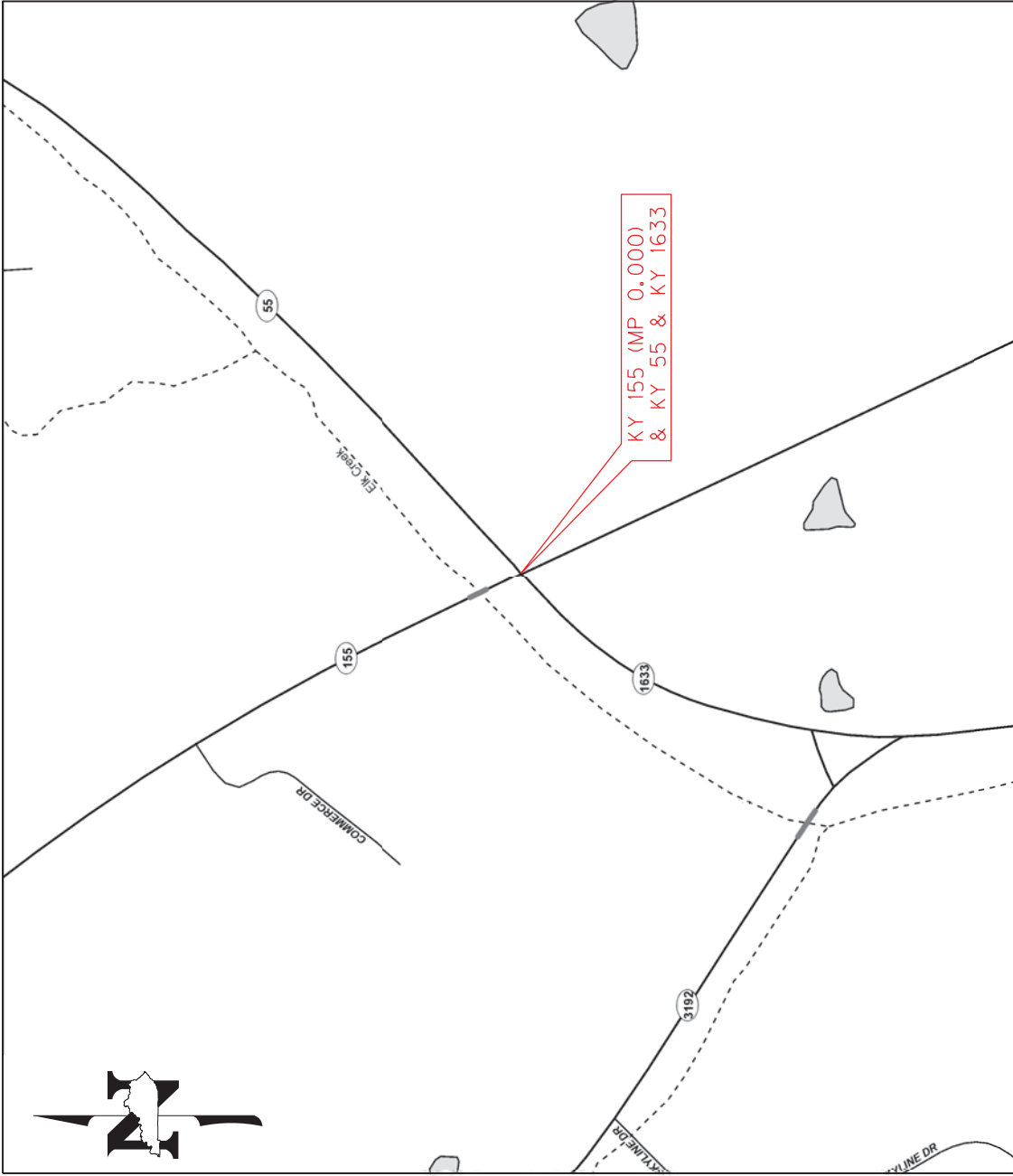
COUNTY OF	ITEM NO.
SPENCER	5-9018.20



**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

PLANS OF  
PROPOSED PROJECT

**SPENCER COUNTY**  
KY 155 AT KY 55 & KY 1633



<b>SPENCER COUNTY</b> <b>KY 155 (TAYLORSVILLE ROAD) &amp; KY 55 (SHELBYVILLE ROAD) &amp; KY 1633 (ELK CREEK ROAD) ITEM</b> <b>NO. 5-9018.20</b> <b>GENERAL SUMMARY</b>			
ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA BASE	①	TON 98
214	CL3 ASPH BASE 1.00D PG64-22	①	TON 125
388	CL3 ASPH SURF 0.38B PG64-22	①	TON 488
1941	MOUNTABLE MEDIAN TYPE 4		SQYD 61
1987	DELINEATOR FOR GUARDRAIL B/W	⑤	EACH 12
2159	TEMP DITCH		LF 663
2160	CLEAN TEMP DITCH		LF 331
2381	REMOVE GUARDRAIL	⑤	LF 538
2391	GUARDRAIL END TREATMENT TYPE 4A	⑤	EACH 3
2360	GUARDRAIL TERMINAL SECTION NO 1	⑤	EACH 1
2569	DEMOBILIZATION		LS 1
2650	MAINTAIN & CONTROL TRAFFIC		LS 1
2677	ASPHALT PAVE MILLING & TEXTURING	①	TON 469
2697	EDGE LINE RUMBLE STRIPS	①	LF 2,500
2701	TEMP SILT FENCE		LF 663
2703	SILT TRAP TYPE A		EACH 2
2704	SILT TRAP TYPE B		EACH 2
2705	SILT TRAP TYPE C		EACH 2
2706	CLEAN SILT TRAP TYPE A		EACH 2
2707	CLEAN SILT TRAP TYPE B		EACH 2
2708	CLEAN SILT TRAP TYPE C		EACH 2
2726	STAKING (KY 155 @ KY 55/KY 1633)		LS 1
4792	CONDUIT-1 INCH (RIGID STEEL)	④	LF 15
4811	ELECTRICAL JUNCTION BOX TYPE B	④	EACH 1
4820	TRENCHING AND BACKFILLING	④	LF 40
4830	LOOP WIRE	④	LF 304
4845	CABLE-NO. 14/7C	④	LF 635
4850	CABLE-NO. 14/1 PAIR	④	LF 240
4895	LOOP SAW SLOT AND FILL	④	LF 107
5952	TEMP MULCH		SQYD 4,923
5953	TEMP SEEDING AND PROTECTION		SQYD 3,692
5963	INITIAL FERTILIZER		TON 0.01
5964	MAINTENANCE FERTILIZER		TON 0.01
5985	SEEDING AND PROTECTION		SQYD 285
5992	AGRICULTURAL LIMESTONE		TON 0.18
6404	FLEXIBLE DELINEATOR POST-M/Y		EACH 55
6540	PAVE STRIPING-THERMO-4 IN W	②	LF 3,238
6541	PAVE STRIPING-THERMO-4 IN Y	②	LF 3,050
6547	PAVE STRIPING-THERMO-12 IN Y	②	LF 60
6568	PAVE MARKING-THERMO STOP BAR-24IN	②	LF 36
6569	PAVE MARKING-THERMO CROSS HATCH	②	SQFT 775
6572	PAVE MARKING-DOTTED LANE EXTEN	②	LF 55
6574	PAVE MARKING-THERMO CURV ARROW	②	EACH 12
20188NS835	INSTALL LED SIGNAL - 3 SECTION	③	EACH 9
20458ES403	CENTERLINE RUMBLE STRIPS	①	LF 920
21373ND	REMOVE SIGN	⑥	EACH 2
21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	⑤	LF 561
24097EC	THERMO RUMBLE STRIPS TY 2	②	LF 96
24900EC	PVC CONDUIT-1 1/4 IN-SCHEDULE 80	④	LF 25
24908EC	INSTALL SIGNAL CONTROLLER TY ATC	③	EACH 1
24955ED	REMOVE SIGNAL EQUIPMENT (KY 155 @ KY 55/KY 1633)	④	EACH 1
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	①	TON 3.2
① CARRIED OVER FROM THE PAVING SUMMARY ② CARRIED OVER FROM THE STRIPING & PAVEMENT MARKING SUMMARY ③ CARRIED OVER FROM THE SIGNAL SUMMARY ④ CARRIED OVER FROM THE LOOP AND SIGNAL SUMMARY ⑤ CARRIED OVER FROM THE GUARDRAIL SUMMARY ⑥ FOR THE REMOVAL OF EXISTING CENTER LANE TURN LANES SIGNS			

<b>SPENCER COUNTY - KY 155 @ KY 55 / KY 1633</b>			
<b>ITEM NO. 5-9018.20</b>			
<b>PAVING SUMMARY</b>			
PAVING AREAS		PAVING QUANTITIES	
ITEM	TOTAL	ITEM	TOTAL
<b>PAVEMENT RESURFACING</b>		<b>PAVEMENT RESURFACING</b>	
1.25" CL3 ASPH SURF 0.38B PG64-22	7,100	CL3 ASPH SURF 0.38B PG64-22	488
ASPHALT MATERIAL FOR TACK NON-TRACKING	7,100	ASPHALT MATERIAL FOR TACK NON-TRACKING	3.0
	<b>CY</b>		
ASPHALT PAVE MILLING & TEXTURING	237	ASPHALT PAVE MILLING & TEXTURING	469
	<b>LF</b>		
EDGE LINE RUMBLE STRIPS	2,500		
CENTERLINE RUMBLE STRIPS	920		
<b>KY 55 RT TURN RADIUS FULL DEPTH PAVEMENT</b>		<b>KY 55 RT TURN RADIUS FULL DEPTH PAVEMENT</b>	
6.0" DGA	226	DGA	78
4.0" CL3 ASPH BASE 1.00D PG64-22	226	CL3 ASPH BASE 1.00D PG64-22	50
4.0" CL3 ASPH BASE 1.00D PG64-22	226	CL3 ASPH BASE 1.00D PG64-22	50
ASPHALT MATERIAL FOR TACK NON-TRACKING	226	ASPHALT MATERIAL FOR TACK NON-TRACKING	0.1
<b>GAS STATION RADIUS FULL DEPTH PAVEMENT</b>		<b>GAS STATION RADIUS FULL DEPTH PAVEMENT</b>	
6.0" DGA	59	DGA	20
4.0" CL3 ASPH BASE 1.00D PG64-22	59	CL3 ASPH BASE 1.00D PG64-22	13
4.0" CL3 ASPH BASE 1.00D PG64-22	59	CL3 ASPH BASE 1.00D PG64-22	13
ASPHALT MATERIAL FOR TACK NON-TRACKING	59	ASPHALT MATERIAL FOR TACK NON-TRACKING	0.1
<b>PAVING SUMMARY</b>			
CODE	ITEM	UNITS	PROJECT TOTAL
1	DGA BASE	TON	98
214	CL3 ASPH BASE 1.00D PG64-22	TON	125
388	CL3 ASPH SURF 0.38B PG64-22	TON	488
2677	ASPHALT PAVE MILLING & TEXTURING	TON	469
2697	EDGE LINE RUMBLE STRIPS	LF	2,500
20458ES403	CENTERLINE RUMBLE STRIPS	LF	920
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	3.2
<b>NOTES:</b>			
All asphalt mixtures shall be estimated at 110 lbs. per SQ. YD. per inch of depth unless noted otherwise			
All DGA Base mixtures shall be estimated at 115 lbs. per SQ. YD. per inch of depth unless noted otherwise			

SPENCER COUNTY KY 155 (TAYLORSVILLE ROAD) & KY 55 (SHELBYVILLE ROAD) & KY 1633 (ELK CREEK ROAD) ITEM NO. 5-9018.20 STRIPING AND PAVEMENT MARKING SUMMARY PAGE 1 OF 2					
PROPOSED STRIPING					
BEGIN		END		LENGTH	LF
STATION	OFFSET	STATION	OFFSET		
4" Single Solid White Line (PAVE STRIPING-THERMO-4 IN W)					
383+43	89' RIGHT	396+87	12' RIGHT	1379	1379
383+61	0'	385+99	0'	238	238
383+61	12' LEFT	384+61	12' LEFT	100	100
383+61	23' LEFT	396+87	12' LEFT	1325	1325
386+77	13.9' RIGHT	387+10	13.1' RIGHT	33	33
388+55	12' RIGHT	389+38	12' RIGHT	83	83
390+61	12' RIGHT	391+41	12' RIGHT	80	80
4" Single Solid Yellow Line (PAVE STRIPING-THERMO-4 IN Y)					
383+61	12' RIGHT	386+59	0'	300	300
383+61	16' RIGHT	386+77	0'	318	318
4" Double Solid Yellow Line (PAVE STRIPING-THERMO-4 IN Y)					
386+59	0'	387+10	0'	51	102
387+41	0'	389+38	0'	197	394
387+41	12.5' RIGHT	388+55	0'	115	230
389+86	0'	391+40	0'	154	308
389+86	12' RIGHT	390+62	0'	78	156
391+78	0'	396+87	0'	509	1018
391+78	12' RIGHT	395+99	0'	421	842
Single Dotted Lane Line Extension (PAVE MARKING-DOTTED LANE EXTEN)					
380+67	24' RIGHT	381+84	24' RIGHT	117	30
384+61	12' LEFT	385+58	12' LEFT	97	25
12" Solid Yellow Line (PAVE STRIPING-THERMO-12 IN Y) - MEDIAN NOSE					
387+41	0'	387+41	12.5' RIGHT	20	20
389+86	0'	389+86	12' RIGHT	20	20
391+78	0'	391+78	12' RIGHT	20	20
PAVEMENT MARKING - THERMO STOP BAR					
STATION	OFFSET	DESCRIPTION		LF	
383+61	23' LEFT - 12' RIGHT	KY 155 SB STOP BAR		36	
PAVE MARKING-THERMO TRANSVERSE RUMBLE STRIPS (THERMO RUMBLE STRIPS TY 2)					
STATION	OFFSET	DESCRIPTION		LF	
395+20	6' LEFT	ONE SET OF 8 STRIPS INSTALLED PER DETAIL		96	

**SPENCER COUNTY**  
**KY 155 (TAYLORSVILLE ROAD) & KY 55 (SHELBYVILLE ROAD) & KY 1633 (ELK CREEK ROAD)**  
**ITEM NO. 5-9018.20**  
**STRIPING AND PAVEMENT MARKING SUMMARY PAGE 2 OF 2**

**PAVEMENT MARKING - THERMO ARROWS**

STATION	OFFSET	DESCRIPTION	EACH	
384+00	18' LEFT	KY 155 SB RIGHT TURN LANE ONTO KY 1633	ARROW	1
384+58	18' LEFT	KY 155 SB RIGHT TURN LANE ONTO KY 1633	ARROW	1
384+00	6' RIGHT	KY 155 SB LEFT TURN LANE ONTO KY 55	ARROW	1
384+65	6' RIGHT	KY 155 SB LEFT TURN LANE ONTO KY 55	ARROW	1
385+30	6' RIGHT	KY 155 SB LEFT TURN LANE ONTO KY 55	ARROW	1
385+95	6' RIGHT	KY 155 SB LEFT TURN LANE ONTO KY 55	ARROW	1
386+78	6' RIGHT	KY 155 NB LEFT TURN LANE INTO GAS	ARROW	1
387+05	6' RIGHT	KY 155 NB LEFT TURN LANE INTO GAS	ARROW	1
388+60	6' RIGHT	KY 155 NB LEFT TURN LANE INTO BANK	ARROW	1
389+30	6' RIGHT	KY 155 NB LEFT TURN LANE INTO BANK	ARROW	1
390+65	6' RIGHT	KY 155 NB LEFT TURN LANE INTO COMMERCE DRIVE	ARROW	1
391+35	6' RIGHT	KY 155 NB LEFT TURN LANE INTO COMMERCE DRIVE	ARROW	1

**PAVE MARKING-THERMO CROSS-HATCH (YELLOW)**

BEGIN		END		SQ FT
STATION	OFFSET	STATION	OFFSET	
WIDTH = 2' AND SPACING = 20'				
38635	10' RIGHT	38659	0'	23
387+41	0' TO 12' RIGHT	388+55	0'	154
389+86	0' TO 12' RIGHT	390+62	0'	86
391+78	0' TO 12' RIGHT	395+99	0'	512

**STRIPING AND PAVEMENT MARKING SUMMARY**

BID ITEM	DESCRIPTION	UNIT	QUANTITY
6540	PAVE STRIPING-THERMO-4 IN W	LF	3,238
6541	PAVE STRIPING-THERMO-4 IN Y	LF	3,050
6547	PAVE STRIPING-THERMO-12 IN Y	LF	60
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	36
6569	PAVE MARKING-THERMO CROSS-HATCH	SQFT	775
6572	PAVE MARKING-DOTTED LANE EXTEN	LF	55
6574	PAVE MARKING-THERMO CURV ARROW	EACH	12
24097EC	THERMO RUMBLE STRIPS TY 2	LF	240

**Signal Head Replacements for: KY 155 @ KY 55 & KY 1633**

**REPLACE EXISTING SIGNAL HEADS**

SIGNAL HEAD NUMBER	STATION*	OFFSET*	DESCRIPTION
2A	383+54	12' RT	3 Section with LT Turn Arrows and Reflective Backplate
2C	383+64	40' RT	3 Section with Reflective Backplate
8A	383+17	66' RT	3 Section with Reflective Backplate
8B	383+01	66' RT	3 Section with Reflective Backplate
6A	382+46	2' LT	3 Section with LT Turn Arrows and Reflective Backplate
6B	382+46	15' LT	3 Section with Reflective Backplate
6C	382+46	27' LT	3 Section with Reflective Backplate
4A	383+01	43' LT	3 Section with Reflective Backplate
4B	383+15	44' LT	3 Section with Reflective Backplate

\* STATION AND OFFSET ARE APPROXIMATE AND ARE FOR INFORMATION ONLY. ALIGN SIGNAL HEADS WITH EXISTING SPAN WIRES AND DRIVING LANES.

NOTE: THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. FINAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

**SIGNAL HEAD REPLACEMENTS**

Signal Heads For NB KY 55

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with LT Turn Arrows and Reflective Backplate (2A)		1		2		
3 Section with Reflective Backplate (2C)	1		1		1	
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>

ALL QUANTITIES ARE CARRIED OVER TO GENERAL SUMMARY

Signal Heads For WB KY 55

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with Reflective Backplate (4A)	1		1		1	
3 Section with Reflective Backplate (4B)	1		1		1	
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>

Signal Heads For SB KY 155

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with LT Turn Arrows and Reflective Backplate (6A)		1		2		
3 Section with Reflective Backplate (6B)	1		1		1	
3 Section with Reflective Backplate (6C)	1		1		1	
<b>Totals</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>

Signal Heads For EB KY 1633

Signal Head	Red Ball	Red Arrow	Yellow Ball	Yellow Arrow	Green Ball	Green Arrow
3 Section with Reflective Backplate (8A)	1		1		1	
3 Section with Reflective Backplate (8B)	1		1		1	
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>



**SPENCER COUNTY  
TRAFFIC SIGNAL SUMMARY  
ITEM NO. 5-9018.20  
SUMMARY FOR LOOPS AND SIGNALS AT KY 155 / KY 55 / KY 1633**

INTERSECTION	SAW, SLOT AND FILL LF	LOOP WIRE LF	CONDUIT		PVC CONDUIT 1 1/4 INCH LF	CABLE NO 14/7C LF	CABLE NO. 14 LF	JUNCTION		Trenching and Backfilling LF	NOTES
			1 INCH LF	1 1/4 INCH LF				TYPE B EA	TYPE B EA		
US 27 @ KY 10	107	304	15	25			240	1	1	40	1 - 6X30 STOP BAR LOOP
WB KY 55 RT TURN (PHASE 4)											
SH #2A					130						
SH #2C					160						
SH #6A					180						
SH #6B					165						
<b>Total</b>	<b>107</b>	<b>304</b>	<b>15</b>	<b>25</b>	<b>635</b>	<b>240</b>	<b>240</b>	<b>1</b>	<b>1</b>	<b>40</b>	

1. Quantities are for estimating purposes only. The Contractor shall field measure and inspect items to verify quantities

Item Number	4895	4830	4792	24900EC	4845	4850	4811	4820
	SAW, SLOT AND FILL LF	LOOP WIRE LF	Rigid Steel CONDUIT 1 INCH LF	PVC CONDUIT 1 1/4 INCH LF	CABLE NO 14/7C LF	CABLE NO. 14 LF	JUNCTION TYPE B EA	Trenching and Backfilling LF
			15	25	635	240	1	40
<b>Grand Total</b>	<b>107</b>	<b>304</b>	<b>15</b>	<b>25</b>	<b>635</b>	<b>240</b>	<b>1</b>	<b>40</b>

LOOP AND SIGNALS ADDITIONAL QUANTITIES		
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY
24955ED	REMOVE SIGNAL EQUIPMENT	1

**Guardrail Summary**      **Spencer County**      **KY 155 @ KY 55 / KY 1633**

Notes: Begin/End Milepoints are estimated to include the entire length of the Rail AND the End Treatments. The Engineer may adjust the proposed guardrail termini to ensure proper installation of the guardrail system.

Proposed Guardrail to be Constructed										Existing Guardrail to be Removed					
Side of Road	Proposed BEGINNING Treatment	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Proposed ENDING Treatment	Proposed Length (LF)	Number of Radius Rail	Remarks	Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Existing Length (LF)
LT	Type 4A	383+14	7.256	385+00	7.292	Terminal Section 1	224.50	12		LT	383+14	7.256	384+96	7.291	192.00
RT	Type 4A	383+90	7.271	385+36	7.298	Type 4A	336.50	18	Proposed guardrail to be installed along back or proposed full depth pavement around the radius.	RT	383+90	7.271	385+36	7.298	346.00

**Summary of Items**

Item Description	Quantity	Unit
G/R Steel W Beam-S Face (7 FT Post)	561.00	LF
Remove Guardrail	538	EACH
End Treatment Type 4A	3	EACH
Terminal Section No. 1	1	EACH
Delineator for Guardrail B/W	12	EACH

Tim Tharpe - Director

**DIVISION OF TRAFFIC OPERATIONS  
PROJECT MATERIALS RELEASE FORM  
FOR SIGNALS AND LIGHTING**

Phone (502) 564-3020  
FAX (502) 564-7759

**Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.**

Item Number: 5-9018.20  
 County: Spencer  
 Description: KY 155 @ KY 55  
Signal Enhancements

Cabinets	Master code	
1	T-01-0105	ATC 2070 Controller (must include T-01-0106 also)
1	T-01-0106	1C w/Maxtime (goes with T-01-0105)
1	T-01-0501	Conflict Monitor, Model 2018 <span style="float: right; background-color: red; color: white; padding: 2px;">Special Order</span>
1	T-01-0510	Isolator, Model 242 (1 for 2070, plus for ped detector and railroad)
2	T-01-0600	Loop Detector, Model 222
4	T-01-0700	Load Switches

Signals		
9	T-02-0009	Siemen 3 Section, 12 inch Signal
9	T-02-0032	Siemen 3 Section Backplate
2	T-02-0300	LED Module 12" Red Arrow
4	T-02-0310	LED Module 12" Yellow Arrow
7	T-02-0330	LED Module 12" Red
7	T-02-0340	LED Module 12" Yellow
7	T-02-0350	LED Module 12" Green

**Special Items**

**Poles**

**REQUIRED**

Electrical Contractor Name \_\_\_\_\_

Electrical Contractor Supervisor \_\_\_\_\_ Contact number for Supervisor \_\_\_\_\_

Project Engineer \_\_\_\_\_ Contact number for Project Engineer \_\_\_\_\_

Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project

Signature of Project Engineer or Designee \_\_\_\_\_

COUNTY OF	SPENCER
ITEM NO.	5-9018.20

PROPOSED MOUNTABLE MEDIAN TYPE 4 WITH DELINEATORS

STATION	SOYD
FROM 383+61 TO 386+35	61

FLEXIBLE DELINEATOR POST - MAY BE INSTALLED ON TOP OF PROPOSED MOUNTABLE MEDIAN SPACED AT 5 FT. ESTIMATED NUMBER OF DELINEATORS IS 55.

**PAVEMENT RESURFACING**  
STA. 383+00 TO STA. 396+87 (488 TON)

**KY 55 RT TURN RADIUS FULL DEPTH PAVEMENT**  
STA. 383+46 TO STA. 387+97  
78 TON DGA & 100 TON ASPH BASE

**CAS STATION RADIUS FULL DEPTH PAVEMENT**  
STA. 385+54 TO STA. 386+25  
20 TON DGA & 26 TON ASPH BASE

**GUARDRAIL**

**ASPHALT PAVE MILLING & TEXTURING LIMITS**

**MOUNTABLE MEDIAN**

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)

BEGIN STATION SEC.	END. STATION SEC.	TERM. SEC.	END. TREAT.	LENGTH
383+14	--	TYPE 4A	385+00	NO. 1 -- 224.50'

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)

BEGIN STATION SEC.	END. STATION SEC.	TERM. SEC.	END. TREAT.	LENGTH
383+90	--	TYPE 4A	385+36	-- TYPE 4A 336.50'

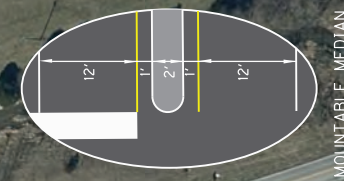
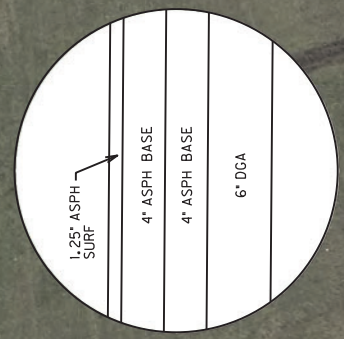
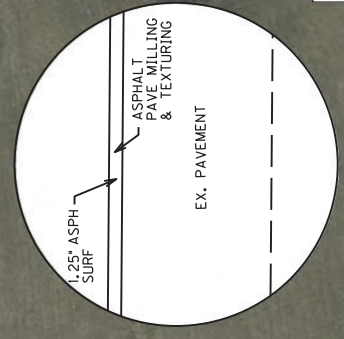
KY 155 RESURFACING PAVEMENT DESIGN

1.25" SURFACE [ 1.25" DEPTH CLASS 3 ASPHALT SURFACE 0.38B PG 64-22

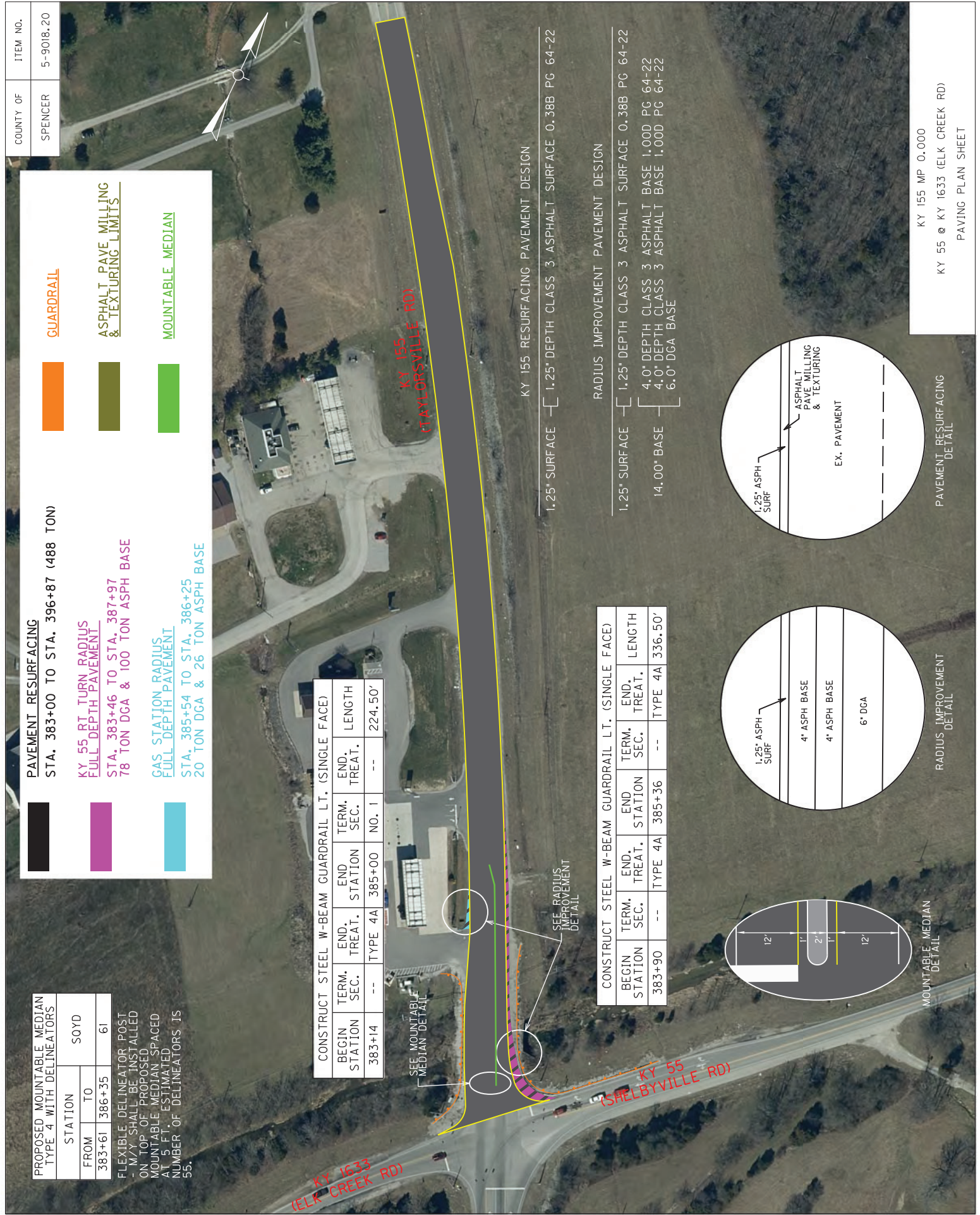
RADIUS IMPROVEMENT PAVEMENT DESIGN

1.25" SURFACE [ 1.25" DEPTH CLASS 3 ASPHALT SURFACE 0.38B PG 64-22

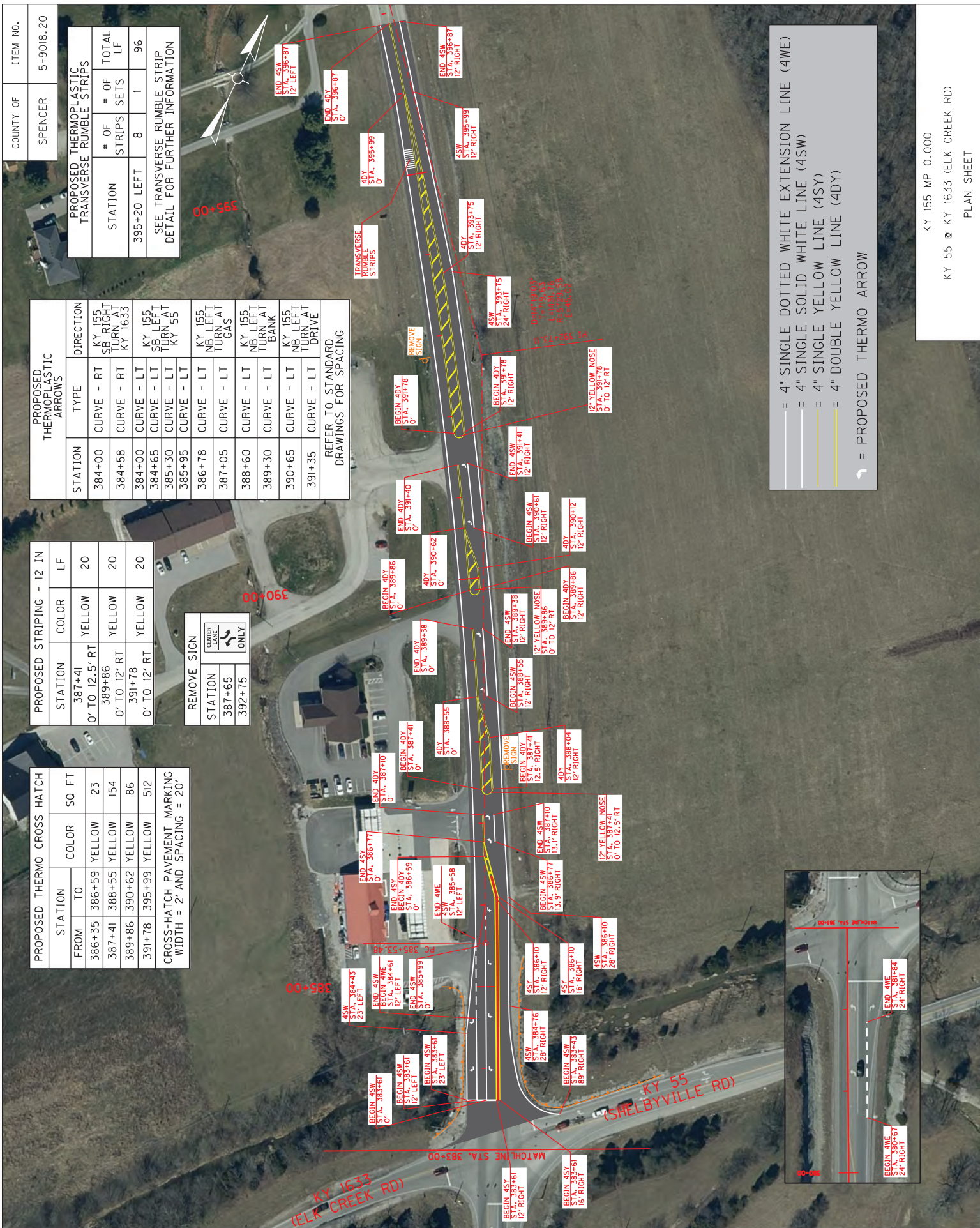
14.00" BASE [ 4.0" DEPTH CLASS 3 ASPHALT BASE 1.00D PG 64-22  
6.0" DGA BASE



KY 155 MP 0.000  
KY 55 @ KY 1633 (ELK CREEK RD)  
PAVING PLAN SHEET







PROPOSED STRIPING - 12 IN

STATION	COLOR	LF
387+41 0' TO 12.5' RT	YELLOW	20
389+86 0' TO 12' RT	YELLOW	20
391+78 0' TO 12' RT	YELLOW	20

REMOVE SIGN

STATION
387+65
392+75

PROPOSED THERMO CROSS HATCH

STATION	FROM	TO	COLOR	SO FT
386+35	386+59	386+59	YELLOW	23
387+41	388+55	388+55	YELLOW	154
389+86	390+62	390+62	YELLOW	86
391+78	395+99	395+99	YELLOW	512

CROSS-HATCH PAVEMENT MARKING  
WIDTH = 2' AND SPACING = 20'

PROPOSED THERMOPLASTIC ARROWS

STATION	TYPE	DIRECTION
384+00	CURVE - RT	KY 155 SB RIGHT TURN AT KY 1633
384+58	CURVE - RT	KY 155 SB RIGHT TURN AT KY 1633
384+00	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
384+65	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
385+30	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
385+95	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
386+78	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
387+05	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
388+60	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
389+30	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
390+65	CURVE - LT	KY 155 NB LEFT TURN AT KY 55
391+35	CURVE - LT	KY 155 NB LEFT TURN AT KY 55

REFER TO STANDARD DRAWINGS FOR SPACING

PROPOSED THERMOPLASTIC TRANSVERSE RUMBLE STRIPS

STATION	# OF STRIPS	# OF SETS	TOTAL LF
395+20 LEFT	8	1	96

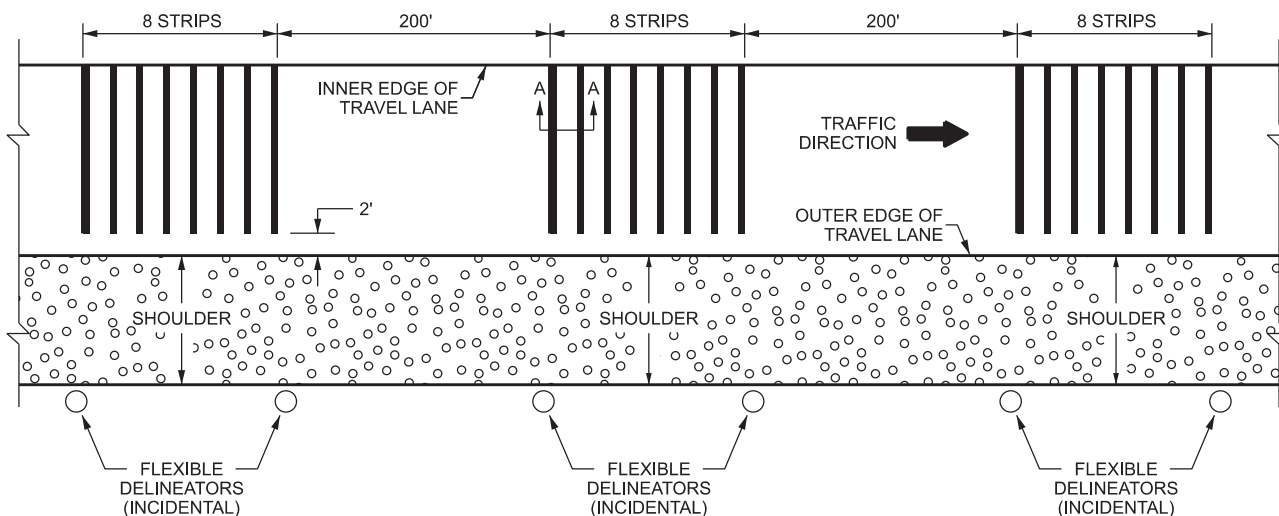
SEE TRANSVERSE RUMBLE STRIP DETAIL FOR FURTHER INFORMATION

Legend for striping types:

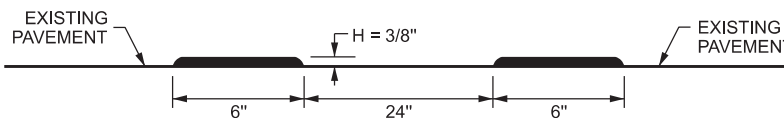
- 4" SINGLE DOTTED WHITE EXTENSION LINE (4WE)
- 4" SINGLE SOLID WHITE LINE (4SW)
- 4" SINGLE YELLOW LINE (4SY)
- 4" DOUBLE YELLOW LINE (4DY)

Proposed Thermo Arrow symbol

KY 155 MP 0.000  
KY 55 @ KY 1633 (ELK CREEK RD)  
PLAN SHEET



PLAN VIEW



SECTION A-A

~ NOTES ~

1. TRANSVERSE RUMBLE STRIPS SHALL CONTAIN THREE SETS OF EIGHT STRIPS WITH SETS SPACED APPROXIMATELY 200 FEET APART. THE PAVEMENT SHALL BE CLEANED AND THE STRIPS SHALL BE CONSTRUCTED UNIFORMLY AT RIGHT ANGLES TO THE CENTER OF THE ROADWAY.
2. INSTALLATIONS SHALL INCLUDE 2 LAYERS OF THERMOPLASTIC MATERIAL, PROVIDING A TOTAL THICKNESS OF 3/8 INCH. THE WIDTH OF THE INDIVIDUAL STRIPS SHOULD BE 6 INCHES WITH A 24 INCH SPACE BETWEEN STRIPS.
3. TRANSVERSE RUMBLE STRIPS SHALL NOT BE LOCATED IN CURVES OR WITHIN THE STOPPING DISTANCE FOR ACTUAL STOP CONDITIONS.
4. SINCE ALL ROADWAYS MAY HAVE CYCLISTS, INSTALLATION OF TRANSVERSE RUMBLE STRIPS SHALL NOT BE MADE WITHIN THE OUTER TWO FEET OF THE TRAVELED LANE UNLESS THERE IS A MINIMUM OF FOUR FEET OF PAVED SHOULDER, OUTSIDE THE NORMAL SHOULDER RUMBLE STRIPS, ALONG THE ROADWAY.
5. TWO FLEXIBLE DELINEATOR POSTS SHALL BE INSTALLED AT EACH LOCATION. THE DELINEATOR POSTS SHALL BE CONSTRUCTED IN SUCH A MANNER THAT TOP OF THE DELINEATOR POSTS ARE 4'-0" ABOVE THE TOP OF THE NEAR EDGE OF PAVEMENT. THE REFLECTIVE SURFACE OF THE DELINEATOR POSTS SHALL FACE TRAFFIC AND POINT TOWARD THE CENTER LINE OF THE ROADWAY APPROXIMATELY ONE-FOURTH MILE AWAY.
6. THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR AN EIGHT (8) STRIP WIDE UNIT SHALL INCLUDE ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN AND DESCRIBED ON THIS DETAIL.

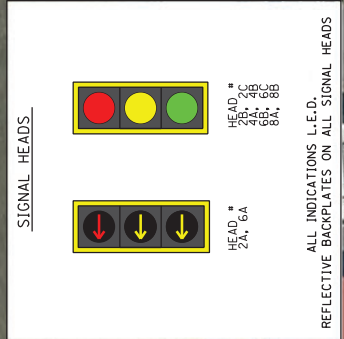
BID ITEM AND UNIT TO BID:  
24097EC THERMO RUMBLE STRIPS TY 2 LF

NOT TO SCALE

<b>KENTUCKY</b> <b>DEPARTMENT OF HIGHWAYS</b>
<b>THERMOPLASTIC</b> <b>RUMBLE STRIPS</b> <b>TYPE 2</b>

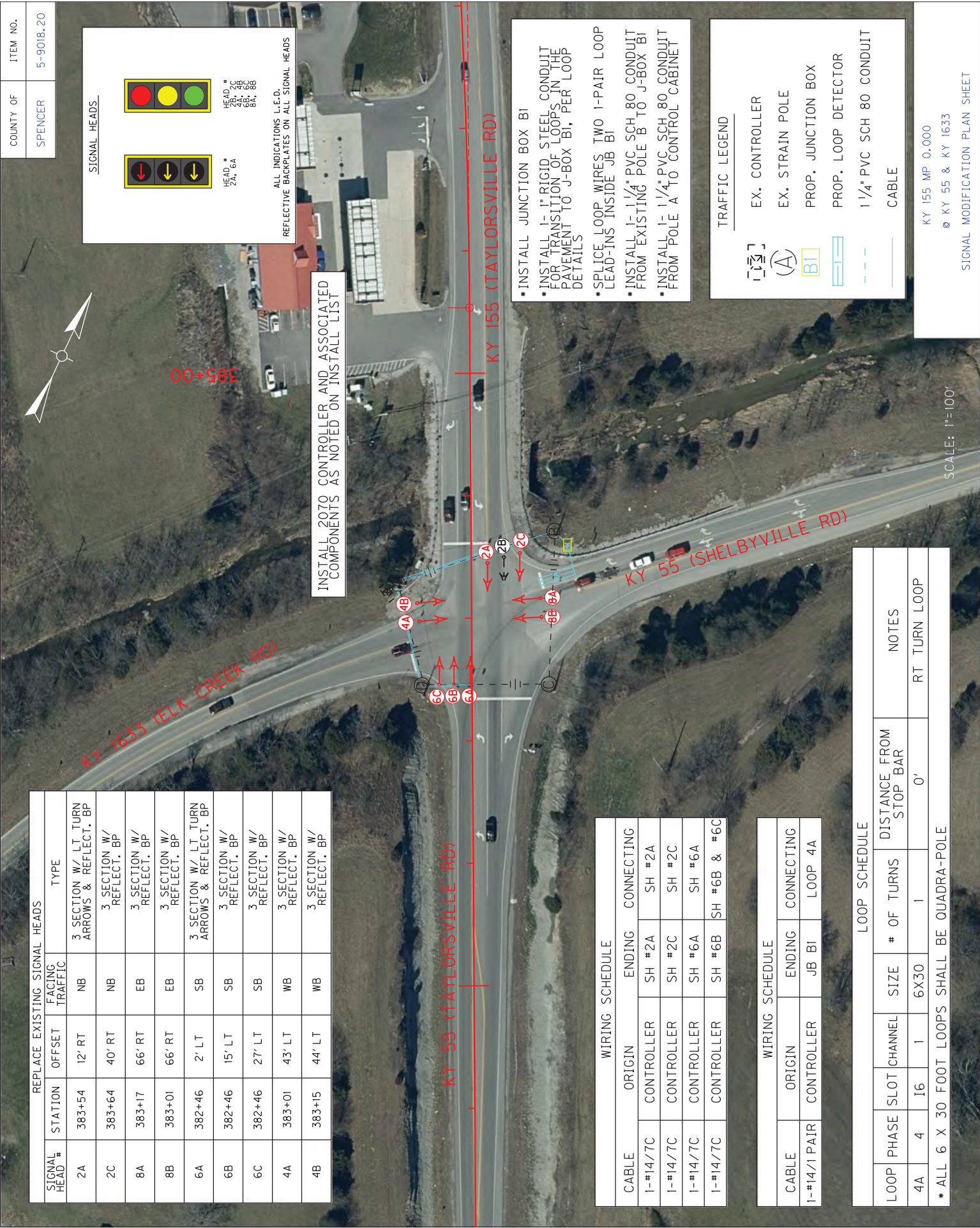


COUNTY OF	SPENCER
ITEM NO.	5-9018.20



INSTALL 2070 CONTROLLER AND ASSOCIATED COMPONENTS AS NOTED ON INSTALL LIST

REPLACE EXISTING SIGNAL HEADS			TYPE
SIGNAL HEAD #	STATION	OFFSET	FACING TRAFFIC
2A	383+54	12' RT	NB
2C	383+64	40' RT	NB
8A	383+17	66' RT	EB
8B	383+01	66' RT	EB
6A	382+46	2' LT	SB
6B	382+46	15' LT	SB
6C	382+46	27' LT	SB
4A	383+01	43' LT	WB
4B	383+15	44' LT	WB



- \* INSTALL JUNCTION BOX BI
- \* INSTALL 1- 1" RIGID STEEL CONDUIT FOR TRANSITION OF LOOPS IN THE PAVEMENT TO J-BOX BI, PER LOOP DETAILS
- \* SPLICE LOOP WIRES TWO 1-PAIR LOOP LEAD-INS INSIDE JIB BI
- \* INSTALL 1- 1/4" PVC SCH 80 CONDUIT FROM EXISTING POLE B TO J-BOX BI
- \* INSTALL 1- 1/4" PVC SCH 80 CONDUIT FROM POLE A TO CONTROL CABINET

**TRAFFIC LEGEND**

[Symbol]	EX. CONTROLLER
(A)	EX. STRAIN POLE
[Symbol]	PROP. JUNCTION BOX
[Symbol]	PROP. LOOP DETECTOR
---	1/4" PVC SCH 80 CONDUIT
---	CABLE

KY 155 MP 0.000
⊙ KY 55 & KY 1633
SIGNAL MODIFICATION PLAN SHEET

**WIRING SCHEDULE**

CABLE	ORIGIN	ENDING	CONNECTING
1-#14/7C	CONTROLLER	SH #2A	SH #2A
1-#14/7C	CONTROLLER	SH #2C	SH #2C
1-#14/7C	CONTROLLER	SH #6A	SH #6A
1-#14/7C	CONTROLLER	SH #6B	SH #6B & #6C

**WIRING SCHEDULE**

CABLE	ORIGIN	ENDING	CONNECTING
1-#14/1 PAIR	CONTROLLER	JIB BI	LOOP 4A

**LOOP SCHEDULE**

LOOP	PHASE	SLOT	CHANNEL	SIZE	# OF TURNS	DISTANCE FROM STOP BAR	NOTES
4A	4	16	1	6X30	1	0'	RT TURN LOOP

\* ALL 6 X 30 FOOT LOOPS SHALL BE QUADRA-POLE

SCALE: 1"=100'

COUNTY OF	ITEM NO.
SPENCER	5-9018.20

MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND I12 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT TED SWANSEGAR OR KERRY ROBERTS WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (5502-782-5540/502-782-5536) OR EMAIL (TED.SWANSEGAR@KY.GOV/KERRY.ROBERTS@KY.GOV) .

2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.

3. CONTRACTOR SHALL ALSO CONTACT THE SIGNAL SYSTEM BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL (JOE.THOMPSON@KY.GOV/LARRY.IRISH@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.

4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP. TO FACILITATE THIS PROCESS, ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : \*PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501\*.

INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE THE CONCRETE BASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL AND DETECTORS, EXCAVATION, BACKFILLING, RESTORATION, ANY NECESSARY POLE MOUNTING HARDWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES INVOLVING UTILITY SECONDARY/PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE CONNECTING THE INDUCTION LOOP AMPLIFIERS, PEDESTRIAN ISOLATORS, LOAD SWITCHES, MODEL 400 MODEM CARD FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE FURNISHING AND INSTALLING ELECTRICAL SERVICE CONDUCTORS, CONDUITS, ANCHORS, METER BASE, FUSED CUTOUT, FUSES, GROUND RODS, GROUND LUGS, AND GROUND WIRES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

KY 155 MP 0.000  
 @ KY 55 & KY 1633  
 SIGNAL MODIFICATION NOTES



COUNTY OF	ITEM NO.	SHEET
SPENCER	5-9008.20	12

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS ON THIS BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.10: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 834

SUBSECTION: 834.15.03 TRANSFORMER BASES.

REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE.  
 REPLACE THE BASE.  
 CONSTRUCT THE FOLLOWING SENTENCE WITH THE FOLLOWING:  
 CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KYTC CUSTOM KEY THAT WILL BE SENT TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE DOOR DEVICE. THE KEY FOR THE DOOR SHALL BE RETURNED TO CENTRAL OFFICE TRAFFIC OPERATIONS AFTER THE DOOR IS OPENED. THE CONTRACTOR SHALL MET A CRABET PL 4596 PREAM STYLE MARK LASER WITH ALLOD CENTER TOP FOR EACH DOOR. THE STICKER SHALL BE 1/4" THICK AND 1/2" HIGH. THE STICKER SHALL BE 1/4" THICKNESS WITH UV WHITE POLYCARBONATE MATERIAL AND WITH M65373 PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."

SECTION: 834.15 LIGHTING POLES.

REVISION: ADD THE FOLLOWING TO THE FIRST PARAGRAPH:  
 THE CABINET WILL WAIVE THE REQUIREMENT STATED IN THE FIRST SENTENCE OF SECTION 5.14.6.2 - REINFORCED HOLES AND CUTOUT FOR HIGH MAST POLES (ONLY).

SECTION: 834.33 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:  
 PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL) THICK.

**ROADWAY LIGHTING ESTIMATE OF QUANTITIES**

TOTAL	UNITS	CODE	ITEM DESCRIPTION
4	EACH	4722	BRACKET 8'
1	EACH	4761	LIGHTING CONTROL EQUIPMENT
20	LN FT	4820	TRENCHING AND BACKFILLING
* * 2,250	LN FT	4832	WIRE-NO. 12
4	EACH	24589ED	LED LUMINAIRE
20	LN FT	2490IEC	PVC CONDUIT - 2 INCH - SCHEDULE 80

\* \* SEE PLAN SHEET FOR WIRE-NO. 12 SPECS

DESIGNED BY: CHARLIE #  
 DATE SUBMITTED: 3/7/2022

Commonwealth of Kentucky  
 DEPARTMENT OF HIGHWAYS  
 COUNTY OF  
**SPENCER**

PROJECT NUMBER:  
 ROADWAY LIGHTING ESTIMATES  
 OF QUANTITIES

121GR22T013-LSIP

COUNTY OF SPENCER ITEM NO. 5-2008.20 SHEET 12

LED Luminaire Specifications

The following are the required specifications for the LED Fixture:

1. The Luminaire shall be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor, the testing laboratory must be listed in the U.S. Department of Labor's OSHA 3090, the applicable code of practice as required by this specification. A list of recognized testing labs for products sold in the United States may be found on the U.S. Department of Labor's web site: <http://www.osha.gov/>
2. The Luminaire shall be listed and labeled by a NRTL or CSA as being in compliance with UL 1598 and suitable for use in wet locations.
3. Key components including LED drivers, LED light sources, and surge protection devices shall be fully compliant with the International Electrotechnical Commission (IEC) 529 ingress protection (IP rating of IP 65 or greater).
4. Shall be in compliance with Electro Magnetic Interference (EMI) requirements as defined by FCC 47 Sub Part 15; CISPR15; CISPR22 Class A (120Vmin), EN61000-3-2, -3, -3, -4, -4, -4, -5.
5. Shall be tested according to the most current version of Illuminating Engineering Society of North America (IESNA) LM-79.
6. Shall have lumen maintenance measured in accordance with IESNA 80.
7. Shall have long term lumen maintenance documented according to the most current version of Illuminating Engineering Society of North America (IESNA) TM-21.
8. The fixture shall have a diecast aluminum housing.
9. The luminaire finish shall be corrosion resistant with a polyester powder-coat of 2.5 mil nominal thickness. Finish shall pass per ASTM D1654 after 3000 hours of testing per ASTM B117.
10. The housing shall be constructed of stainless steel, zinc or steel with zinc alloy electroplate and chromate top coat.
11. The luminaire shall be easy to open when properly mounted and shall have readily accessible internal parts. Access to all internal parts requiring replacement shall not require tools (i.e., "tool-less entry").
12. The luminaire shall have a vibration rating of 3G per the American National Standard (ANSI) IEEE C136.31, Table 2, Roadway Lighting Equipment - Luminaire.
13. The luminaire shall be designed to allow water shedding.
14. The luminaire shall have a passive cooling method shall be employed to manage thermal output of LED light engine and power supply.
15. The luminaire shall have a label per ANSI C136.22 that states operating voltage and current range. The label must be clearly visible on the inside of the housing.
16. The luminaire shall fully operate in a temperature range of -40 degrees C to 40 degrees C.
17. The luminaire shall have an internal power supply (electronic driver). The power supply shall not have a manual, field-adjustable setting for current output.
18. The luminaire shall have a power supply (electronic driver) that will operate on a 480 volt single phase at 60 hertz.
19. The luminaire shall have a power factor of .90 or greater at full load.
20. The luminaire shall have a power supply (electronic driver) that has total harmonic distortion of 20% or less at full load.
21. The luminaire shall have power supply (electronic driver) output ripple of less than 10%.
22. The luminaire shall have a power supply (electronic driver) with a rated life of 100,000 hours with a luminaire operated at an ambient temperature of 25°C (77°F).
23. The luminaire shall have an isolated power supply (electronic driver) that has thermal overload protection.
24. The luminaire shall have a power supply (electronic driver) that is self-limited short circuit protected and over load protected.
25. The luminaire shall not use any active thermal cutback, such as in order to achieve a higher thermal performance.
26. The luminaire shall have a power supply (electronic driver) that is terminated in a quick disconnect wire harness for easy maintenance. Wire nut termination is not acceptable.
27. The luminaire shall have a terminal block for terminating wiring to the luminaire. The terminal block shall be a 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG pole wire.
28. Fixture shall have a surge protection that meets 20kV/10kA per ANSI/IEEE C62.41.
29. The luminaire shall have life rating on all electrical components of 100,000 hours of operation with a lumen output of 25 degrees C.
30. All LED components shall be rated for operation in a luminaire at 25 degrees C (77 degrees F) at 100,000 hours.
31. Electrical components shall be protected per ANSI/IEEE standard C62.41, for Class C applications.
32. The LED shall fully operate in a temperature range -40 degrees C to 40 degrees C (1-40 degrees F to 104 degrees F).
33. The LED shall have no more than a 15% optical intensity of initial delivery lumens due to thermal output when operated at 25°C (77°F).
34. The LED shall have a minimum lumen output of 80% of initial lumens after 70,000 hours of operation when operated at 25°C (77°F).
35. The LED shall have a rated life of 100,000 hours when operated at 40 °C.
36. The LED shall have a minimum Luminaire efficacy of 120 lumens/watt.

LED Luminaire Specifications

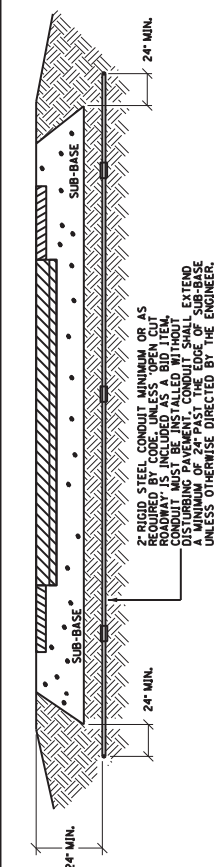
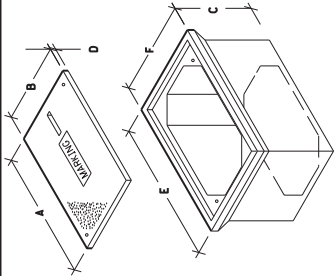
39. The Correlated Color Temperature (CCT) shall be 4000K with a tolerance of ±250K, white that conforms to LM-79. The Correlated Color Temperature (CCT) shall be 5000K with a variance of 250K, white, that conforms to LM-79 (HIGH MAST ONLY).
40. The minimum color rendering index (CRI) shall not be less than 70.
41. The optics shall have a completely sealed optical system.
42. The optics shall have an Illuminating Engineering Society of North America (IESNA) beam spread rating of 0.8 or greater.
43. The Light Loss Factor (LLF) shall be calculated for each fixture as follows:  
LLF = LLD x LDD  
Lamp Lumen Depreciation Factor (LLD) shall be the specified percentage of lumen maintenance at 25°C (77°F) from the TM-21 report. This LLD should be verified from the TM-21 report. This report shall be submitted for verification.  
Luminaire Dirt Depreciation (LDD) = .9  
The TM-21 Report must show the drive current used for the submitted luminaire. The report can show a larger drive current to represent a worst case scenario.
44. The Lumen Maintenance Life  $L_m$  from the TM-21 Report must not be below 80% of 70,000 hours at 25°C (77°F).
45. The manufacturer shall provide certified test laboratories IES photometrics which verify light levels. Product submittal shall be accompanied by IES TM-21 compliant test reports from a CALIPER qualified or NVLAP accredited testing laboratory for the specific model being submitted.
46. The luminaire shall be equipped with a shorting cap and a 7-pin photocontrol receptacle that meets ANSI 2013 standard C136.41
47. The luminaire shall have an exterior label that identifies the fixture type and is approved by the project engineer. This label shall be submitted and approved by the project engineer.
48. The luminaire shall have a QR code label that can be scanned and identify the model number and serial number for each individual fixture. This label shall be submitted and approved by the project engineer.
49. WARRANTY: The Manufacturer shall ensure that the LED luminaires have a minimum standard warranty of 10 years for all parts, materials, paint finish, workmanship and labor. The warranty shall be in writing on the luminaire. The warranty shall begin upon the date the luminaire is received. The warranty shall be transferable.  
(1) Failure in luminaire LED, housing, wiring, connections, and drivers.  
(2) More than 10 percent decrease in lumen output.  
(3) Significant change in light output color.
50. Technical Support: During the warranty period, technical support shall be available for the manufacturer. The manufacturer shall provide technical support to the certified personnel or factory certified installers at no additional charge to the Department.
51. MINIMUM REQUIRED SUBMITTALS:  
LED driver specification sheet.  
LM-79 Luminaire photometric report.  
The report must submit LM-79 in-situ test data to confirm thermal operating temperatures of the luminaire.  
LM-80 lumen maintenance report.  
Backlight, Uplight, Glare (BUG) rating of the luminaire.  
Written product warranty.  
Certified test lab IES photometric reports, including IES electronic file, including intensity and chromaticity data, instructions for installation and maintenance.
52. BREAKAWAY FUSE CONNECTOR KIT  
6 AMP/100 VOLT CARTRIDGE FUSE  
RECEPTACLE HOUSING  
T-TYPE RUBBER INSULATOR  
RECEPTACLE TERMINAL  
FUSEHOLDER TERMINAL  
RECEPTACLE TERMINAL  
CONNECTOR SCREW  
LINE CABLE  
LINE TERMINAL (SCREW TYPE)  
LOAD CABLE  
LOAD TERMINAL (SCREW TYPE)  
T-TYPE RUBBER INSULATOR  
RECEPTACLE HOUSING  
RECEPTACLE TERMINAL  
CONNECTOR SCREW  
LINE CABLE  
LINE TERMINAL (SCREW TYPE)  
LOAD CABLE  
LOAD TERMINAL (SCREW TYPE)  
DETAILS OF TYPE HEB-JW-RYC CONNECTOR  
TYPE HEB-JW-RYC CONNECTOR SHOWN  
LINE SIDE ASSEMBLY  
BREAKAWAY POINT  
LINE SIDE ASSEMBLY  
LED LUMINAIRE/FUSE CONNECTOR DETAILS

DESIGN CRITERIA FOR LED LUMINAIRE FOR INTERSECTION LIGHTING SHEET  
CALCULATION ZONE SHOWN ON PLAN  
OVERALL DESIGN CRITERIA  
ILLUMINANCE: AVERAGE: NOT LESS THAN 1.22 FOOT-CANDLES AND MORE THAN 1.55 FOOT-CANDLES  
LAMP WATTAGE: CAN NOT EXCEED 90 WATTS  
LUMINAIRE DESIGN:  
DRIVER: NOT TO EXCEED 700 mA  
TYPE 4 DISTRIBUTION  
LAMP WATTAGE: CAN NOT EXCEED 90 WATTS  
BRACKET LENGTH 4' 6" OR 8'  
MOUNTING HEIGHT AS SPECIFIED (NOMINAL)  
FINISHED GRADE  
LUMINAIRE DESIGNATION EXAMPLE  
SPECIAL NOTE:  
ALL LUMINAIRE SHALL HAVE THE NEMA LABEL INSTALL ON THE BOTTOM OF THE FIXTURE TO VERIFY THE WATTAGE. LABEL: B4  
LUMINAIRE NUMBER IN CIRCUIT  
CIRCUIT NUMBER  
1 - 2  
1/26/2022

COUNTY OF	SPENCER
ITEM NO.	5-900R.20
SHEET	13

JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 1/2"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

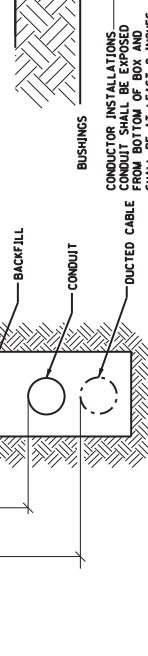
\* MINIMUM  
NOTE: STACKABLE BOXES ARE PERMITTED  
JUNCTION BOX



**CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL**

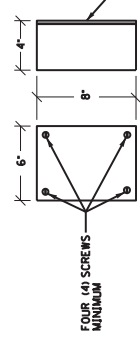


DEPTH SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND FINISH PAVEMENT TO ORIGINAL LIFTS AND BEFORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

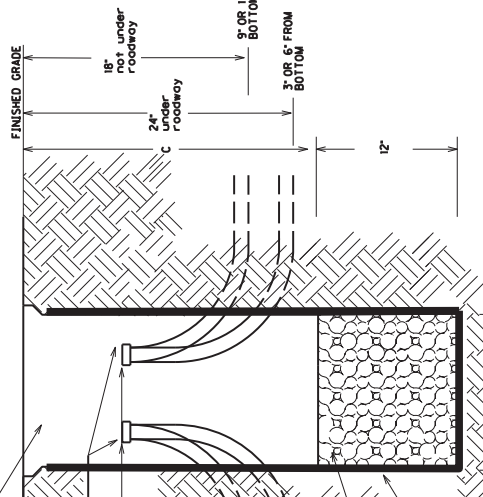
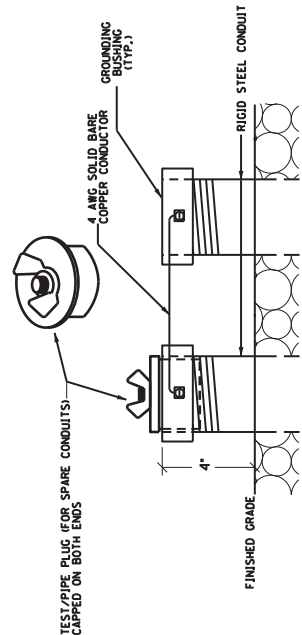


**CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH**

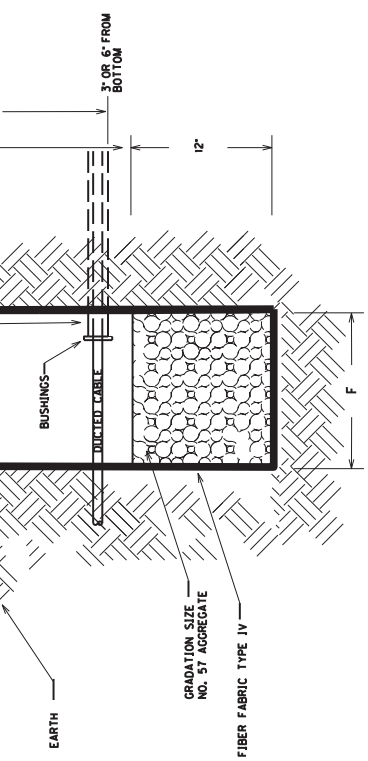
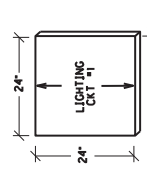
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 1/2\"/>



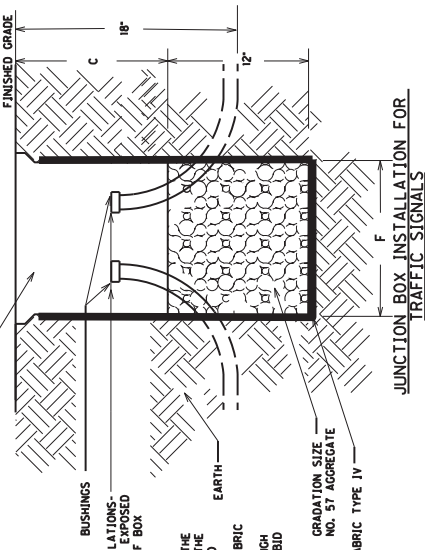
**ABOVE GROUND BOX**



**JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING**



**JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING**



**JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS**

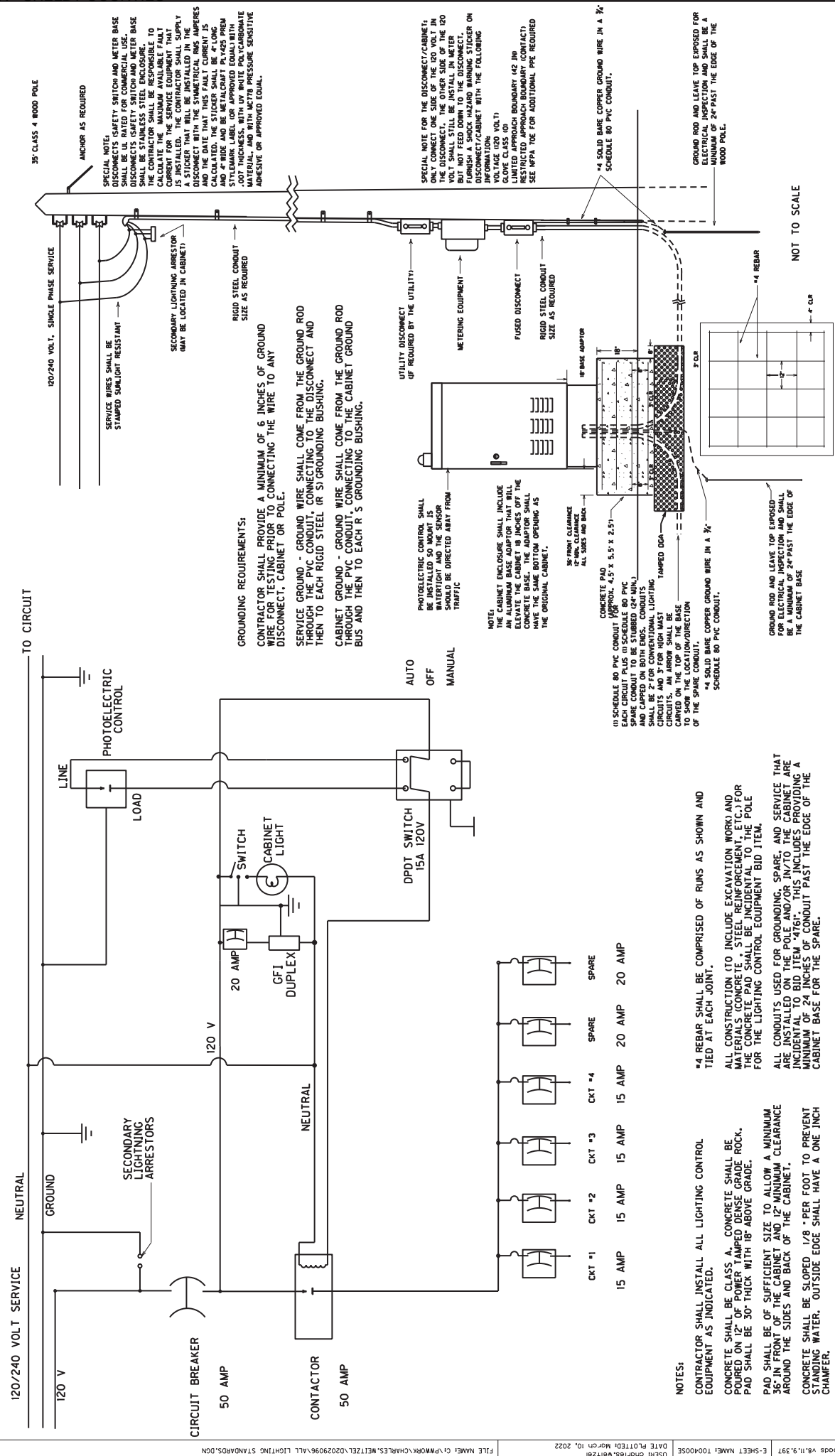
BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE CUT ONLY AS MUCH AS NECESSARY TO ALLOW EACH INDIVIDUAL CONDUIT THROUGH. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 481L, 20392NS835, OR 20392NS835S.

**TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL CONCRETE CABLE MARKERS**

**TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT DETAILS**

3/13/2017

COUNTY OF	ITEM NO.	SHEET
SPENCER	5-9010.20	14



120/240 VOLT, SINGLE PHASE SERVICE

SERVICE WIRES SHALL BE STAMPED SUNLIGHT RESISTANT

SECONDARY LIGHTNING ARRESTOR (MAY BE LOCATED IN CABINET)

RIGID STEEL CONDUIT SIZE AS REQUIRED

ANCHOR AS REQUIRED

SPECIAL NOTE: DISCONNECTS (SAFETY SWITCH AND METER BASE) SHALL BE UL RATED FOR COMMERCIAL USE. THE METER BASE SHALL BE STAINLESS STEEL ENCLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE MAXIMUM AVAILABLE FAULT CURRENT. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE SAFETY SWITCH AND DISCONNECT WITH THE SYMMETRICAL RMS AMPERES AND THE DATE THAT THIS FAULT CURRENT IS CALCULATED. THE SAFETY SWITCH SHALL BE 4" WIDE AND BE METALMATE PL 455 PREM STYLE MARK LABEL (OR APPROVED EQUAL) WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MCT70 PRESSURE SENSITIVE ADHESIVE OR APPROVED EQUAL.

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R S GROUNDING BUSHING.

GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R S GROUNDING BUSHING.

UTILITY DISCONNECT (IF REQUIRED BY THE UTILITY)

METERING EQUIPMENT

FUSED DISCONNECT

RIGID STEEL CONDUIT SIZE AS REQUIRED

1/4" SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 80 PVC CONDUIT.

GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE WOOD POLE.

PHOTOELECTRIC CONTROL

LINE

LOAD

20 AMP

GFI DUPLEX

SWITCH

CABINET LIGHT

DPDT SWITCH 15A 120V

AUTO OFF MANUAL

PHOTOELECTRIC CONTROL SHALL BE INSTALLED TO CONTROL WATER LIGHT AND THE SENSOR SHOULD BE DIRECTED AWAY FROM TRAFFIC

NOTE: THE CABINET ENCLOSURE SHALL INCLUDE AN ANCHOR TO BE ELEVATED 18 INCHES OFF THE CONCRETE BASE. THE ADAPTOR SHALL HAVE THE SAME BOTTOM OPENING AS THE ORIGINAL CABINET.

3" FRONT CLEARANCE ALL SIDES AND BACK

8" BASE ADAPTOR

CONCRETE PAD 4.5' x 3.5' x 2.5"

1" SCHEDULE 80 PVC CONDUIT FOR EACH CIRCUIT PLUS (1) SCHEDULE 80 PVC CONDUIT FOR GROUNDING. CONDUITS SHALL BE 2" FOR CONVENTIONAL LIGHTING CIRCUITS AND 3" FOR HIGH MAST LIGHTING CIRCUITS. CONDUITS SHALL BE CAPPED ON THE TOP OF THE BASE TO SHOW THE LOCATION/DIRECTION OF THE SPARE CONDUIT.

1/4" SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 80 PVC CONDUIT.

GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE CABINET BASE

CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.

CONCRETE SHALL BE CLASS A, CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.

PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.

CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STAGNANT WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.

CONTRACTOR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.

ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE, STEEL REINFORCEMENT, ETC.) FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.

ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM -4761. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

15 AMP	CKT #1	15 AMP	CKT #2	15 AMP	CKT #3	15 AMP	CKT #4	SPARE	SPARE	20 AMP
--------	--------	--------	--------	--------	--------	--------	--------	-------	-------	--------

BASE MOUNTED SERVICE DETAIL  
 120 240 VOLT

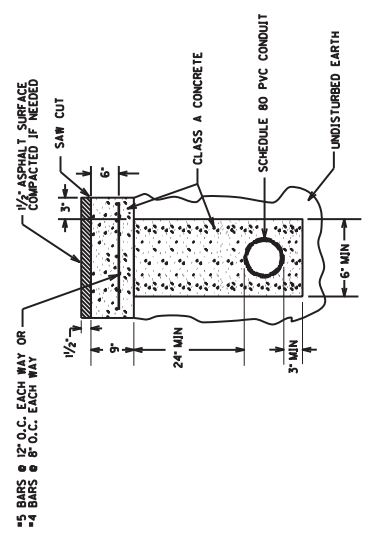
NOT TO SCALE

TYPICAL

1/24/2020



COUNTY OF	ITEM NO.	SHEET
SPENCER	5-9008.20	15



OPEN CUT PAVEMENT DETAIL

1/2" ASPHALT SURFACE  
COMPACTED IF NEEDED

SAW CUT

CLASS A CONCRETE

SCHEDULE 80 PVC CONDUIT

UNDISTURBED EARTH

6" MIN

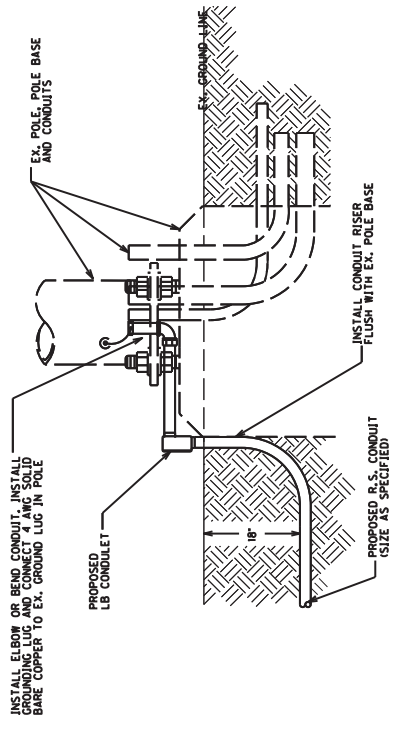
3" MIN

24" MIN

1/2"

9"

3"



CONDUIT INSTALLATION IN EX. POLE BASE

INSTALL ELBOW OR BEND CONDUIT, INSTALL GROUNDING LUG AND CONNECT 4 AWG SOLID BARE COPPER TO EX. GROUND LUG IN POLE

PROPOSED LB CONDUIT

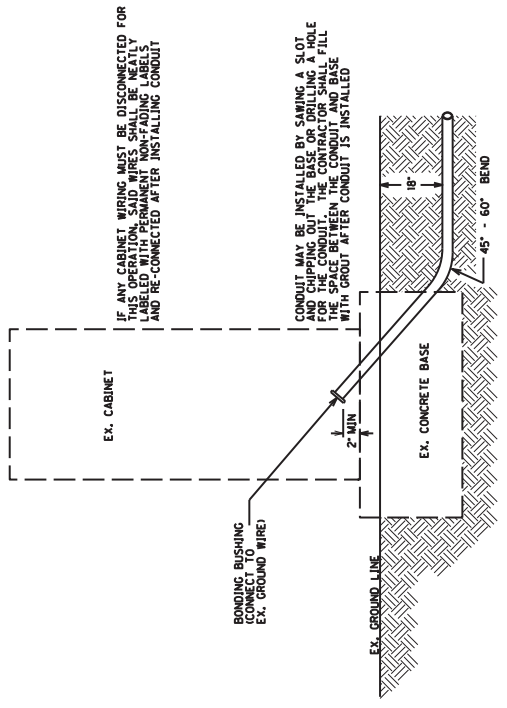
EX. POLE, POLE BASE AND CONDUITS

EX. GROUND LINE

INSTALL CONDUIT RISER FLUSH WITH EX. POLE BASE

18"

PROPOSED R.S. CONDUIT (SIZE AS SPECIFIED)



CONDUIT INSTALLATION IN EX. CABINET BASE

EX. CABINET

EX. CONCRETE BASE

EX. GROUND LINE

BONDING BUSHING (CONNECT TO EX. GROUND WIRE)

2" MIN

CONDUIT MAY BE INSTALLED BY SAWING A SLOT AND CHIPPING OUT THE BASE OR DRILLING A HOLE IN THE CONDUIT AND FILLING THE SPACE BETWEEN THE CONDUIT AND BASE WITH GROUT AFTER CONDUIT IS INSTALLED

18"

45° - 60° BEND

IF ANY CABINET WIRING MUST BE DISCONNECTED FOR THIS OPERATION, SAID WIRES SHALL BE NEATLY TYPED AND IDENTIFIED PRIOR TO DISCONNECTING AND RE-CONNECTED AFTER INSTALLING CONDUIT

CONDUIT INSTALLATIONS IN EXISTING LOCATIONS

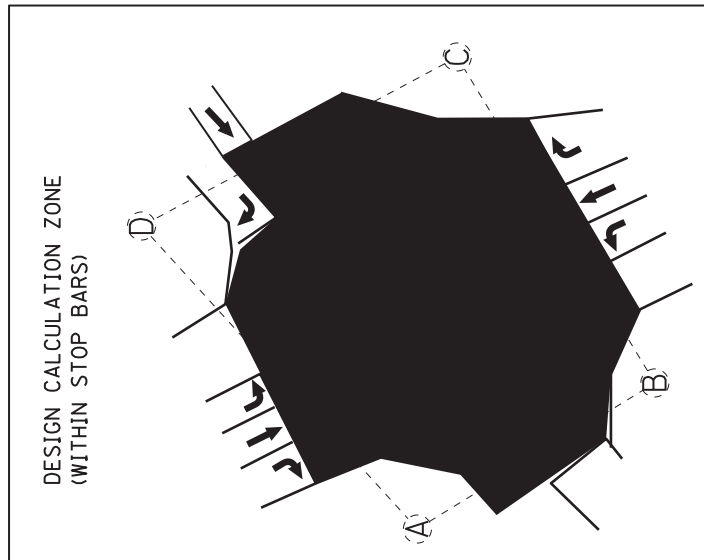
3/10/2017

COUNTY OF	SPENCER
ITEM NO.	5-9018.20
SHEET	T6

WIRING SCHEDULE

FROM	TO	WIRE SIZE	CONDUIT SIZE
CKT #1	CONTROLLER POLE A	3-12 AWG	2" PVC
	POLE A	1-1 UP POLE A	
CKT #2	CONTROLLER POLE A	3-12 AWG	2" PVC
	POLE A	2-1 POLE A ACROSS MESSENGER SPAN, TO POLE B	
CKT #3	CONTROLLER POLE A	3-12 AWG	2" PVC
	POLE A	1-1 UP POLE A ACROSS MESSENGER SPAN, THRU POLE B, TO POLE C	
CKT #4	CONTROLLER POLE A	3-12 AWG	2" PVC
	POLE A	1-1 UP POLE A ACROSS MESSENGER SPAN, TO POLE D	

-GROUND WIRE FOR CIRCUIT 1 SHALL CONNECT TO GROUND LUG ON SIGNAL POLE "B", THEN RUN UP POLE TO LUMINAIRE  
 -GROUND WIRE FOR CIRCUIT 2, 3, & 4 SHALL RUN DOWN LUG, THEN BACK UP POLE TO LUMINAIRE  
 -ALL WIRE SHALL BE 1/2" A.W.G. EACH CIRCUIT SHALL HAVE BLACK, WHITE, NEUTRAL, AND GREEN (GROUND) WIRE  
 -ALL WIRE SHALL BE INSTALLED SPICE FREE FROM CABINET TO LUMINAIRE  
 -\*\* RID ITEM 4833, WIRE, NO. 12 SHALL BE TYPE AHHW WIRE OR SUNLIGHT RESISTANT APPROVED  
 -ALL WIRE SHALL BE INSTALLED IN THE SAME 2" PVC CONDUIT



120V SERVICE AREA  
 -CONNECT 120V FEED FOR LIGHTING CABINET TO EXISTING METER FOR TRAFFIC SIGNAL  
 -INSTALL SEPARATE DISCONNECT BETWEEN METER AND LIGHTING CABINET ON SIGNAL POLE  
 -INSTALL 50 AMP DISCONNECT

-INSTALL LUMINAIRE 4-1 ON AN 8' ARM ATTACHED TO EXISTING SIGNAL POLE "D"  
 -MOUNTING HEIGHT OF LUMINAIRE TO FINISHED GRADE SHALL BE 35'  
 -LUMINAIRE SHALL HAVE NEMA LABEL B4

-INSTALL LUMINAIRE 2-1 ON AN 8' ARM ATTACHED TO EXISTING SIGNAL POLE "C"  
 -MOUNTING HEIGHT OF LUMINAIRE TO FINISHED GRADE SHALL BE 35'  
 -LUMINAIRE SHALL HAVE NEMA LABEL B4

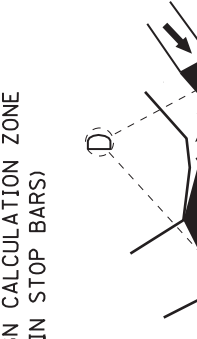
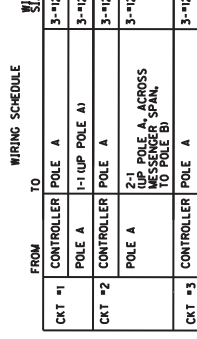
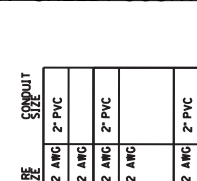
-INSTALL LUMINAIRE 3-1 ON AN 8' ARM ATTACHED TO EXISTING SIGNAL POLE "A"  
 -MOUNTING HEIGHT OF LUMINAIRE TO FINISHED GRADE SHALL BE 35'  
 -LUMINAIRE SHALL HAVE NEMA LABEL B4

-GROUND WIRE FOR CIRCUIT 1 SHALL CONNECT TO GROUND LUG ON SIGNAL POLE "B", THEN RUN UP POLE TO LUMINAIRE  
 -GROUND WIRE FOR CIRCUIT 2, 3, & 4 SHALL RUN DOWN LUG, THEN BACK UP POLE TO LUMINAIRE  
 -ALL WIRE SHALL BE 1/2" A.W.G. EACH CIRCUIT SHALL HAVE BLACK, WHITE, NEUTRAL, AND GREEN (GROUND) WIRE  
 -ALL WIRE SHALL BE INSTALLED SPICE FREE FROM CABINET TO LUMINAIRE  
 -\*\* RID ITEM 4833, WIRE, NO. 12 SHALL BE TYPE AHHW WIRE OR SUNLIGHT RESISTANT APPROVED  
 -ALL WIRE SHALL BE INSTALLED IN THE SAME 2" PVC CONDUIT

SCALE 1" = 20'

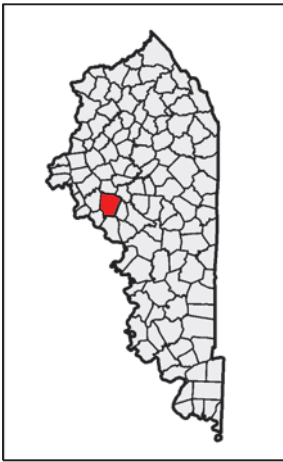
LEGEND  
 [Symbol] BASE MOUNTED LIGHTING CONTROLLER  
 [Symbol] EXISTING STEEL STRAIN POLE  
 [Symbol] LED LUMINAIRE ON 8' ARM  
 [Symbol] 2" PVC SCHEDULE 80 CONDUIT

INTERSECTION LIGHTING PLAN SHEET  
 KY 155 @ KY 55



FILE NAME: C:\P\WORK\KORCH\KHALS.WEITZEL\0202986\ALL LIGHTING STD\ANDR05.DGN  
 USER: khals@weitzel.com  
 DATE PLOTTED: March 14, 2022  
 E-SHEET NAME: T0060001.T  
 Power Interiors 8/13/2022

COUNTY OF	ITEM NO.
SHELBY	5-9018-40

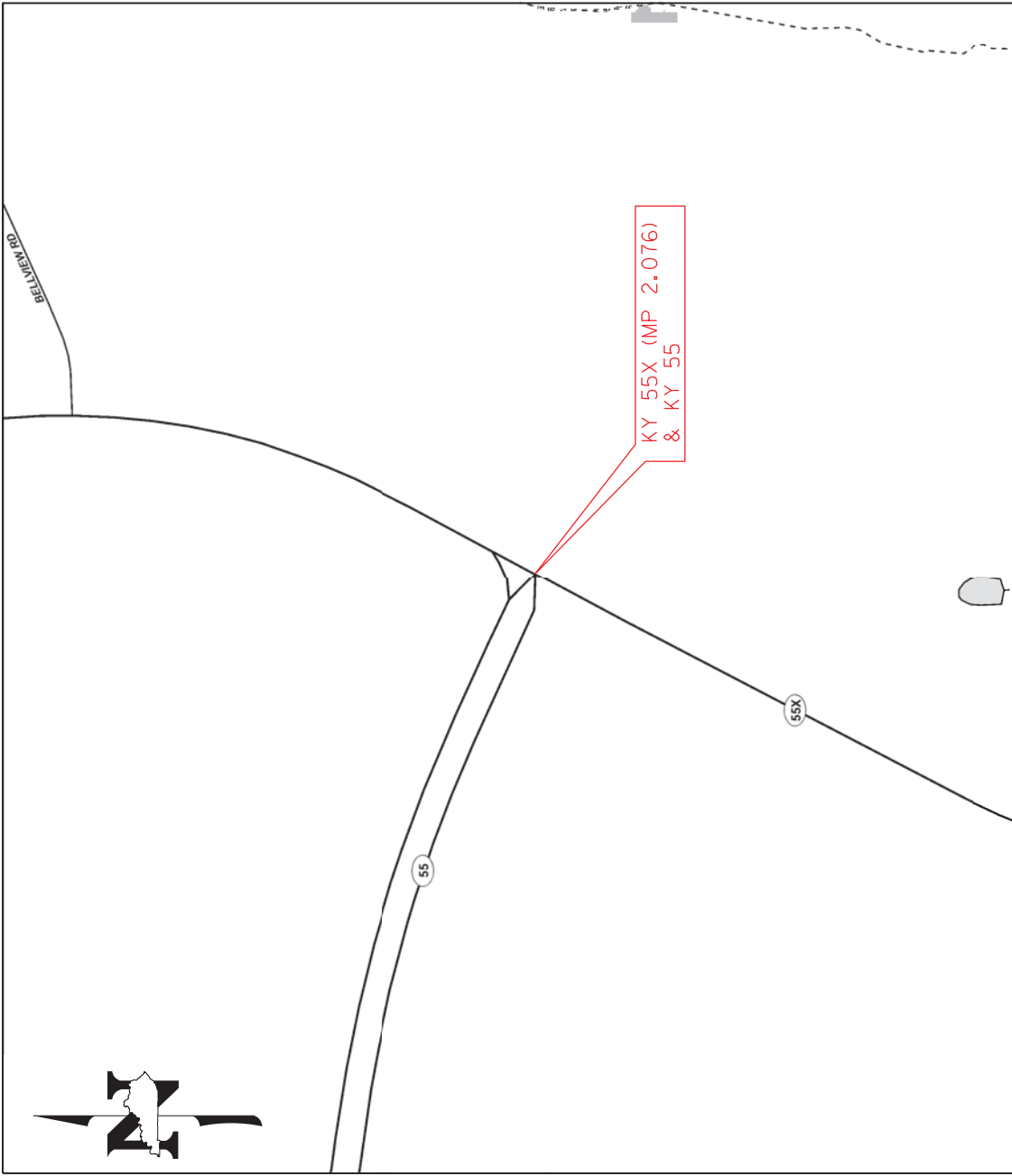


**Commonwealth of Kentucky**  
**DEPARTMENT OF HIGHWAYS**

PLANS OF  
PROPOSED PROJECT

**SHELBY COUNTY**

KY 55X AT KY 55



**SHELBY COUNTY**  
**KY 55X (EMINENCE PIKE) @ KY 55 (FREEDOM'S WAY)**  
**ITEM NO. 5-9018.40**  
**GENERAL SUMMARY**

ITEM NUMBER	ITEM		UNIT	QUANTITY
1	DGA BASE	(4)	TON	38
2069	JPC PAVEMENT - 10 IN	(4)	SQYD	82
2200	ROADWAY EXCAVATION	(4)	CUYD	41
2569	DEMOBILIZATION		LS	1
2650	MAINTAIN & CONTROL TRAFFIC (KY 55X @ KY 55)		LS	1
2726	STAKING (KY 55X @ KY 55)		LS	1
4845	CABLE NO 14/7C	(1)	LF	80
6406	SBM ALUM SHEET SIGNS .080 IN	(3)	SQFT	58.63
6407	SBM ALUM SHEET SIGNS .125 IN	(3)	SQFT	80.67
6410	STEEL POST TYPE 1	(3)	LF	202
6472	INSTALL SPAN MOUNTED SIGN	(3)	EACH	2
6542	PAVE STRIPING-THERMO-6 IN W	(2)	LF	15
6543	PAVE STRIPING-THERMO-6 IN Y	(2)	LF	39
6556	PAVE STRIPING-DUR TY 1-6 IN W	(2)	LF	50
6557	PAVE STRIPING-DUR TY 1-6 IN Y	(2)	LF	80
6560	PAVE STRIPING-DUR TY 1-12 IN W	(2)	LF	284
6568	PAVE MARKING-THERMO STOP BAR-24IN	(2)	LF	25
6598	PAVEMENT MARKING REMOVAL	(2)	SQFT	299
20188NS835	INSTALL LED SIGNAL - 3 SECTION	(1)	EACH	3
20266ES835	INSTALL LED SIGNAL - 4 SECTION	(1)	EACH	1
20275EC	VIDEO DETECTION-INSTALL	(1)	EACH	1
20550ND	SAWCUT PAVEMENT	(4)	LF	137
22664EN	WATER BLASTING EXISTING STRIPE	(2)	LF	101
23253ES717	PAVE MARK TY 1 TAPE CROSS HATCH	(2)	SQFT	653
23256ES717	PAVE MARK TY 1 TAPE-ONLY	(2)	EACH	6
23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	(2)	LF	45
23270ES717	PAVE MARK TY 1 TAPE-CURV ARROW	(2)	EACH	8
24631EC	BARCODE SIGN INVENTORY	(3)	EACH	18
24908EC	INSTALL SIGNAL CONTROLLER TY ATC	(1)	EACH	1
24955ED	REMOVE SIGNAL EQUIPMENT (KY 55X @ KY 55)	(1)	EACH	1

- (1) CARRIED OVER FROM THE SIGNAL SUMMARY AND SIGNAL PLAN SHEET
- (2) CARRIED OVER FROM THE STRIPING / PAVEMENT MARKING SUMMARY
- (3) CARRIED OVER FROM SIGNING SUMMARY
- (4) CARRIED OVER FROM PAVING SUMMARY



<b>SHELBY COUNTY - KY 55X @ KY 55</b>			
<b>ITEM NO. 5-9018.40</b>			
<b>PAVING SUMMARY</b>			
<b>PAVING AREAS</b>		<b>PAVING QUANTITIES</b>	
<b>ITEM</b>	<b>TOTAL</b>	<b>ITEM</b>	<b>TOTAL</b>
<b>KY 55 MEDIAN FULL DEPTH PAVEMENT</b>		<b>KY 55 MEDIAN FULL DEPTH PAVEMENT</b>	
	<b>SY</b>		<b>CY</b>
ROADWAY EXCAVATION	82	ROADWAY EXCAVATION	41
	<b>LF</b>		
SAWCUT PAVEMENT	137		
	<b>SY</b>		<b>TON</b>
8.0" DGA	82	8.0" DGA BASE	38
10.0" JPC PAVEMENT	82		

<b>PAVING SUMMARY</b>			
<b>CODE</b>	<b>ITEM</b>	<b>UNITS</b>	<b>PROJECT TOTAL</b>
1	DGA BASE	TON	38
2069	JPC PAVEMENT-10 IN	SQYD	82
2200	ROADWAY EXCAVATION	CUYD	41
20550ND	SAWCUT PAVEMENT	LF	137

NOTES:

All DGA BASE mixtures shall be estimated at 115 lbs. per SQ. YD. per inch of depth unless noted otherwise

**SHELBY COUNTY  
KY 55X (EMINENCE PIKE) & KY 55 (FREEDOM'S WAY)  
ITEM NO. 5-9018.40  
STRIPING / PAVEMENT MARKING SUMMARY PAGE 1 OF 2**

STRIPING					
BEGIN		END		LENGTH	LF
STATION	OFFSET	STATION	OFFSET		
<b>KY 55 (EMINENCE PIKE) SOUTHBOUND</b>					
12" Single Solid White Line - Island Outline (PAVE STRIPING-DUR TY 1-12 IN W)					
184+32	24' LT	184+94	24' LT	62	62
184+32	24' LT	337+38	32' LT	61	61
184+94	24' LT	337+38	32' LT	98	98
6" Single Solid White Line - Island Outline (PAVE STRIPING-DUR TY 1-6 IN W)					
336+88	32' LT	337+38	32' LT	50	50
<b>KY 55X (EMINENCE PIKE) NORTHBOUND</b>					
6" Single Solid White Line (PAVE STRIPING-THERMO-6 IN W)					
183+37	0'	183+52	0'	15	15
6" Double Solid Yellow Line (PAVE STRIPING-THERMO-6 IN Y)					
183+37	13' LT	183+52	13' LT	15	30
6" Dashed Yellow Line (PAVE STRIPING-THERMO-6 IN Y)					
183+52	13' LT	183+84	28' LT	36	9
6" Single Solid Yellow Line (PAVE STRIPING-DUR TY 1-6 IN Y)					
183+81	28' LT	337+24	20' LT	80	80
12" Single Solid White Line - Island Outline (PAVE STRIPING-DUR TY 1-12 IN W)					
184+04	24' LT	184+21	24' LT	17	17
184+04	24' LT	337+78	20' LT	26	26
184+21	24' LT	337+38	20' LT	20	20

PAVEMENT MARKING - STOP BAR - 24 IN				
STATION	OFFSET	DESCRIPTION	LF	
<b>KY 55X NORTHBOUND</b>				
183+52	13' LEFT to 12' RIGHT	24" THERMO STOP BAR	25	
<b>KY 55 (FREEDOM'S WAY) EASTBOUND</b>				
337+78	20' RIGHT to 65' RIGHT	24" TY 1 TAPE STOP BAR	45	

PAVEMENT MARKING - DUR TY 1 ARROWS / "ONLY"				
STATION	OFFSET	DESCRIPTION	EACH	
<b>KY 55 EASTBOUND (TY 1 TAPE)</b>				
332+57	28' RIGHT	KY 55 EB LEFT TURN LANE ONTO KY 55 NB	LEFT ARROW	1
332+57	38' RIGHT	KY 55 EB RIGHT TURN LANE ONTO KY 55X SB	RIGHT ARROW	1
333+37	26' RIGHT & 38' RIGHT	KY 55 EB - LEFT TURN AND RIGHT TURN LANES	ONLY	2
334+17	28' RIGHT	KY 55 EB LEFT TURN LANE ONTO KY 55X SB	LEFT ARROW	1
334+17	38' RIGHT	KY 55 EB RIGHT TURN LANE ONTO KY 55X SB	RIGHT ARROW	1
334+97	26' RIGHT & 38' RIGHT	KY 55 EB - LEFT TURN AND RIGHT TURN LANES	ONLY	2
335+77	28' RIGHT	KY 55 EB LEFT TURN LANE ONTO KY 55 NB	LEFT ARROW	1
335+77	38' RIGHT	KY 55 EB RIGHT TURN LANE ONTO KY 55X SB	RIGHT ARROW	1
336+57	26' RIGHT & 38' RIGHT	KY 55 EB - LEFT TURN AND RIGHT TURN LANES	ONLY	2
337+37	28' RIGHT	KY 55 EB LEFT TURN LANE ONTO KY 55 NB	LEFT ARROW	1
337+37	38' RIGHT	KY 55 EB RIGHT TURN LANE ONTO KY 55X SB	RIGHT ARROW	1

PAVE MARKING - TY 1 TAPE CROSS HATCH (ISLAND CROSS HATCH) (X = 1' , Y = 10')			
STATION	OFFSET	DESCRIPTION	SQFT
184+33	24' LEFT	KY 55 SOUTHBOUND RIGHT TURN ISLAND	93

PAVE MARKING - TY 1 TAPE CROSS HATCH (ISLAND CROSS HATCH) (X = 2' , Y = 20')			
STATION	OFFSET	DESCRIPTION	SQFT
336+60	50' LEFT	FREEDOM'S WAY RIGHT SHOULDER HATCH	200

PAVE MARKING - TY 1 TAPE CROSS HATCH (ISLAND CROSS HATCH) (X = 4' , Y = 40')			
STATION	OFFSET	DESCRIPTION	SQFT
334+22	50' LEFT	FREEDOM'S WAY RIGHT SHOULDER HATCH	360

**SHELBY COUNTY  
KY 55X (EMINENCE PIKE) & KY 55 (FREEDOM'S WAY)  
ITEM NO. 5-9018.40  
STRIPING / PAVEMENT MARKING SUMMARY PAGE 2 OF 2**

PAVEMENT MARKING REMOVAL			
STATION	OFFSET	DESCRIPTION	SF
183+38	0'	KY 55X NB STOP BAR	50
332+57	28' RIGHT	FREEDOM'S WAY LEFT TURN ARROW	15.5
332+57	38' RIGHT	FREEDOM'S WAY RIGHT TURN ARROW	15.5
333+37	28' RIGHT	FREEDOM'S WAY "ONLY"	20.8
333+37	38' RIGHT	FREEDOM'S WAY "ONLY"	20.8
334+17	28' RIGHT	FREEDOM'S WAY LEFT TURN ARROW	15.5
334+17	38' RIGHT	FREEDOM'S WAY RIGHT TURN ARROW	15.5
334+97	28' RIGHT	FREEDOM'S WAY "ONLY"	20.8
334+97	38' RIGHT	FREEDOM'S WAY "ONLY"	20.8
335+77	28' RIGHT	FREEDOM'S WAY LEFT TURN ARROW	15.5
335+77	38' RIGHT	FREEDOM'S WAY RIGHT TURN ARROW	15.5
336+57	28' RIGHT	FREEDOM'S WAY "ONLY"	20.8
336+57	38' RIGHT	FREEDOM'S WAY "ONLY"	20.8
337+37	28' RIGHT	FREEDOM'S WAY LEFT TURN ARROW	15.5
337+37	38' RIGHT	FREEDOM'S WAY RIGHT TURN ARROW	15.5

WATER BLASTING					
BEGIN		END		LENGTH	LF
STATION	OFFSET	STATION	OFFSET		
<b>KY 55x (EMINENCE PIKE) NORTHBOUND</b>					
4" Dashed Yellow Line (WATER BLASTING EXISTING STRIPE)					
183+38	13' LEFT	184+03	26' LEFT	65	16.25
<b>KY 55 (FREEDOM'S WAY) EASTBOUND</b>					
4" Solid Yellow Line (WATER BLASTING EXISTING STRIPE)					
337+24	20' LEFT	337+95	2' LEFT	85	85

STRIPING / PAVEMENT MARKING SUMMARY			
BID ITEM	DESCRIPTION	UNIT	QUANTITY
6542	PAVE STRIPING-THERMO-6 IN W	LF	15
6543	PAVE STRIPING-THERMO-6 IN Y	LF	39
6556	PAVE STRIPING-DUR TY 1-6 IN W	LF	50
6557	PAVE STRIPING-DUR TY 1-6 IN Y	LF	80
6560	PAVE STRIPING-DUR TY 1-12 IN W	LF	284
6568	PAVE MARKING-THERMO STOP BAR-24 IN	LF	25
6598	PAVEMENT MARKING REMOVAL	SQFT	299
22664EN	WATER BLASTING EXISTING STRIPE	LF	101
23253ES717	PAVE MARK TY 1 TAPE CROSS HATCH	SQFT	653
23256ES717	PAVE MARK TY 1 TAPE-ONLY	EACH	6
23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	LF	45
23270ES717	PAVE MARK TY 1 TAPE-CURV ARROW	EACH	8

Assembly ID	Side of Road	SIGN LOCATION			Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text/Remarks	Sign Dimensions (in x in)	SHEETING		SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (includng to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)																																																																																															
		Approx Offset (ft)	Approx Station	Approx Mile Point						Text/Symbol Color	Background Color											Sheeting Type																																																																																														
S-2	RT	27	179+74	3.404	NB	W3-3	Signal Ahead		30 x 30	Red, Green & Black	Yellow	Black	Black	Strnd w/ Soil Plate	1	13.50				13.50	1																																																																																															
					NB	M3-3	South		24 x 12	Black	White	White	White								1																																																																																															
					NB	M1-5	State Route Sign (1 or 2 digit)	55	24 x 24	Black	White	White	White								1																																																																																															
					NB	M6-1L	Left Arrow		21 x 15	Black	White	White	White								1																																																																																															
					NB	M3-1	North		24 x 12	Black	White	White	White								1																																																																																															
					NB	M1-5	State Route Sign (1 or 2 digit)	55	24 x 24	Black	White	White	White								1																																																																																															
					NB	M6-1R	Right Arrow		21 x 15	Black	White	White	White								1																																																																																															
S-5	RT	36	183+70	3.479	EB	OM3-L	Object Marker Type 3 Left		12 x 36	Black	Yellow	Black	Black	Strnd w/ Soil Plate	1	14.0				14.00	1																																																																																															
					EB	W19-3	Freeway Ends	(Modified) "BYPASS"	48 x 48	Black	Yellow	Black	Black	Strnd w/ Soil Plate							1																																																																																															
					EB	W16-2AP	XX FT	1000	18 x 36	Black	Yellow	Black	Black	Strnd w/ Soil Plate	2	18.0				36.00	1																																																																																															
					EB	W19-3	Freeway Ends	(Modified) "BYPASS"	48 x 48	Black	Yellow	Black	Black	Strnd w/ Soil Plate							1																																																																																															
					EB	W16-2AP	XX FT	1500	18 x 36	Black	Yellow	Black	Black	Strnd w/ Soil Plate	2	18.0				36.00	1																																																																																															
					EB	W19-3	Freeway Ends	(Modified) "BYPASS"	48 x 48	Black	Yellow	Black	Black	Strnd w/ Soil Plate							1																																																																																															
					EB	W16-2AP	XX FT	1500	18 x 36	Black	Yellow	Black	Black	Strnd w/ Soil Plate	2	18.0				36.00	1																																																																																															
					EB	W19-3	Freeway Ends	(Modified) "BYPASS"	48 x 48	Black	Yellow	Black	Black	Strnd w/ Soil Plate							1																																																																																															
					EB	W16-2AP	XX FT	1000	18 x 36	Black	Yellow	Black	Black	Strnd w/ Soil Plate	2	18.0				36.00	1																																																																																															
S-30	RT	8	183+86	3.482	EB	R3-5R	Right Turn ONLY		30 x 36	Black	White	White	White							1																																																																																																
S-31	RT	8	184+29	3.490	EB	R3-5L	Left Turn ONLY		30 x 36	Black	White	White	White							1																																																																																																
<table border="1"> <thead> <tr> <th colspan="10">Reflective Sign Post Panel</th> <th colspan="2">Summary of Items</th> </tr> </thead> <tbody> <tr> <td colspan="10">Install Yellow Reflective Sign Post Panel on Warning Sign Post(s) Plans</td> <td>2</td> <td>60</td> <td>Fl Yellow</td> <td>XI</td> <td>16.67</td> <td colspan="6">Install Yellow Reflective Sign Post Panel on Warning Sign Post(s)</td> </tr> <tr> <td colspan="10">SBM Alum Sheet Signs 0.080 INCH</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="6">SBM Alum Sheet Signs 0.080 INCH</td> </tr> <tr> <td colspan="10">SBM Alum Sheet Signs 0.125 INCH</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="6">SBM Alum Sheet Signs 0.125 INCH</td> </tr> <tr> <td colspan="10">Barcode Sign Inventory</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="6">Barcode Sign Inventory</td> </tr> </tbody> </table>																					Reflective Sign Post Panel										Summary of Items		Install Yellow Reflective Sign Post Panel on Warning Sign Post(s) Plans										2	60	Fl Yellow	XI	16.67	Install Yellow Reflective Sign Post Panel on Warning Sign Post(s)						SBM Alum Sheet Signs 0.080 INCH															SBM Alum Sheet Signs 0.080 INCH						SBM Alum Sheet Signs 0.125 INCH															SBM Alum Sheet Signs 0.125 INCH						Barcode Sign Inventory															Barcode Sign Inventory					
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Summary of Items		
Steel Post - Type 1	202	LF
Install Span Mounted Sign	2	EACH

Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	58.63	SQ FT
SBM Alum Sheet Signs 0.125 INCH	80.67	SQ FT
Barcode Sign Inventory	18	EACH



### **Special Note for Pickup of Video Detection Cameras**

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The Video Detection Cameras and related hardware to be installed as part of the proposed Signal Enhancements at the intersection of KY 55 @ KY 55X in Shelby County are being special ordered by District 5 Traffic staff. The Contractor will need to coordinate with Zach Neihof and/or David Huber for pickup of the Video Detection Cameras equipment. The District Office 5 telephone number is 502-210-5400.

All other signal material items to be provided by KYTC will be picked up at the KYTC Warehouse in Frankfort, KY. Refer to the "Project Material Release Form for Signals and Lighting" for a listing of the materials to be picked up at the KYTC Warehouse, as well as instructions pertaining to coordination and pickup procedures for the materials to be picked up at the KYTC Warehouse.

Tim Tharpe - Director

**DIVISION OF TRAFFIC OPERATIONS  
PROJECT MATERIALS RELEASE FORM  
FOR SIGNALS AND LIGHTING**

Phone (502) 564-3020  
FAX (502) 564-7759

**Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.**

Item Number: 5-9018.40  
 County: Shelby  
 Description: KY 55 @ KY 55X  
Signal Enhancements

Cabinets	Master code	
1	T-01-0105	ATC 2070 Controller (must include T-01-0106 also)
1	T-01-0106	1C w/Maxtime (goes with T-01-0105)
1	T-01-0501	Conflict Monitor, Model 2018 <span style="float: right; background-color: red; color: white; padding: 2px;">Special Order</span>
1	T-01-0510	Isolator, Model 242 (1 for 2070, plus for ped detector and railroad)
2	T-01-0700	Load Switches

Signals		
3	T-02-0009	Siemen 3 Section, 12 inch Signal
3	T-02-0032	Siemen 3 Section Backplate
1	T-02-0033	Siemen 4 Section 12 inch Signal (poly)
1	T-02-0043	Siemen 4 Section Straight Signal Backplate
2	T-02-0300	LED Module 12" Red Arrow
3	T-02-0310	LED Module 12" Yellow Arrow
2	T-02-0320	LED Module 12" Green Arrow
1	T-02-0330	LED Module 12" Red
1	T-02-0340	LED Module 12" Yellow
1	T-02-0350	LED Module 12" Green

Special Items		
2	T-09-0415	30 X 36 through 36 X 36 Sign Hanger (New)

**Poles**

**REQUIRED**

Electrical Contractor Name \_\_\_\_\_

Electrical Contractor Supervisor \_\_\_\_\_

Contact number for Supervisor \_\_\_\_\_

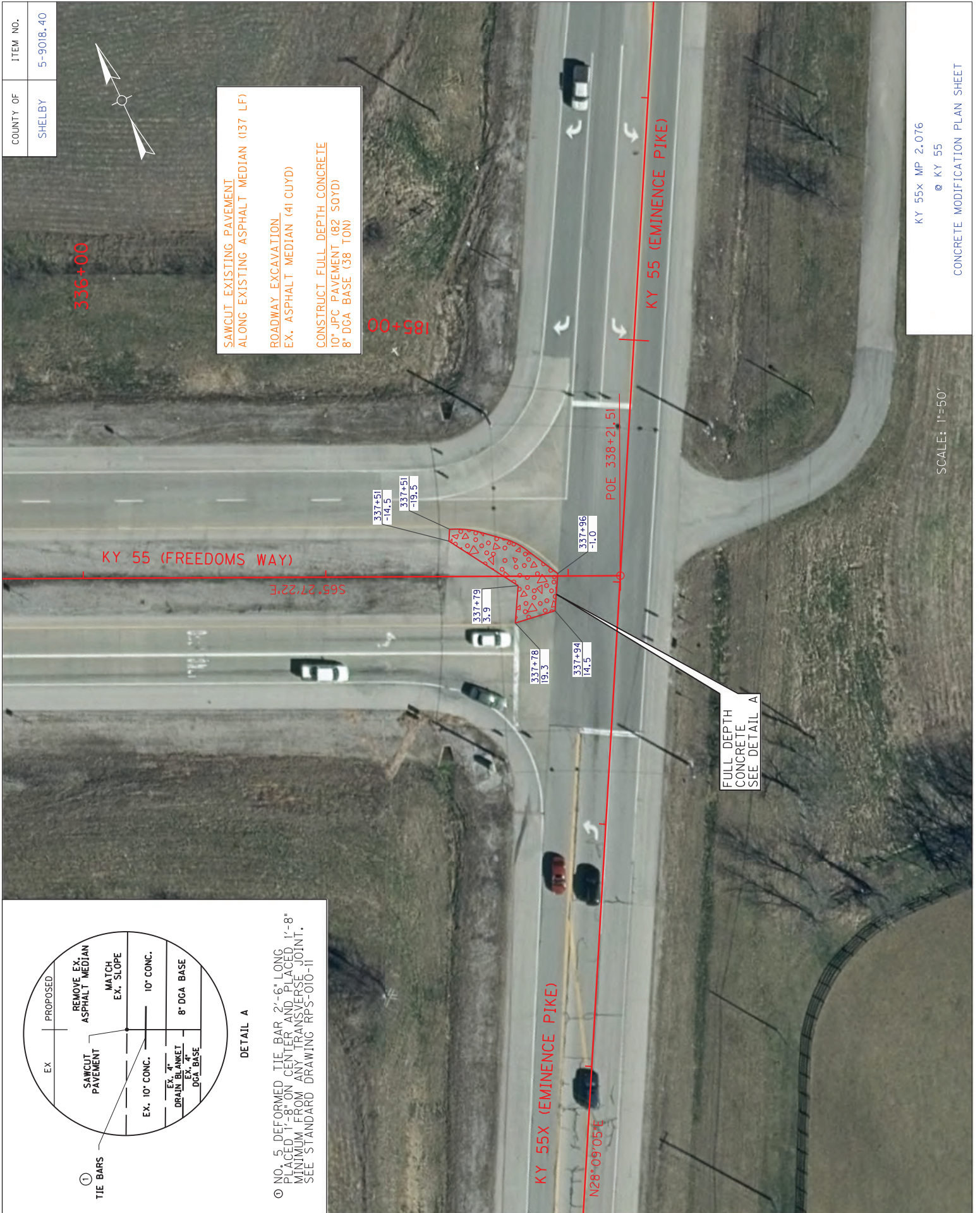
Project Engineer \_\_\_\_\_

Contact number for Project Engineer \_\_\_\_\_

Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project

Signature of Project Engineer or Designee \_\_\_\_\_





COUNTY OF	SHELBY	ITEM NO.	5-9018.40
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SAWCUT EXISTING PAVEMENT  
ALONG EXISTING ASPHALT MEDIAN (137 LF)  
**ROADWAY EXCAVATION**  
EX. ASPHALT MEDIAN (41 CUYD)  
CONSTRUCT FULL DEPTH CONCRETE  
10" JPC PAVEMENT (82 SOYD)  
8" DGA BASE (38 TON)

KY 55 (FREEDOMS WAY)

KY 55 (EMINENCE PIKE)

337+51  
-141.5

337+51  
-19.5

337+78  
19.3

337+94  
14.5

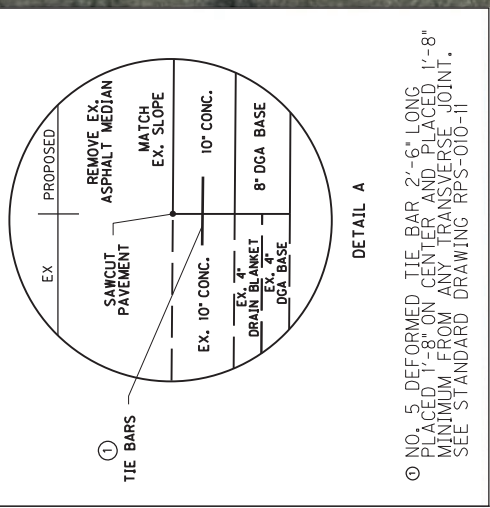
337+96  
-1.0

POE 338+21.51

FULL DEPTH  
CONCRETE  
SEE 'DETAIL A'

KY 55X (EMINENCE PIKE)

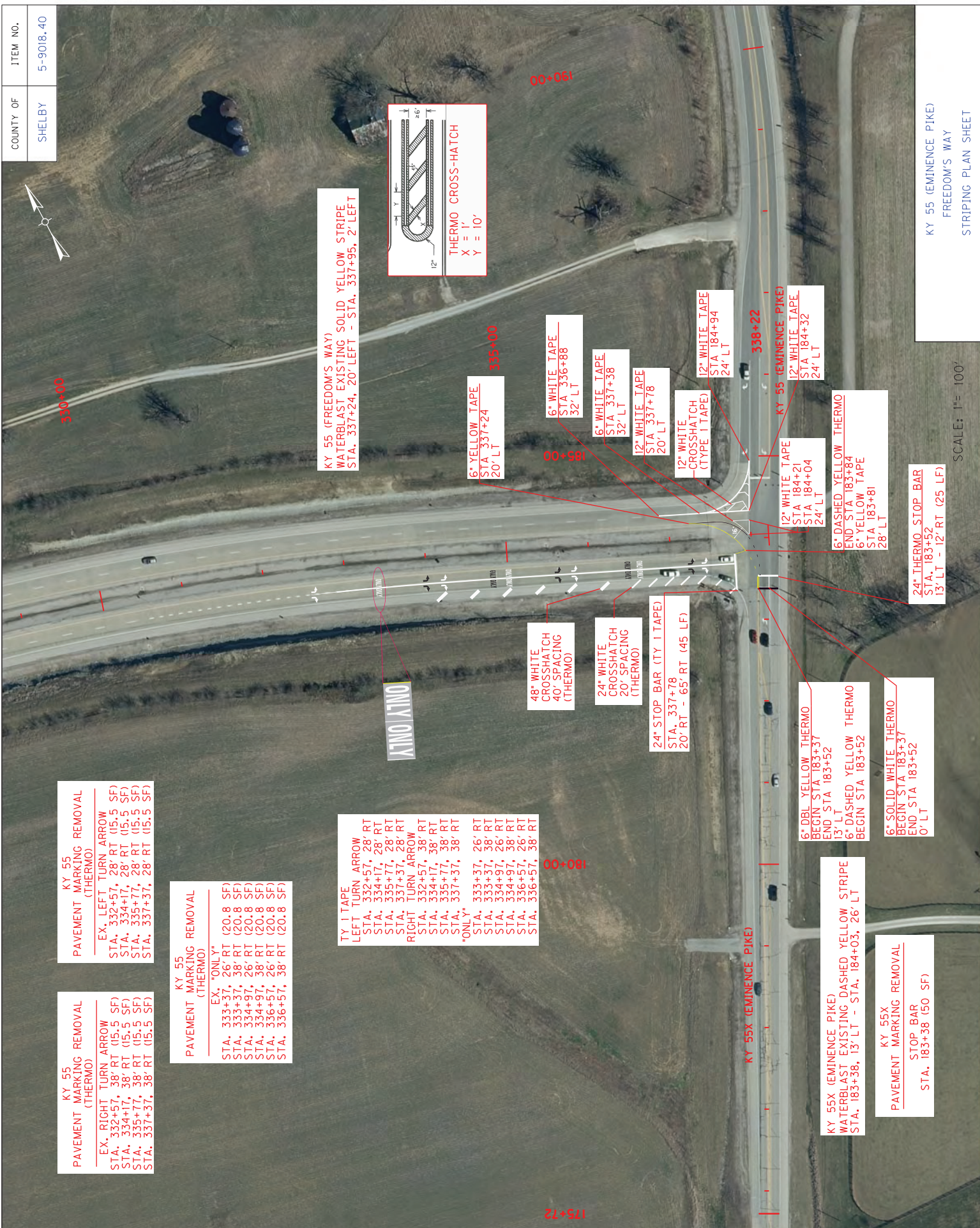
N28° 09' 05" E



KY 55x MP 2.076  
@ KY 55  
CONCRETE MODIFICATION PLAN SHEET

SCALE: 1"=50'





COUNTY OF	SHELBY
ITEM NO.	5-9018.40

**KY 55  
PAVEMENT MARKING REMOVAL  
(THERMO)**

EX. LEFT TURN ARROW  
STA. 332+57, 28' RT (15.5 SF)  
STA. 334+17, 28' RT (15.5 SF)  
STA. 335+77, 28' RT (15.5 SF)  
STA. 337+37, 28' RT (15.5 SF)

**KY 55  
PAVEMENT MARKING REMOVAL  
(THERMO)**

EX. RIGHT TURN ARROW  
STA. 332+57, 38' RT (15.5 SF)  
STA. 334+17, 38' RT (15.5 SF)  
STA. 335+77, 38' RT (15.5 SF)  
STA. 337+37, 38' RT (15.5 SF)

**KY 55  
PAVEMENT MARKING REMOVAL  
(THERMO)**

EX. \*ONL Y\*

STA. 333+57, 26' RT (20.8 SF)  
STA. 333+57, 38' RT (20.8 SF)  
STA. 334+97, 26' RT (20.8 SF)  
STA. 334+97, 38' RT (20.8 SF)  
STA. 336+57, 26' RT (20.8 SF)  
STA. 336+57, 38' RT (20.8 SF)

**TY I TAPE**

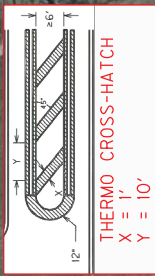
LEFT TURN ARROW  
STA. 332+57, 28' RT  
STA. 334+17, 28' RT  
STA. 335+77, 28' RT  
STA. 337+37, 28' RT

RIGHT TURN ARROW  
STA. 332+57, 38' RT  
STA. 334+17, 38' RT  
STA. 335+77, 38' RT  
STA. 337+37, 38' RT

\*ONL Y\*

STA. 333+37, 26' RT  
STA. 333+37, 38' RT  
STA. 334+97, 26' RT  
STA. 334+97, 38' RT  
STA. 336+57, 26' RT  
STA. 336+57, 38' RT

**KY 55 (FREEDOM'S WAY)  
WATERBLAST EXISTING SOLID YELLOW STRIPE  
STA. 337+24, 20' LEFT - STA. 337+95, 2' LEFT**

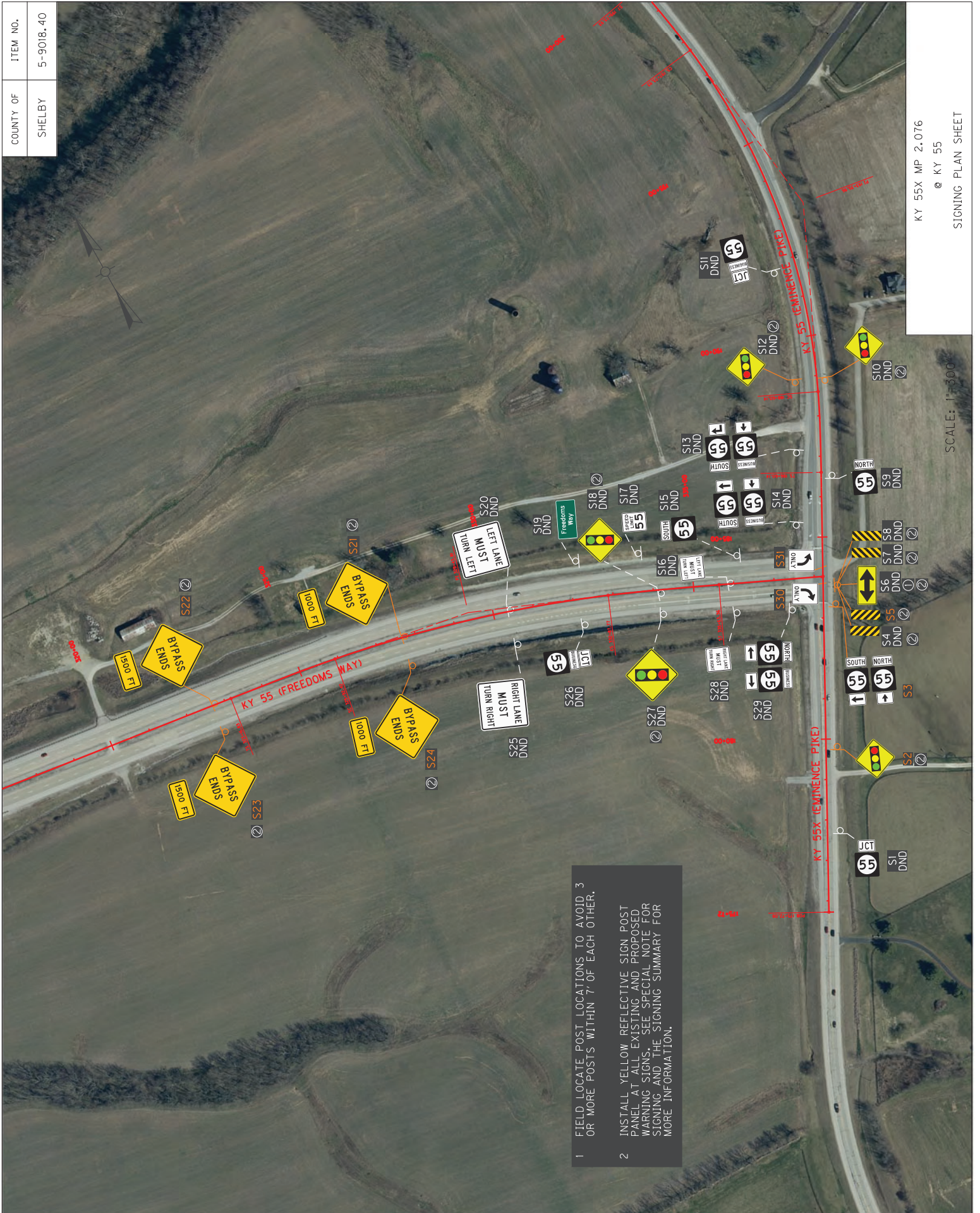


**KY 55 (EMINENCE PIKE)  
FREEDOM'S WAY  
STRIPING PLAN SHEET**

SCALE: 1"= 100'



COUNTY OF	SHELBY
ITEM NO.	5-9018-40



- 1 FIELD LOCATE POST LOCATIONS TO AVOID 3 OR MORE POSTS WITHIN 7' OF EACH OTHER.
- 2 INSTALL YELLOW REFLECTIVE SIGN POST PANEL AT ALL EXISTING AND PROPOSED WARNING SIGNS. SEE SPECIAL NOTE FOR SIGNING AND THE SIGNING SUMMARY FOR MORE INFORMATION.

KY 55X MP 2.076  
© KY 55  
SIGNING PLAN SHEET

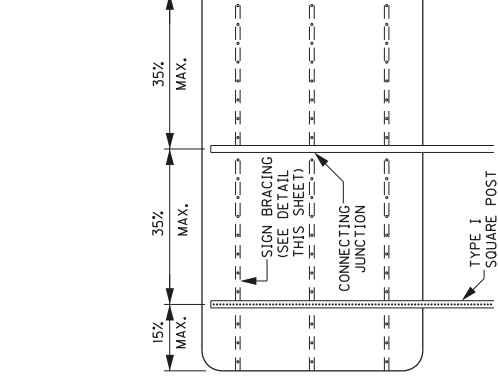
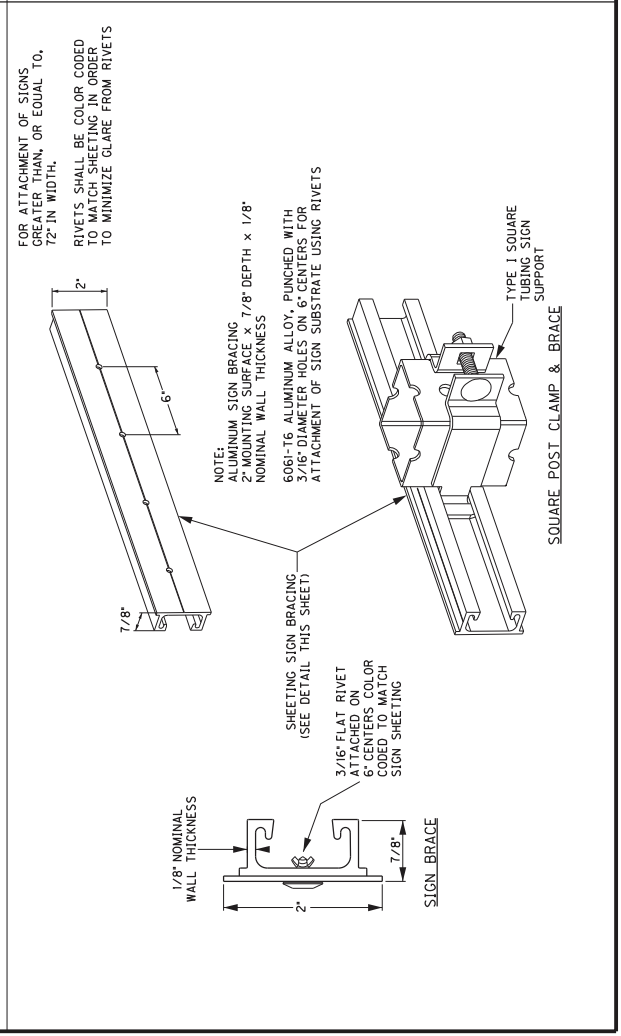
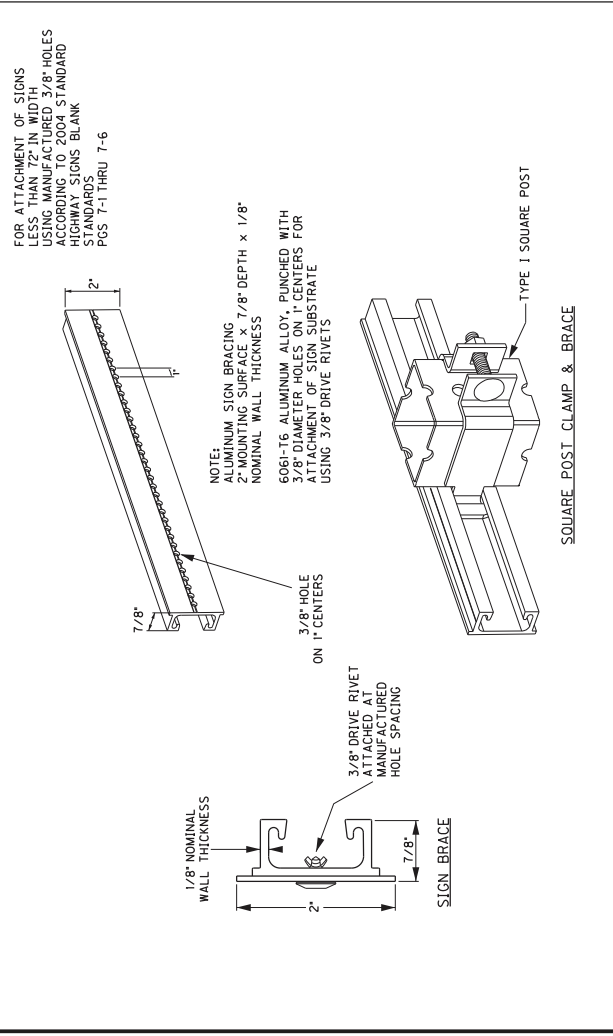
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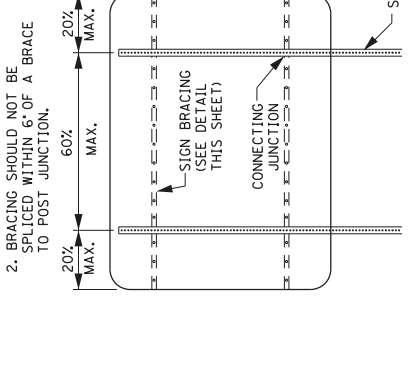


COUNTY OF	ITEM NO.	SHEET NO.



3\_POST - BRACING DIAGRAM

NOTE:  
1. MAXIMUM AREA PER CONNECTING JUNCTION = 16 SQ. FT.



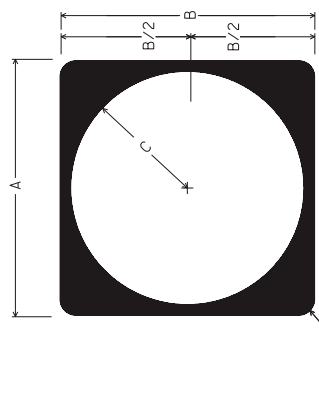
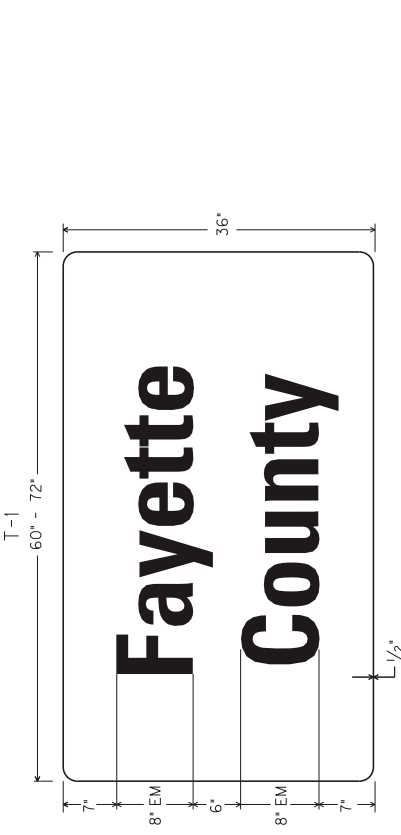
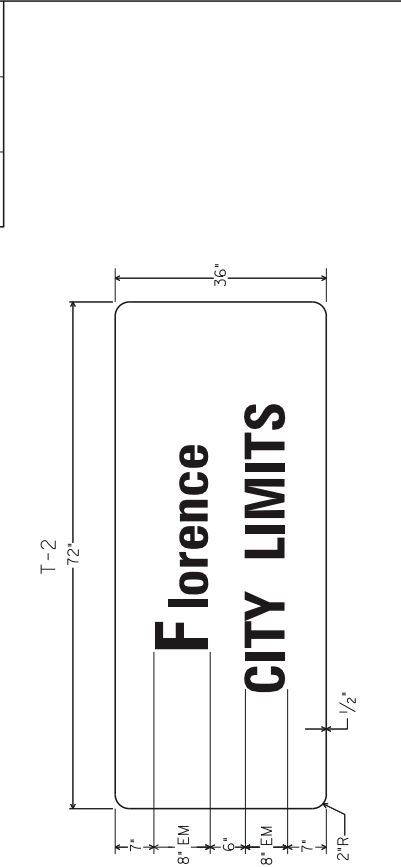
2\_POST - BRACING DIAGRAM

NOTE:  
USE OF SIGN BRACING NOT SHOWN ON THIS SHEET MAY BE PERMITTED BY PROJECT ENGINEER AND/OR DISTRICT TRAFFIC ENGINEER.

NOT TO SCALE

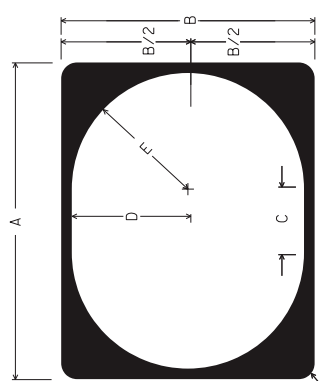
SHEETING SIGN DETAIL  
SHEET 2 OF 2

COUNTY OF	ITEM NO.	SHEET NO.



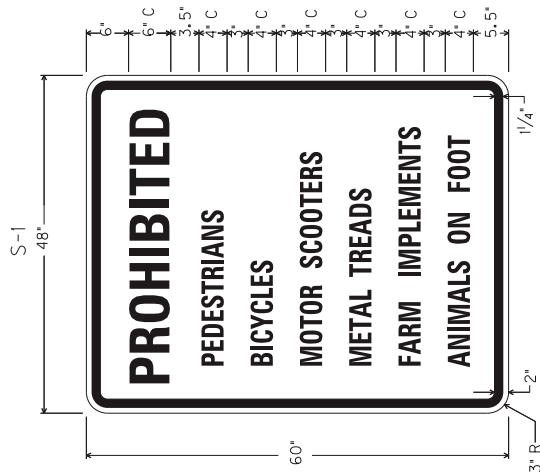
MI-5 (1 OR 2 DIGIT)

	A	B	C	FONT
CONVENTIONAL	24"	24"	11"	12D
EXPRESSWAY/ FREEWAY	36"	36"	17"	18D



MI-5 (3 OR 4 DIGIT)

	A	B	C	D	E	FONT	
						3 DIGIT	4 DIGIT
CONVENTIONAL	30"	24"	6"	11"	11"	12D	12B
EXPRESSWAY/ FREEWAY	45"	36"	9"	16.5"	16.5"	18D	18B

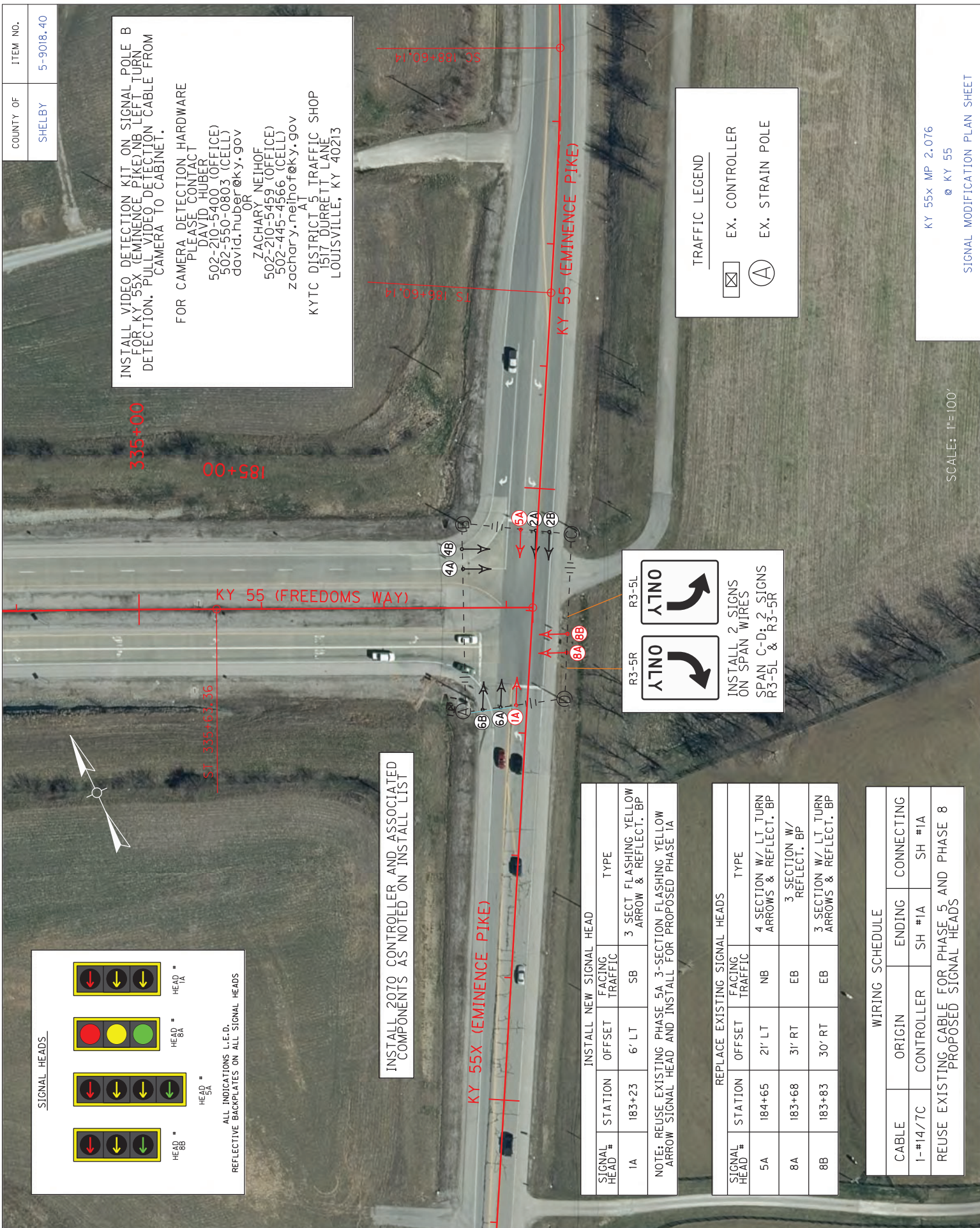


NOTE: EXPRESSWAY/FREEWAY DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL OR FULL CONTROL OF ACCESS

NOTE: FOR ROUTE MARKERS, IF NECESSARY, ADJUSTMENTS TO THE DIGIT LAYOUT AND/OR FONT TYPE MAY BE MADE TO ENSURE VISUAL ACUITY

NOT TO SCALE

TYPICAL SIGNS



INSTALL VIDEO DETECTION KIT ON SIGNAL POLE B FOR KY 55X (EMINENCE PIKE) NB LEFT TURN DETECTION. PULL VIDEO DETECTION CABLE FROM CAMERA TO CABINET.

FOR CAMERA DETECTION HARDWARE PLEASE CONTACT  
 DAVID HUBER  
 502-210-5400 (OFFICE)  
 502-550-0803 (CELL)  
 david.huber@ky.gov

OR  
 ZACHARY NEHOF  
 502-210-5459 (OFFICE)  
 502-445-4566 (CELL)  
 zachary.nehof@ky.gov

AT  
 KYTC DISTRICT 5 TRAFFIC SHOP  
 1517 DURRETT LANE  
 LOUISVILLE, KY 40213

**TRAFFIC LEGEND**

☒ EX. CONTROLLER  
 ⓐ EX. STRAIN POLE

KY 55x MP 2.076  
 ⓐ KY 55  
 SIGNAL MODIFICATION PLAN SHEET

SCALE: 1"=100'

**SIGNAL HEADS**

HEAD # 8B

HEAD # 5A

HEAD # 1A

HEAD # 8A

ALL INDICATIONS, I.E.D., REFLECTIVE BACKPLATES ON ALL SIGNAL HEADS

INSTALL 2070 CONTROLLER AND ASSOCIATED COMPONENTS AS NOTED ON INSTALL LIST

**INSTALL NEW SIGNAL HEAD**

SIGNAL HEAD #	STATION	OFFSET	FACING TRAFFIC	TYPE
1A	183+23	6' LT	SB	3 SECT FLASHING YELLOW ARROW & REFLECT. BP

NOTE: REUSE EXISTING PHASE 5A 3-SECTION FLASHING YELLOW ARROW SIGNAL HEAD AND INSTALL FOR PROPOSED PHASE 1A

**REPLACE EXISTING SIGNAL HEADS**

SIGNAL HEAD #	STATION	OFFSET	FACING TRAFFIC	TYPE
5A	184+65	21' LT	NB	4 SECTION W/ LT TURN ARROWS & REFLECT. BP
8A	183+68	31' RT	EB	3 SECTION W/ REFLECT. BP
8B	183+83	30' RT	EB	3 SECTION W/ LT TURN ARROWS & REFLECT. BP

R3-5R ONLY

R3-5L ONLY

INSTALL 2 SIGNS ON SPAN WIRES  
 SPAN C-D: 2 SIGNS R3-5L & R3-5R

**WIRING SCHEDULE**

CABLE	ORIGIN	ENDING	CONNECTING
1-#14/7C	CONTROLLER	SH #1A	SH #1A
REUSE EXISTING CABLE FOR PHASE 5 AND PHASE 8 PROPOSED SIGNAL HEADS			



COUNTY OF	ITEM NO.
SHELBY	5-9018, 40

MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT TED SWANSEGAR OR KERRY ROBERTS WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (5502-782-5540/502-782-5536) OR EMAIL (TED.SWANSEGAR@KY.GOV/KERRY.ROBERTS@KY.GOV) .

2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.

3. CONTRACTOR SHALL ALSO CONTACT THE SIGNAL SYSTEM BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL (JOE.THOMPSON@KY.GOV/LARRY.IRISH@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.

4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP. TO FACILITATE THIS PROCESS, ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : \*PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501\*.

INSTALL VIDEO CAMERA - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE INSTALLATION OF SPECIFIED VIDEO CAMERA, VIDEO MODULES, OR MOUNTING BRACKET AS SHOWN ON THE DETAIL SHEET AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING TRUSS TYPE ARM (IF NECESSARY), POWER CABLE, COAXIAL CABLE, OR ANY HARDWARE NECESSARY FOR PROPER INSTALLATION AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER WHEN INSTALLATION IS COMPLETE FOR PLACEMENT OF LOOPS.

INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE THE CONCRETE BASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL AND DETECTORS, EXCAVATION, BACKFILLING, RESTORATION, ANY NECESSARY POLE MOUNTING HARDWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES INVOLVING UTILITY SECONDARY/PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE CONNECTING THE INDUCTION LOOP AMPLIFIERS, PEDESTRIAN ISOLATORS, LOAD SWITCHES, MODEL 400 MODEM CARD FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE FURNISHING AND INSTALLING ELECTRICAL SERVICE CONDUCTORS, CONDUITS, ANCHORS, METER BASE, FUSED CUTOUT, FUSES, GROUND RODS, GROUND LUGS, AND GROUND WIRES FOR PAYMENT, AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

FOR CAMERA DETECTION HARDWARE,  
PLEASE CONTACT

DAVID HUBER  
502-210-5400 (OFFICE)  
502-550-0803 (CELL)  
david.huber@ky.gov

OR

ZACHARY NEIHOF  
502-210-5459 (OFFICE)  
502-445-4566 (CELL)  
zachary.neihof@ky.gov

AT

KYTC DISTRICT 5 TRAFFIC SHOP  
157 DURRETT LANE  
LOUISVILLE, KY 40213

KY 55x MP 2-076  
@ KY 55

SIGNAL MODIFICATION NOTES



COUNTY OF	SHELBY
ITEM NO.	5-908B.40
SHEET	11

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.10: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 834

SUBSECTION: 834.15.03 TRANSFORMER BASES.  
REMOVE: REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE.

REVISION: REPLACE THE FOLLOWING SENTENCE WITH THE FOLLOWING:  
CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KYTC CUSTOM KEY THAT WILL BE SENT TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE AFTER THE DEVICE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CENTRAL OFFICE TRAFFIC OPERATIONS CENTER TOP OF EACH DOOR. THE STICKER SHALL BE METAL CRAFT PLY 606 PREP. STYLING LABEL WITH .007 THICKNESS. WITH UV WHITE POLYCARBONATE MATERIAL AND WITH MESH PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."

\* \*\* SEE PLAN SHEET FOR WIRE-NO. 12 SPECS

**ROADWAY LIGHTING ESTIMATE OF QUANTITIES**

TOTAL	UNITS	CODE	ITEM DESCRIPTION
4	EACH	4722	BRACKET 8'
1	EACH	4761	LIGHTING CONTROL EQUIPMENT
20	LIN FT	4820	TRENCHING AND BACKFILLING
* **	LIN FT	4832	WIRE-NO. 12
4	EACH	24589ED	LED LUMINAIRE
20	LIN FT	2490IEC	PVC CONDUIT - 2 INCH - SCHEDULE 80

\* \*\* SEE PLAN SHEET FOR WIRE-NO. 12 SPECS

SECTION: 834.15 LIGHTING POLES.

REVISION: ADD THE FOLLOWING TO THE FIRST PARAGRAPH:  
THE CABINET WILL WAIVE THE REQUIREMENT STATED IN THE FIRST SENTENCE OF SECTION 5.14.6.2 - REINFORCED HOLES AND CUTOFF FOR HIGH MAST POLES (ONLY).

SECTION: 834.33 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:  
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL) THICK.

DESIGNED BY: CHARLIE #  
DATE SUBMITTED: 3/11/2022

Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY OF  
SHELBY

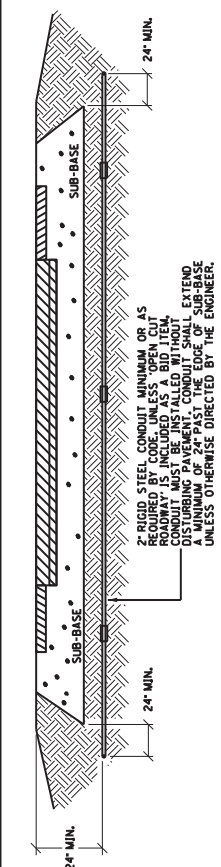
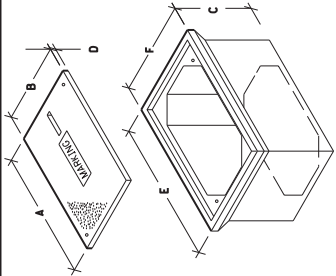
PROJECT NUMBERS:  
ROADWAY LIGHTING ESTIMATES  
OF QUANTITIES



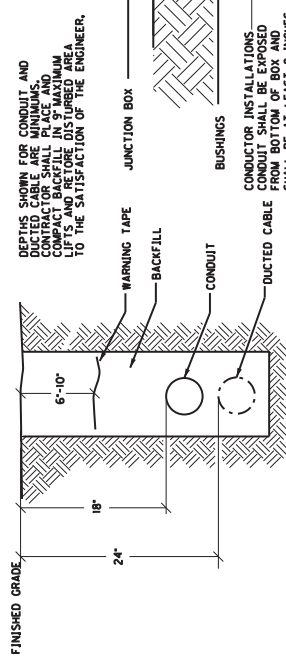
JUNCTION BOX DIMENSIONS (NOMINAL)

	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 1/2"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

\* MINOR JUNCTION BOXES ARE PERMITTED

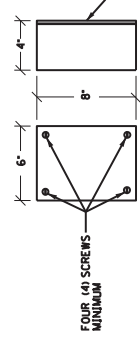


**CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL**

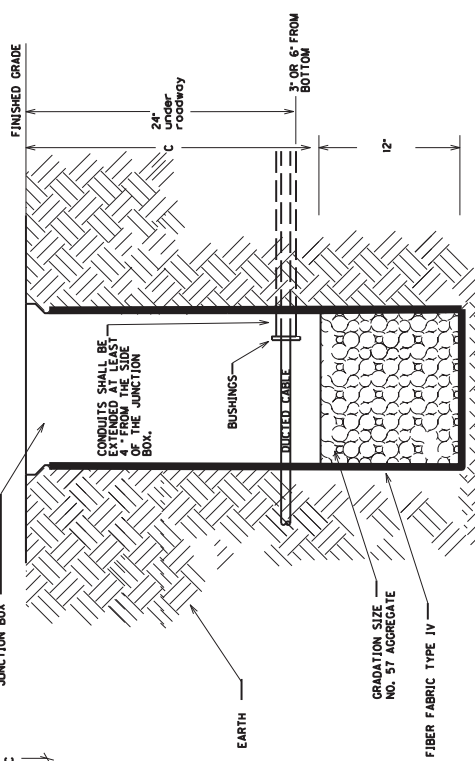
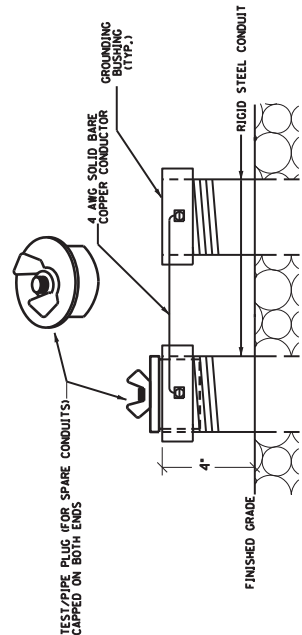


**CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH**

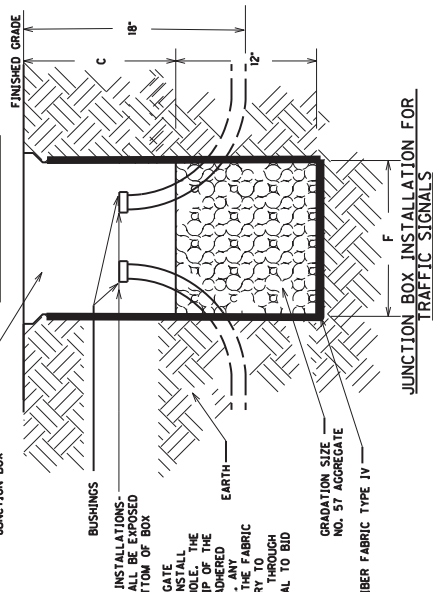
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 1/2" GAUGE STEEL, AND BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING TO THE SURFACE. THE SURFACE SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



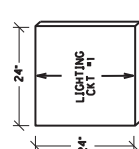
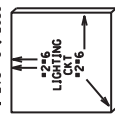
**ABOVE GROUND BOX**



**JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING**



BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FILTER FABRIC SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE CUT ONLY AS MUCH AS NECESSARY TO ALLOW EACH INDIVIDUAL CONDUIT THROUGH. THE FILTER FABRIC SHALL BE INCIDENTAL TO BID ITEMS 481L, 2039IN6835, OR 2039IN6835S.

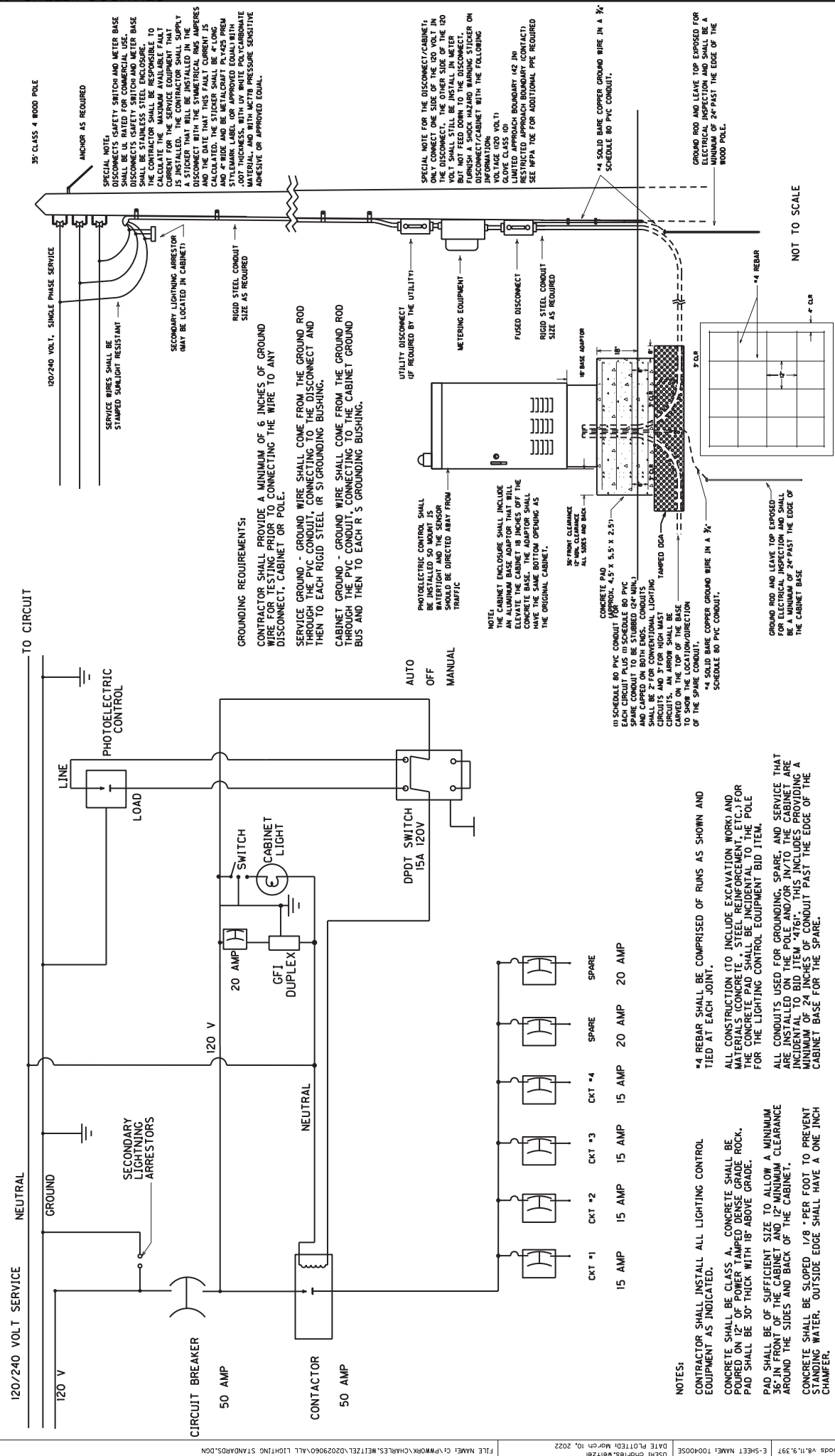


**TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL CONCRETE CABLE MARKERS**

**TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT DETAILS**

3/13/2017

COUNTY OF	ITEM NO.	SHEET
SHELBY	5-90NB-40	14



35' CLASS 4 WOOD POLE

ANCHOR AS REQUIRED

SPECIAL NOTE: DISCONNECTS SAFETY SWITCH AND METER BASE SHALL BE UL RATED FOR COMMERCIAL USE. DISCONNECTS SHALL BE STAINLESS STEEL ENCLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE ENTRANCE. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE SAFETY SWITCH AND DISCONNECT WITH THE SYMMETRICAL RMS AMPERES AND THE DATE THAT THIS FAULT CURRENT IS CALCULATED. THE SAFETY SWITCH SHALL BE 4" WIDE AND BE METALMATE PL 455 PREM STYLE MARK LABEL (OR APPROVED EQUAL) WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MCT70 PRESSURE SENSITIVE ADHESIVE OR APPROVED EQUAL.

120/240 VOLT, SINGLE PHASE SERVICE

SERVICE WIRES SHALL BE STAMPED SUNLIGHT RESISTANT

SECONDARY LIGHTNING ARRESTOR (MAY BE LOCATED IN CABINET)

RIGID STEEL CONDUIT SIZE AS REQUIRED

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

GROUNDING REQUIREMENTS:  
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R S GROUNDING BUSHING.

UTILITY DISCONNECT (IF REQUIRED BY THE UTILITY)

METERING EQUIPMENT

FUSED DISCONNECT

RIGID STEEL CONDUIT SIZE AS REQUIRED

14 SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 80 PVC CONDUIT.

GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE WOOD POLE.

PHOTOELECTRIC CONTROL SHALL BE MOUNTED ON THE POLE AND THE SENSOR SHOULD BE DIRECTED AWAY FROM WATER LIGHT AND THE SENSOR TRAFFIC

NOTE: THE CABINET ENCLOSURE SHALL INCLUDE AN ANCHOR BUSHING TO BE ELEVATE THE CABINET 18 INCHES OFF THE CONCRETE BASE. THE ADAPTOR SHALL HAVE THE SAME BOTTOM OPENING AS THE ORIGINAL CABINET.

3" FRONT CLEARANCE ALL SIDES AND BACK

8" BASE ADAPTOR

CONCRETE PAD FOR PHOTO. 4.5' x 3.5' x 2.5"

1) SCHEDULE 80 PVC CONDUIT FOR PHOTO. 4.5' x 3.5' x 2.5" EACH CIRCUIT PLUS (3) SCHEDULE 80 PVC CONDUIT FOR GROUNDING AND CAPPED ON BOTH ENDS. CONDUITS SHALL BE 2" FOR CONVENTIONAL LIGHTING CIRCUITS AND 3" FOR HIGH MAST LIGHTING CIRCUITS. CONDUITS SHALL BE CAPPED ON THE TOP OF THE BASE TO SHOW THE LOCATION/DIRECTION OF THE SPARE CONDUIT.

4" SOLID BARE COPPER GROUND WIRE IN A 3/4" SCHEDULE 80 PVC CONDUIT.

GROUND ROD AND LEAVE TOP EXPOSED FOR ELECTRICAL INSPECTION AND SHALL BE A MINIMUM OF 24" PAST THE EDGE OF THE CABINET BASE

14 REBAR

NOT TO SCALE

TYPICAL

BASE MOUNTED SERVICE DETAIL  
120 240 VOLT

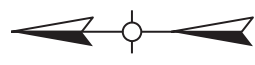




SHEET	ITEM NO.
T6	5-9018-40
COUNTY OF	SHELBY

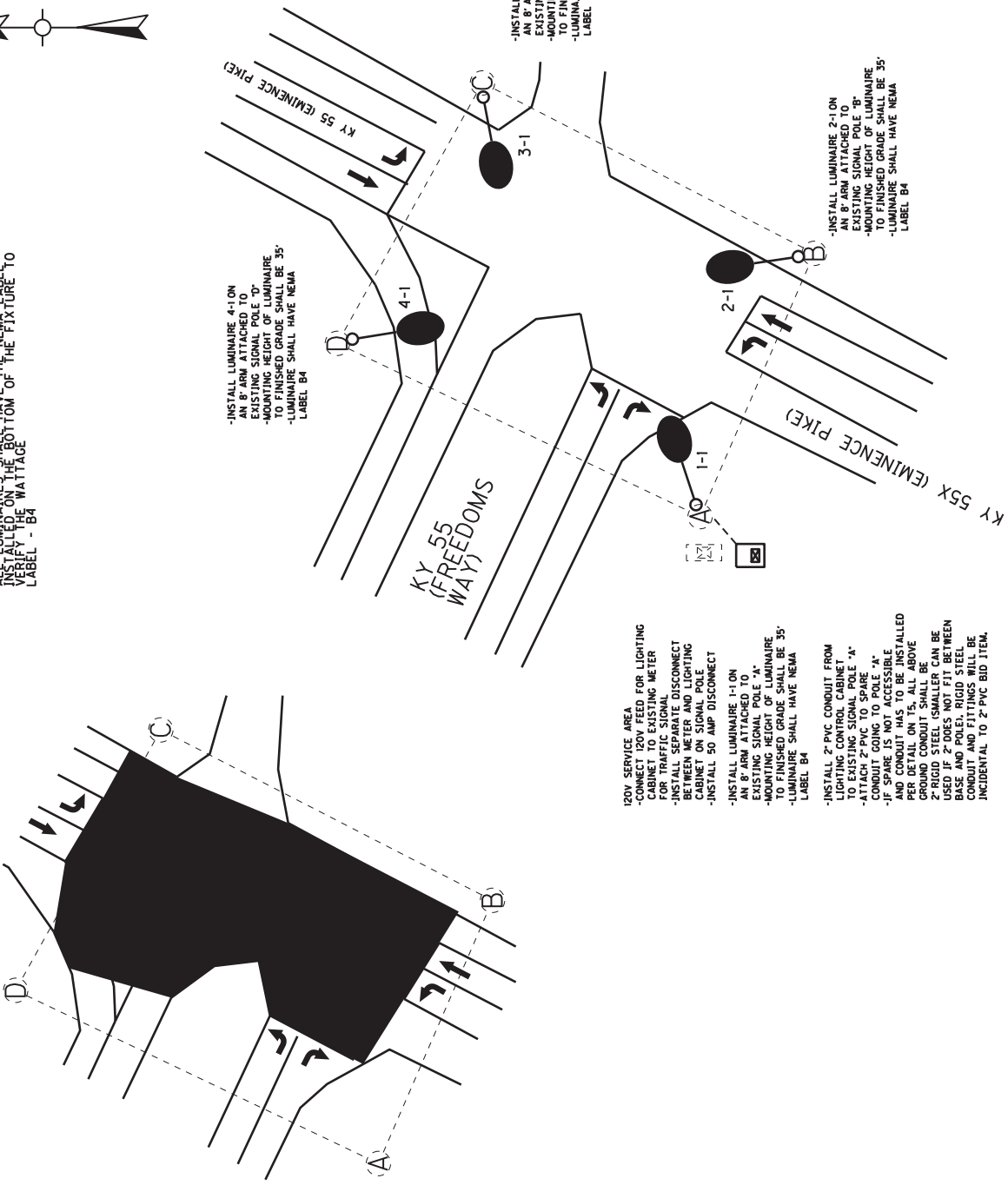
FROM	TO	WIRING SCHEDULE	SIZE	CONDUIT
CKT #1	CONTROLLER	POLE A	3-12 AWG	2" PVC
	POLE A	1-1 (UP POLE A)	3-12 AWG	
CKT #2	CONTROLLER	POLE A	3-12 AWG	2" PVC
	POLE A	2-1 (UP POLE A, ACROSS MESSAGE SPAN, TO POLE B)	3-12 AWG	
CKT #3	CONTROLLER	POLE A	3-12 AWG	2" PVC
	POLE A	3-1 (UP POLE A, ACROSS MESSAGE SPAN, THROUGH POLE B, TO POLE C)	3-12 AWG	
CKT #4	CONTROLLER	POLE A	3-12 AWG	2" PVC
	POLE A	4-1 (UP POLE A, ACROSS MESSAGE SPAN, TO POLE D)	3-12 AWG	

-GROUND WIRE FOR CIRCUIT 1 SHALL CONNECT TO GROUNDING INSIDE OF ATTACHMENT POLE AND CONNECT TO GROUNDING POLE TO LUMINAIRE  
 -GROUND WIRE FOR CIRCUIT 2,3, & 4 SHALL RUN DOWN INSIDE OF ATTACHMENT POLE AND CONNECT TO GROUNDING LUG; THEN BACK UP POLE TO LUMINAIRE  
 -ALL WIRE SHALL BE #12 AWG, EACH CIRCUIT SHALL HAVE A BLACK (#02), WHITE (NEUTRAL), AND GREEN (GROUND) WIRE  
 -ALL WIRE SHALL BE INSTALLED SPICE FREE FROM CABINET TO LUMINAIRE  
 \*\* BID ITEM 4832, WIRE-NO.12, SHALL BE TYPE XHHW WIRE OR SUNLIGHT RESISTANT APPROVED  
 -ALL WIRE SHALL BE INSTALLED IN THE SAME 2" PVC CONDUIT



SPECIAL NOTE: ALL LUMINAIRE SHALL HAVE THE NEMA LABEL VERIFIED AT THE BOTTOM OF THE FIXTURE TO VERIFY THE MOUNTING ATTACHE LABEL - B4

DESIGN CALCULATION ZONE (WITHIN STOP BARS)



- 120V SERVICE AREA
- CONNECT 120V FEED FOR LIGHTING CABINET TO EXISTING METER
  - INSTALL SEPARATE DISCONNECT BETWEEN METER AND LIGHTING CABINET ON SIGNAL POLE
  - INSTALL 50 AMP DISCONNECT
  - INSTALL LUMINAIRE 1-1 ON AN 8" ARM ATTACHED TO EXISTING SIGNAL POLE "A"
  - MOUNTING HEIGHT OF LUMINAIRE TO FINISHED GRADE SHALL BE 35'
  - LUMINAIRE SHALL HAVE NEMA LABEL B4
  - INSTALL 2" PVC CONDUIT FROM LIGHTING CONTROL CABINET TO EXISTING SIGNAL POLE "A"
  - ATTACH 2" PVC TO SPARE CONDUIT GOING TO POLE "A"
  - IF SPARE IS NOT ACCESSIBLE CONDUIT SHALL BE CALLED PER DETAIL ON T&E, ALL ABOVE GROUND CONDUIT SHALL BE 2" RIGID STEEL SMALLER CAN BE USED IF 2" DOES NOT FIT BETWEEN BASE AND POLE, RIGID STEEL CONDUIT AND FITTINGS WILL BE INCIDENTAL TO 2" PVC BID ITEM.

SCALE 1" = 20'

LEGEND

- BASE MOUNTED LIGHTING CONTROLLER
- EXISTING STEEL STRAIN POLE
- LED LUMINAIRE ON 8' ARM
- 2" PVC CONDUIT
- SCHEDULE 80 CONDUIT

INTERSECTION LIGHTING PLAN SHEET  
KY 55 @ KY 55X

# GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: \_\_\_\_\_

Contractor: \_\_\_\_\_

Section Engineer: \_\_\_\_\_

District & County: \_\_\_\_\_

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY LEAVING PROJECT</u>	<u>QTY RECEIVED@BB YARD</u>
GUARDRAIL (Includes End treatments & crash cushions)	LF	_____	_____
STEEL POSTS	EACH	_____	_____
STEEL BLOCKS	EACH	_____	_____
WOOD OFFSET BLOCKS	EACH	_____	_____
BACK UP PLATES	EACH	_____	_____
CRASH CUSHION	EACH	_____	_____
NUTS, BOLTS, WASHERS	BAG/BCKT	_____	_____
DAMAGED RAIL TO MAINT. FACILITY	LF	_____	_____
DAMAGED POSTS TO MAINT. FACILITY	EACH	_____	_____

**\*Required Signatures before Leaving Project Site**

Printed Section Engineer's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Section Engineer's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Printed Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

**\*Required Signatures after Arrival at Bailey Bridge Yard (All material on truck must be counted & the quantity received column completed before signatures)**

Printed Bailey Bridge Yard Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Bailey Bridge Yard Representative \_\_\_\_\_ & Date \_\_\_\_\_

Printed Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

\*\*Payment for the bid item remove guardrail will be based upon the quantities shown in the Bailey Bridge Yard received column. Payment will not be made for guardrail removal until the guardrail verification sheets are electronically submitted to the Section Engineer by the Bailey Bridge Yard Representative.

Completed Form Submitted to Section Engineer Date: \_\_\_\_\_ By: \_\_\_\_\_



## **PART II**

### **SPECIFICATIONS AND STANDARD DRAWINGS**

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020*.

## **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting.  
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

### SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

**1.0 DESCRIPTION.** Install barcode label on sheeting signs. Section references herein are to the Department’s Standard Specifications for Road and Bridge Construction, current edition.

**2.0 MATERIALS.** The Department will provide the Contractor with a 2 inch x 1 inch foil barcode label for each permanent sheeting sign. A unique number will be assigned to each barcode label.

The Contractor shall contact the Operations and Pavement Management Branch in the Division of Maintenance at (502) 564-4556 to obtain the barcode labels.

**3.0 CONSTRUCTION.** Apply foil barcode label in the lower right quadrant of the sign back. Signs where the bottom edge is not parallel to the ground, the lowest corner of the sign shall serve as the location to place the barcode label. The barcode label shall be placed no less than one-inch and no more than three inches from any edge of the sign. The barcode must be placed so that the sign post does not cover the barcode label.

Barcodes shall be applied in an indoor setting with a minimum air temperature of 50°F or higher. Prior to application of the barcode label, the back of the sign must be clean and free of dust, oil, etc. If the sign is not clean, an alcohol swab shall be used to clean the area. The area must be allowed to dry prior to placement of the barcode label.

Data for each sign shall include the barcode number, MUTCD reference number, sheeting manufacturer, sheeting type, manufacture date, color of primary reflective surface, installation date, latitude and longitude using the North American Datum of 1983 (NAD83) or the State Plane Coordinates using an x and y ordinate of the installed location.

Data should be provided electronically on the TC 71-229 Sign Details Information and TC 71-230 Sign Assembly Information forms. The Contractor may choose to present the data in a different format provided that the information submitted to the Department is equivalent to the information required on the Department TC forms. The forms must be submitted in electronic format regardless of which type of form is used. The Department will not accept PDF or handwritten forms. These completed forms must be submitted to the Department prior to final inspection of the signs. The Department will not issue formal acceptance for the project until the TC 71-229 and TC-230 electronic forms are completed for all signs and sign assemblies on the project.

**4.0 MEASUREMENT.** The Department will measure all work required for the installation of the barcode label and all work associated with completion and submission of the sign inventory data (TC 71-229 and TC 71-230).

The installation of the permanent sign will be measured in accordance to Section 715.

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

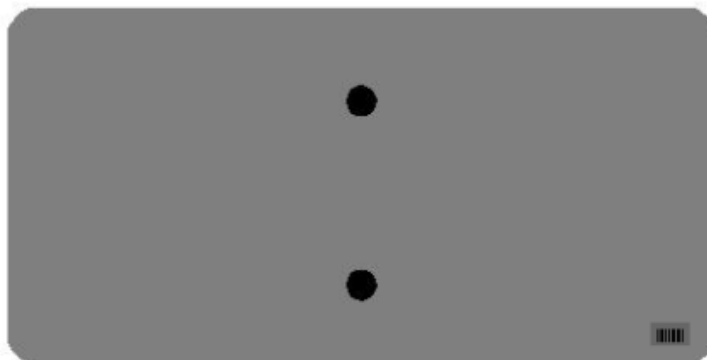
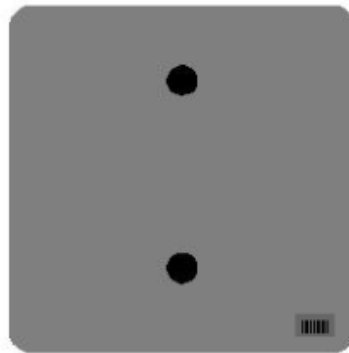
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment as full compensation for all work required under this special note.

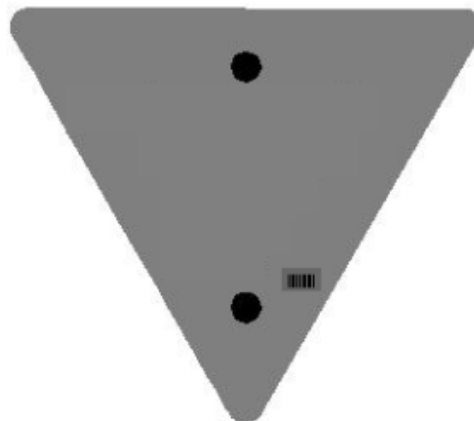
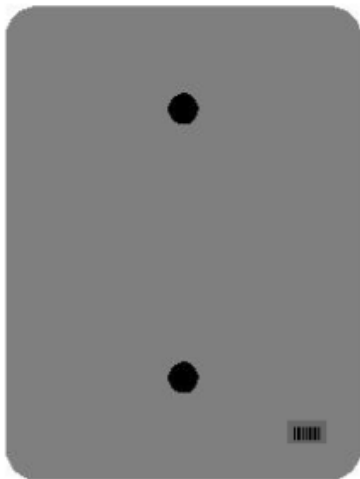
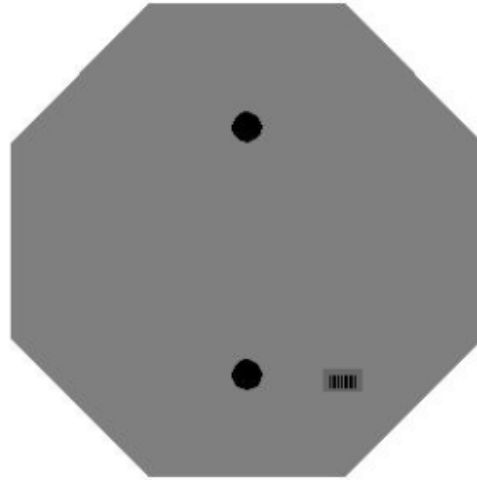
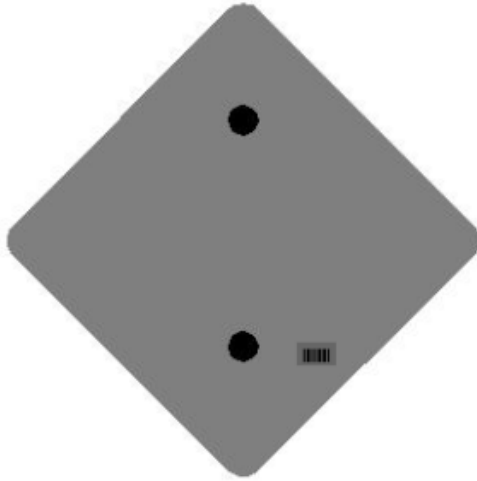
### One Sign Post



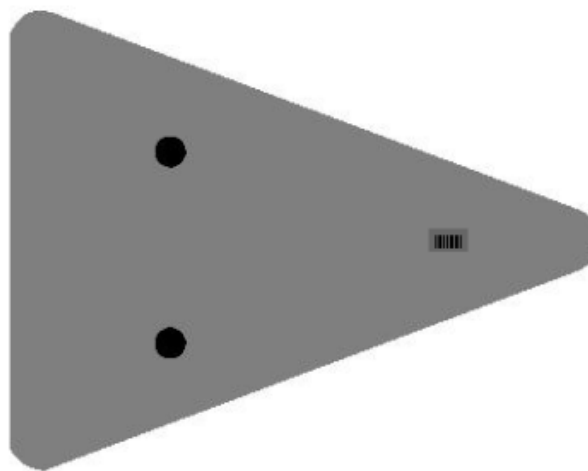
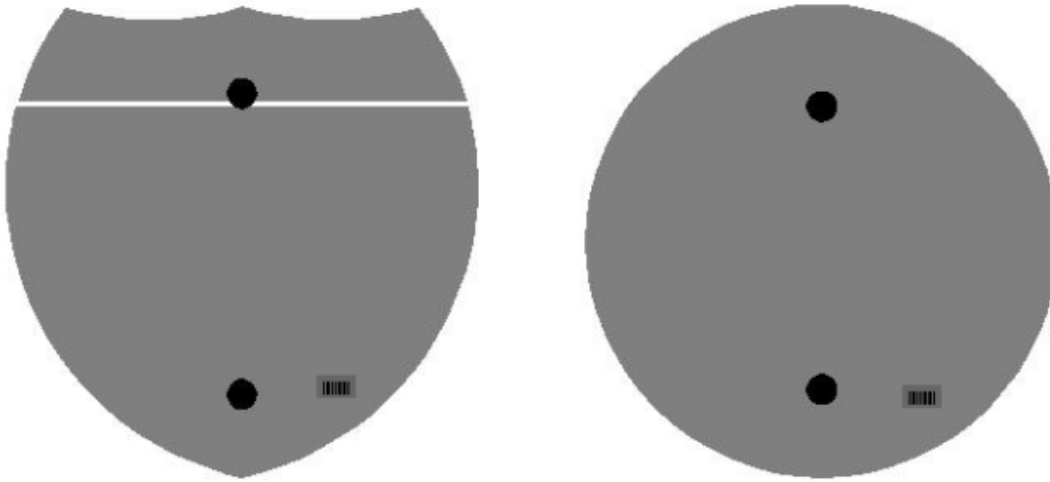
↑  
2" Wide Post



### One Sign Post

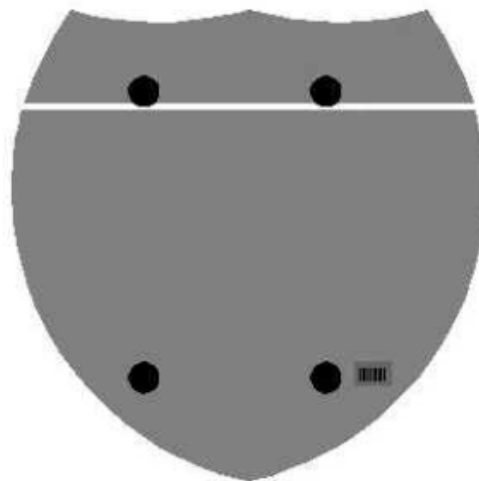


### One Sign Post

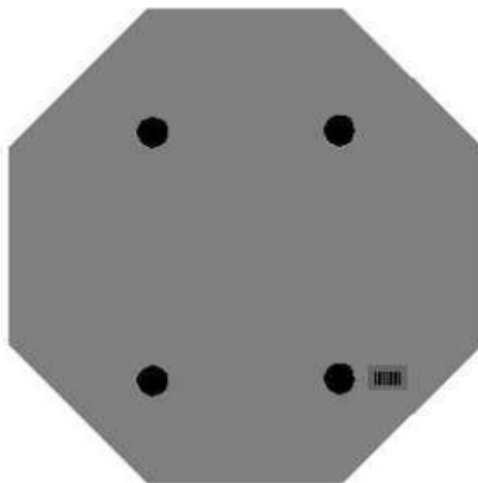




### Double Sign Post



Interstate  
Shield

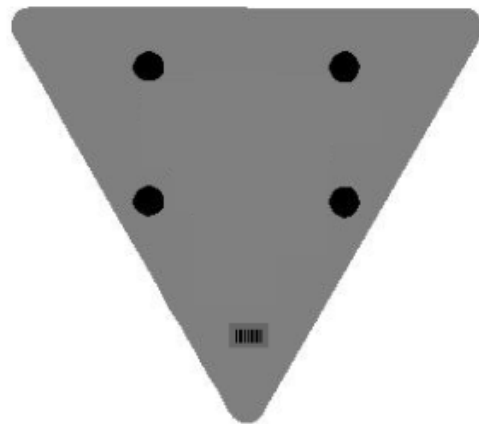


48" Stop

### 2 Post Signs



↑  
2" Wide Post



**2020 STANDARD DRAWINGS THAT APPLY**

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**ROADWAY  
~ BARRIERS ~**

**TYPICAL BARRIER INSTALLATIONS**

TYPICAL GUARDRAIL INSTALLATIONS .....	RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS .....	RBI-002-07

**GUARDRAIL HARDWARE**

STEEL BEAM GUARDRAIL (W-BEAM) .....	RBR-001-13
GUARDRAIL COMPONENTS .....	RBR-005-11
GUARDRAIL TERMINAL SECTIONS .....	RBR-010-06
STEEL GUARDRAIL POSTS.....	RBR-015-06
GUARDRAIL END TREATMENT TYPE 4A .....	RBR-035-12
DELINEATORS FOR GUARDRAIL .....	RBR-005-01

**~ DRAINAGE ~**

**MISCELLANEOUS DRAINAGE**

TEMPORARY SILT FENCE .....	RDX-210-03
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC .....	RDX-215-01
SILT TRAP - TYPE A .....	RDX-220-05
SILT TRAP - TYPE B .....	RDX-225-01
SILT TRAP - TYPE C .....	RDX-230-01

**~ GENERAL ~**

**MISCELLANEOUS STANDARDS**

TYPE D BREAKAWAY SIGN SUPPORT .....	RGX-065-02
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**~ PAVEMENT ~**

**MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.**

MOUNTABLE MEDIAN .....	RPM-011-06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT .....	RPM-110-07

**NON-REINFORCED CONCRETE PAVEMENT**

NON-REINFORCED CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS .....	RPN-001-07
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**STANDARD REINFORCED CONCRETE PAVEMENT**

CONCRETE PAVEMENT JOINT DETAILS .....	RPS-010-11
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Standard Drawings That Apply  
Page 2 of 2

**TRAFFIC**  
**~ PERMANENT ~**  
**MARKERS**

TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS.....	TPM-203
TYPICAL MARKINGS FOR ISLANDS AND MEDIANS.....	TPM-205
TYPICAL MARKINGS FOR TURN LANES PAGE 1.....	TPM-206
TYPICAL MARKINGS FOR TURN LANES PAGE 2.....	TPM-207

**RUMBLE STRIPS**

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CENTERLINE RUMBLE STRIPS 4 INCH STRIPING.....	TPR-105
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EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS.....	TPR-120
RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS.....	TPR-130

**~ TEMPORARY ~**  
**TRAFFIC CONTROL**

LANE CLOSURE MULTI-LANE HIGHWAY CASE II.....	TTC-120-04
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**STRIPING OPERATIONS**

MOBILE OPERATION FOR PAINT STRIPING CASE IV.....	TTS-115-02
MOBILE OPERATION FOR DURABLE STRIPING CASE I.....	TTS-120-02

## **PART III**

### **EMPLOYMENT, WAGE AND RECORD REQUIREMENTS**

FHWA-1273 -- Revised May 1, 2012

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

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

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

**ATTACHMENTS**

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

**II. NONDISCRIMINATION**

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

**I. GENERAL**

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

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

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

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

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

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

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

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

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

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

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

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

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

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

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

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

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

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

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

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

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

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

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

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

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

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

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

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

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

**6. Training and Promotion:**

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



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

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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

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

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

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

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

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

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

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

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

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

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

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

(1) The number and work hours of minority and 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; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

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

### III. NONSEGREGATED FACILITIES

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

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

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

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

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

#### 1. Minimum wages

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

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

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

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

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

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

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

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

## 2. Withholding

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

## 3. Payrolls and basic records

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

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

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

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

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

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

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

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

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

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

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

##### b. Trainees (programs of the USDOL).

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

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

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

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

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

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

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

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

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

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

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

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

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

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

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

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

## VII. SAFETY: ACCIDENT PREVENTION

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

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

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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

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

##### **1. Instructions for Certification – First Tier Participants:**

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

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

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

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

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

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.



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

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

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

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

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

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

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

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

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

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

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

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

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

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

\* \* \* \* \*

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

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

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

\* \* \* \* \*

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

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

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

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

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

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

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

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

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

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

**KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

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

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

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

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

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); 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 forty (40) and over. 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, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, 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 forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

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

Revised: January 25, 2017

### Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

### Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*)

## 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 (7) provides:

No present or former public servant shall, within six (6) months 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, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of 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, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure 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, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, 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, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022



"General Decision Number: KY20220038 05/06/2022

Superseded General Decision Number: KY20210038

State: Kentucky

Construction Type: Highway

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

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.</li> </ul>
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a

conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/11/2022
2	02/18/2022
3	02/25/2022
4	05/06/2022

BRIN0004-003 06/01/2021

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER.....	\$ 29.57	14.75
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BRKY0001-005 06/01/2021		

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

	Rates	Fringes
BRICKLAYER.....	\$ 29.57	15.10
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BRKY0002-006 06/01/2021		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 30.87	15.87
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BRKY0007-004 06/01/2021		

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 36.19	19.54
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BRKY0017-004 06/01/2021		

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 30.87	15.87
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* CARP0064-001 04/01/2022		

	Rates	Fringes
CARPENTER.....	\$ 30.84	22.19

Diver.....	\$ 46.64	22.19
PILED RIVERMAN.....	\$ 31.09	22.19

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ELEC0212-008 06/07/2021

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 32.32	19.85

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ELEC0212-014 11/25/2019

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
Sound & Communication Technician.....	\$ 24.35	12.09

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ELEC0317-012 06/01/2021

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN (Wiremen).....	\$ 35.10	27.47

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ELEC0369-007 05/31/2021

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

	Rates	Fringes
ELECTRICIAN.....	\$ 33.85	18.72

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ELEC0575-002 11/29/2021

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 35.00	19.76

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ENGI0181-018 07/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 34.80	17.85
GROUP 2.....	\$ 31.94	17.85
GROUP 3.....	\$ 32.39	17.85
GROUP 4.....	\$ 31.62	17.85

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller;  
Batcher Plant; Bituminous Paver; Bituminous Transfer  
Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All  
Scoop; Carry Deck Crane; Central Compressor Plant; Cherry

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

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

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

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

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

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

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

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IRON0044-009 06/01/2021

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,  
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);  
CARROLL (Eastern third, including the Township of Ghent);  
FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,

Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
 MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);  
 NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);  
 OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);  
 SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

IRONWORKER

Fence Erector.....	\$ 29.75	21.60
Structural.....	\$ 31.32	21.60

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 IRON0070-006 06/01/2021

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD  
 BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);  
 CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);  
 CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);  
 OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);  
 SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

Rates Fringes

IRONWORKER.....	\$ 31.09	23.75
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 IRON0769-007 06/01/2021

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

Rates Fringes

IRONWORKER

ZONE 1.....	\$ 33.00	27.29
ZONE 2.....	\$ 33.40	27.29
ZONE 3.....	\$ 35.00	27.29

ZONE 1 - (no base rate increase) Up to 10 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 2 - (add \$0.40 per hour to base rate) 10 to 50 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 3 - (add \$2.00 per hour to base rate) 50 mile radius & over of Union Hall, 1643 Greenup Ave, Ashland, KY.

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LAB00189-003 07/01/2021

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

Rates	Fringes
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Laborers:

GROUP 1.....	\$ 23.51	16.22
GROUP 2.....	\$ 23.76	16.22
GROUP 3.....	\$ 23.81	16.22
GROUP 4.....	\$ 24.41	16.22

LABORERS CLASSIFICATIONS

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

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

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

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;

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

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 LAB00189-008 07/01/2021

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

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.51	16.22
GROUP 2.....	\$ 23.76	16.22
GROUP 3.....	\$ 23.81	16.22
GROUP 4.....	\$ 24.41	16.22

LABORERS CLASSIFICATIONS

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

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

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

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

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 LAB00189-009 07/01/2021



BRECKINRIDGE & GRAYSON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.51	16.22
GROUP 2.....	\$ 23.76	16.22
GROUP 3.....	\$ 23.81	16.22
GROUP 4.....	\$ 24.41	16.22

LABORERS CLASSIFICATIONS

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

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

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

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

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 PAIN0012-005 06/11/2005

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

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder..	\$ 18.90	5.90
Brush & Roller.....	\$ 21.30	5.90
Elevated Tanks;		

SPENCER - FRANKLIN - SHELBY COUNTIES  
121GR22T013-HSIP

Steeplejack Work; Bridge & Lead Abatement.....	\$ 22.30	5.90
Sandblasting & Waterblasting.....	\$ 22.05	5.90
Spray.....	\$ 21.80	5.90

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PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping)		
Bridge Equipment Tender and Containment Builder.....	\$ 20.73	9.06
Brush & Roller.....	\$ 23.39	9.06
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....	\$ 24.39	9.06
Sandblasting & Water Blasting.....	\$ 24.14	9.06
Spray.....	\$ 23.89	9.06

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PAIN0118-004 06/01/2018

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

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 22.00	12.52
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....	\$ 23.00	12.52

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PAIN1072-003 12/01/2021

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

	Rates	Fringes
Painters:		
Bridges; Locks; Dams; Tension Towers & Energized Substations.....	\$ 35.06	21.15
Power Generating Facilities..	\$ 31.82	21.15

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PLUM0248-003 06/01/2021

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

	Rates	Fringes
Plumber and Steamfitter.....	\$ 38.00	21.60

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PLUM0392-007 06/01/2018

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

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 32.01	19.67
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PLUM0502-003 08/01/2021		

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

	Rates	Fringes
PLUMBER.....	\$ 38.07	20.78
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SUKY2010-160 10/08/2001		

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 16.57	7.34
GROUP 2.....	\$ 16.68	7.34
GROUP 3.....	\$ 16.86	7.34
GROUP 4.....	\$ 16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole  
 Trailer when used to pull building materials and equipment;  
 Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

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

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

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 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
 for Federal Contractors applies to all contracts subject to the  
 Davis-Bacon Act for which the contract is awarded (and any  
 solicitation was issued) on or after January 1, 2017. If this  
 contract is covered by the EO, the contractor must provide  
 employees with 1 hour of paid sick leave for every 30 hours  
 they work, up to 56 hours of paid sick leave each year.  
 Employees must be permitted to use paid sick leave for their  
 own illness, injury or other health-related needs, including  
 preventive care; to assist a family member (or person who is  
 like family to the employee) who is ill, injured, or has other  
 health-related needs, including preventive care; or for reasons  
 resulting from, or to assist a family member (or person who is  
 like family to the employee) who is a victim of, domestic  
 violence, sexual assault, or stalking. Additional information

on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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

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

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate

that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISIO"

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

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

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

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

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

**TO: EMPLOYERS/EMPLOYEES**

**PREVAILING WAGE SCHEDULE:**

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

**OVERTIME:**

**Overtime is to be paid to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.**

Director  
Division of Construction Procurement  
Frankfort, Kentucky 40622  
502-564-3500



**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:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
7.0%	6.9%

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

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

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

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

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

**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:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
9.6%	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 Shelby County.

**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:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
9.6%	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 Spencer County.

**PART IV**  
**INSURANCE**

Refer to  
*Kentucky Standard Specifications for Road and Bridge Construction,*  
current edition

**PART V**  
**BID ITEMS**

**PROPOSAL BID ITEMS**

224318

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Report Date 5/25/22

**Section: 0001 - PAVING**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	136.00	TON		\$	
0020	00214		CL3 ASPH BASE 1.00D PG64-22	125.00	TON		\$	
0030	00388		CL3 ASPH SURF 0.38B PG64-22	488.00	TON		\$	
0040	02069		JPC PAVEMENT-10 IN	82.00	SQYD		\$	
0050	02676		MOBILIZATION FOR MILL & TEXT (SPENCER KY 155 @ KY 55)	1.00	LS		\$	
0060	02677		ASPHALT PAVE MILLING & TEXTURING	469.00	TON		\$	
0070	20550ND		SAWCUT PAVEMENT	137.00	LF		\$	
0080	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	3.20	TON		\$	

**Section: 0002 - ROADWAY**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0090	01941		MOUNTABLE MEDIAN TYPE 4	61.00	SQYD		\$	
0100	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH		\$	
0110	02159		TEMP DITCH	663.00	LF		\$	
0120	02160		CLEAN TEMP DITCH	331.00	LF		\$	
0130	02200		ROADWAY EXCAVATION	41.00	CUYD		\$	
0140	02650		MAINTAIN & CONTROL TRAFFIC (FRANKLIN US 60 @ KY 1681)	1.00	LS		\$	
0150	02650		MAINTAIN & CONTROL TRAFFIC (SHELBY KY 55 @ KY 55X)	1.00	LS		\$	
0160	02650		MAINTAIN & CONTROL TRAFFIC (SPENCER KY 155 @ KY 55)	1.00	LS		\$	
0170	02671		PORTABLE CHANGEABLE MESSAGE SIGN (ADDED 4-22-22)	6.00	EACH		\$	
0180	02697		EDGELINE RUMBLE STRIPS	2,500.00	LF		\$	
0190	02701		TEMP SILT FENCE	663.00	LF		\$	
0200	02703		SILT TRAP TYPE A	2.00	EACH		\$	
0210	02704		SILT TRAP TYPE B	2.00	EACH		\$	
0220	02705		SILT TRAP TYPE C	2.00	EACH		\$	
0230	02706		CLEAN SILT TRAP TYPE A	2.00	EACH		\$	
0240	02707		CLEAN SILT TRAP TYPE B	2.00	EACH		\$	
0250	02708		CLEAN SILT TRAP TYPE C	2.00	EACH		\$	
0260	02726		STAKING (SPENCER KY 155 @ KY 55)	1.00	LS		\$	
0270	02726		STAKING (FRANKLIN US 60 @ KY 1681)	1.00	LS		\$	
0280	02726		STAKING (SHELBY KY 55 @ KY 55X)	1.00	LS		\$	
0290	05952		TEMP MULCH	4,923.00	SQYD		\$	
0300	05953		TEMP SEEDING AND PROTECTION	3,692.00	SQYD		\$	
0310	05963		INITIAL FERTILIZER	.01	TON		\$	
0320	05964		MAINTENANCE FERTILIZER	.01	TON		\$	
0330	05985		SEEDING AND PROTECTION	285.00	SQYD		\$	
0340	05992		AGRICULTURAL LIMESTONE	.18	TON		\$	

**PROPOSAL BID ITEMS**

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Report Date 5/25/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0350	06404		FLEXIBLE DELINEATOR POST-M/Y	55.00	EACH		\$	
0360	06540		PAVE STRIPING-THERMO-4 IN W	3,238.00	LF		\$	
0370	06541		PAVE STRIPING-THERMO-4 IN Y	3,050.00	LF		\$	
0380	06542		PAVE STRIPING-THERMO-6 IN W	15.00	LF		\$	
0390	06543		PAVE STRIPING-THERMO-6 IN Y	39.00	LF		\$	
0400	06546		PAVE STRIPING-THERMO-12 IN W	429.00	LF		\$	
0410	06547		PAVE STRIPING-THERMO-12 IN Y	60.00	LF		\$	
0420	06556		PAVE STRIPING-DUR TY 1-6 IN W	50.00	LF		\$	
0430	06557		PAVE STRIPING-DUR TY 1-6 IN Y	80.00	LF		\$	
0440	06560		PAVE STRIPING-DUR TY 1-12 IN W	284.00	LF		\$	
0450	06568		PAVE MARKING-THERMO STOP BAR-24IN	174.00	LF		\$	
0460	06569		PAVE MARKING-THERMO CROSS-HATCH	775.00	SQFT		\$	
0470	06572		PAVE MARKING-DOTTED LANE EXTEN	55.00	LF		\$	
0480	06574		PAVE MARKING-THERMO CURV ARROW	33.00	EACH		\$	
0490	06576		PAVE MARKING-THERMO ONLY	2.00	EACH		\$	
0500	06598		PAVEMENT MARKING REMOVAL	454.00	SQFT		\$	
0510	20458ES403		CENTERLINE RUMBLE STRIPS	920.00	LF		\$	
0520	21373ND		REMOVE SIGN	2.00	EACH		\$	
0530	22664EN		WATER BLASTING EXISTING STRIPE	101.00	LF		\$	
0540	23253ES717		PAVE MARK TY 1 TAPE CROSS-HATCH	653.00	SQFT		\$	
0550	23256ES717		PAVE MARK TY 1 TAPE -ONLY	6.00	EACH		\$	
0560	23265ES717		PAVE MARK TY 1 TAPE STOP BAR-24 IN	45.00	LF		\$	
0570	23270ES717		PAVE MARK TY 1 TAPE-CURV ARROW	8.00	EACH		\$	
0580	24097EC		THERMO RUMBLE STRIPS TY 2	96.00	LF		\$	

**Section: 0003 - SIGNING**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0590	06406		SBM ALUM SHEET SIGNS .080 IN	58.63	SQFT		\$	
0600	06407		SBM ALUM SHEET SIGNS .125 IN	80.67	SQFT		\$	
0610	06410		STEEL POST TYPE 1	202.00	LF		\$	
0620	06472		INSTALL SPAN MOUNTED SIGN	2.00	EACH		\$	
0630	24631EC		BARCODE SIGN INVENTORY	18.00	EACH		\$	

**Section: 0004 - SIGNALIZATIOIN**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	04792		CONDUIT-1 IN	15.00	LF		\$	
0650	04811		ELECTRICAL JUNCTION BOX TYPE B	4.00	EACH		\$	
0660	04820		TRENCHING AND BACKFILLING	940.00	LF		\$	
0670	04830		LOOP WIRE	304.00	LF		\$	
0680	04844		CABLE-NO. 14/5C	2,250.00	LF		\$	
0690	04845		CABLE-NO. 14/7C	1,153.00	LF		\$	
0700	04850		CABLE-NO. 14/1 PAIR	240.00	LF		\$	
0710	04895		LOOP SAW SLOT AND FILL	107.00	LF		\$	
0720	20188NS835		INSTALL LED SIGNAL-3 SECTION	19.00	EACH		\$	
0730	20266ES835		INSTALL LED SIGNAL- 4 SECTION	2.00	EACH		\$	

### PROPOSAL BID ITEMS

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Report Date 5/25/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0740	20275EC		VIDEO DETECTION-INSTALL	1.00	EACH		\$	
0750	20408ES835		INSTALL LED BEACON-12 IN	4.00	EACH		\$	
0760	23157EN		TRAFFIC SIGNAL POLE BASE	4.50	CUYD		\$	
0770	24525EC		ADVANCE WARNING FLASHER	1.00	EACH		\$	
0780	24900EC		PVC CONDUIT-1 1/4 IN-SCHEDULE 80	925.00	LF		\$	
0790	24908EC		INSTALL SIGNAL CONTROLLER-TY ATC	2.00	EACH		\$	
0800	24955ED		REMOVE SIGNAL EQUIPMENT (FRANKLIN US 60 @ KY 1681)	1.00	EACH		\$	
0810	24955ED		REMOVE SIGNAL EQUIPMENT (SHELBY KY 55 @ KY 55X)	1.00	EACH		\$	
0820	24955ED		REMOVE SIGNAL EQUIPMENT (SPENCER KY 155 @ KY 55)	1.00	EACH		\$	

#### Section: 0005 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0830	04722		BRACKET 8 FT	8.00	EACH		\$	
0840	04761		LIGHTING CONTROL EQUIPMENT	2.00	EACH		\$	
0850	04820		TRENCHING AND BACKFILLING	40.00	LF		\$	
0860	04832		WIRE-NO. 12	4,850.00	LF		\$	
0870	24589ED		LED LUMINAIRE	8.00	EACH		\$	
0880	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	40.00	LF		\$	

#### Section: 0006 - GUARDRAIL

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0890	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0900	02381		REMOVE GUARDRAIL	538.00	LF		\$	
0910	02391		GUARDRAIL END TREATMENT TYPE 4A	3.00	EACH		\$	
0920	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	561.00	LF		\$	

#### Section: 0007 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0930	02569		DEMOBILIZATION	1.00	LS		\$	