



**CALL NO. 102**

**CONTRACT ID. 251017**

**CAMPBELL COUNTY**

**FED/STATE PROJECT NUMBER STP 8177(004)**

**DESCRIPTION KY-1892**

**WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB**

**PRIMARY COMPLETION DATE 8/1/2026**

**LETTING DATE: July 24,2025**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 24,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**DBE CERTIFICATION REQUIRED - 3%**

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

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

ADMINISTRATIVE DISTRICT - 06

CONTRACT ID - 251017  
STP 8177(004)  
COUNTY - CAMPBELL  
PCN - DE01918922517  
STP 8177(004)

KY-1892 (MP 1.429) ADDRESS CONDITION OF KY-1892 FROM MP 1.429 TO MP 2.125 IN CAMPBELL COUNTY (MP 2.125), A DISTANCE OF 0.70 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 06-20014.00.  
GEOGRAPHIC COORDINATES LATITUDE 39:05:04.00 LONGITUDE 84:28:20.00  
ADT

COMPLETION DATE(S):  
COMPLETED BY 08/01/2026                      APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

### **INSURANCE**

Refer to Kentucky Standard Specifications for Road and Bridge Construction, current edition.

### **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 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/construction-procurement](http://www.transportation.ky.gov/construction-procurement)). 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 state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, 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 agreement for the purpose of financial audit or program review. 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. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

### **BOYCOTT PROVISIONS**

If applicable, the contractor represents that, pursuant to [KRS 45A.607](#), they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

### **LOBBYING PROHIBITIONS**

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in [KRS 11A.236](#) during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to [KRS 45A.328](#), they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

Revised: 1/1/2025

## 1.0 BUY AMERICA REQUIREMENT.

Follow the “Buy America” provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

## 2.0 – BUILD AMERICA, BUY AMERICA (BABA)

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or \$2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all “construction materials” as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be

required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

### 3.0 FINAL RULE – FHWA’S BUY AMERICA REGULATION TO TERMINATE GENERAL APPLICABILITY WAIVER FOR MANUFACTURED PRODUCTS

- **March 17, 2025** (effective date): For all Federal-aid projects obligated on or after March 15, 2025, all iron or steel products, as defined in § 635.410(c)(1)(iii), must comply with FHWA’s Buy America requirements for steel and iron in § 635.410(b). In addition, for all Federal-aid projects obligated on or after March 15, 2025, per § 635.410(c)(2), articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include “excluded materials” and “construction materials”); an article, material, or supply must not be considered to fall into multiple categories.
- **October 1, 2025:** The final assembly requirement will become effective for Federal-aid projects obligated on or after October 1, 2025. This means that, for manufactured product to be Buy America compliant, for Federal-aid projects obligated on or after October 1, 2025, final assembly of the manufactured product must occur in the United States.
- **October 1, 2026:** The 55 percent requirement will become effective for Federal-aid projects obligated on or after October 1, 2026. This means that, for manufactured product to be Buy America-compliant, for Federal-aid projects obligated on or after October 1, 2026, all manufactured products permanently incorporated into the project must both be manufactured in the United States (satisfy the final assembly requirement) and have the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States be greater than 55 percent of the total cost of all components of the manufactured product (satisfy the 55 percent requirement).

### 4.0 – ADDITIONAL REQUIREMENTS

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it’s in compliance.

At the Contractor’s request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration’s Buy America webpage for more information.

[Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration \(dot.gov\)](#)

Effective - June 26, 2025, Letting

**BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE**

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

Date Submitted:\_\_\_\_\_

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

Signature:\_\_\_\_\_

Printed Name:\_\_\_\_\_

Title:\_\_\_\_\_

**NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.**



## **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.

**AFTER PROJECT AWARD AND BEFORE NOTICE TO PROCEED/WORK ORDER IS ISSUED (SEE SECTION 103.06, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION)**

Prime Contractors awarded a federally funded project with a DBE Goal greater than zero will be required to submit a fully executed DBE Subcontract, along with the attached FHWA 1273 and Certificate of Liability Insurance for each DBE Firm submitted as part of the previously approved DBE Utilization Plan (TC 14-35). A signed quote or purchase order shall be attached when the DBE subcontractor is a material supplier or broker.

The Certificate of Liability Insurance submitted must meet the requirements outlined in Section 107.18 of the Standard Specifications for Road and Bridge Construction.

Changes to **APPROVED** DBE Participation Plans must be approved by the Office for Civil Rights & Small Business Development. 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. Tony Youssefi. Mr. Youssefi's current contact information is email address – [tyousseffi@ky.gov](mailto:tyousseffi@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.



### **PROJECT TRAFFIC COORDINATOR (PTC)**

Be advised this project is a significant project pursuant to section 112.03.12.

### **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.

### **INCIDENTAL SURFACING**

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

### **ASPHALT PAVEMENT RIDE QUALITY CATEGORY B**

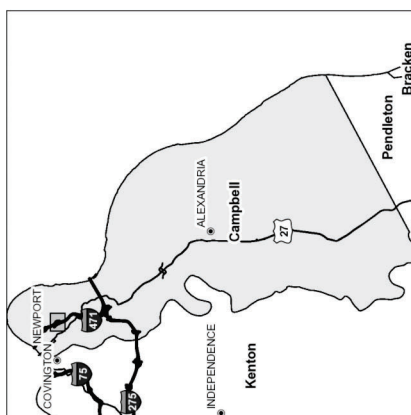
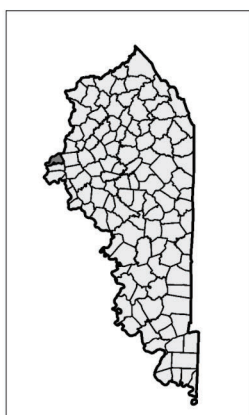
The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category B.

### **FUEL AND ASPHALT PAY ADJUSTMENT**

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

### **OPTION A**

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.



PROJECT NO. FD52 019 1892 001-003 / STP 8177(004)

PROJECT NO. FD52 019 1892 001-003 / SIP 817(1004)  
ITEM NO.: 6-20014 LETTING DATE: 7/24/2025 AADT: 21,442

ITEM NO.: 6-20014  
RECOMMENDED BY: ROSS MILLS P.E. DATE: \_\_\_\_\_

RECOMMENDED BY: ROSS MILLS F.E. DATE: \_\_\_\_\_  
PLAN APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

NOT TO SCALE



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

6-20014 PAVEMENT REHABILITATION  
CAMPBELL COUNTY



## REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2019 with Supplemental Specifications, as applicable.
2. FHWA Manual on Uniform Traffic Control Devices (MUTCD) – 2023 Edition w/Revisions
3. Kentucky Department of Highways Standard Drawings, 2020 edition, as applicable:

Kentucky Department of Highways Active Sepia Drawings, 2020 edition, as applicable:

- RDB-270-09-CURB BOX INLET TYPE A (DETAIL DRAWING)
- RDB-271-05-CURB BOX INLET TYPE A (STEEL DRAWING)
- RDB-272-07-CURB BOX INLET TYPE A (TOP PHASE TABLES)
- RDB-273-06-CURB BOX INLET TYPE A (DETAL & BAR CHART FOR 8" LID)
- RDB-400-05-BOX INLET RISER
- RDB-410-06-BOX INLET PIPE CHAMBER
- RDB-420-05-BOX INLET PIPE CHAMBER (ADDITIONAL STEEL)
- RDI-041-01-EROSION CONTROL BLANKET CHANNEL INSTALLATION
- RDX-225-01-SILT TRAP TYPE A
- RDX-230-01-SILT TRAP TYPE B
- RDM-001-07-MANHOLE TYPE A
- RDM-100-03-FRAME AND LID TYPE 1
- RDM-105-03-FRAME AND LID TYPE 2
- RDP-001-06-PERFORATED PIPE TYPES AND COVER HEIGHTS
- RDP-005-05- MULTI-LANE ROADS
- RDP-006-04-PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE)
- RGX-040-03-DETECTABLE WARNINGS
- RPM-010-06-STANDARD BARRIER MEDIAN
- RPM-100-11-CURB AND GUTTER, CURBS AND VALLEY GUTTER
- RPM-115-05-CONCRETE TERMINAL SECTION TYPE 1
- TPM-203-TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS
- TPM-205-TYPICAL MARKINGS FOR ISLANDS AND MEDIANS
- TPM-206-TYPICAL MARKINGS FOR TURN LANES PAGE 1
- TPM-207-TYPICAL MARKINGS FOR TURN LANES PAGE 2
- TTC-115-04-LANE CLOSURE MULTI-LANE HIGHWAY CASE I
- TTC-120-04-LANE CLOSURE MULTI-LANE HIGHWAY CASE II
- TTC-145-04-MEDIAN CROSSOVER CASE II
- TTC-146-04-MEDIAN CROSSOVER CASE II
- TTC-155-02-TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR CONSTRUCTION ZONES
- TTC-160-02-TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR LANE CLOSURES
- TTD-125-03-PAVEMENT CONDITION WARNING SIGNS
- TTS-115-02-MOBILE OPERATION FOR PAINT STRIPING CASE IV
- TTS-135-02-MOBILE OPERATION FOR DURABLE STRIPING CASE IV
- Sepia 006-INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- Sepia 007-INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- Sepia 008-INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- Sepia 016-INLAID PAVEMENT MARKER ARRANGEMENT CHANNELIZED INTERSECTION
- Sepia 020-SECURITY PLATE ASSEMBLY

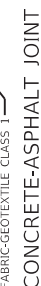
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- Sepia 025-SILT TRAP TYPE C
- Sepia 041 SIDEWALK RAMPS
- Sepia S-TTD-120-03 HIGHER FINES ZONE SIGNS
- Sepia S-TTD-130 SPEED ZONE SIGNING FOR WORK ZONES

#### **4. Special Notes and Provisions**

- Special Note for Before You Dig
- Special Note for Typical Section Dimensions
- Special Note for Fixed Completion Date and Liquidated Damages
- Special Note for Geogrid Placement for Subgrade
- Special Note for Barcodes on Permanent Signs 2019
- Special Note for Install Radar Presence Detector Type A
- Special Note for Permanent Traffic Count Stations
- Special Note for Waste and Borrow Sites (1-296)
- Special Note for Concrete Slurry
- Special Note for Paver Mounted Temperature Profiles (1-3062)
- Special Note for Non-Tracking Tack Coat (1-3090)
- Special Note for Experimental KYCT and Hamburg Testing
- Special Note for Portable Changeable Message Sign(2-3-01)
- Special Notes Applicable to Project (1-201)
- Special Note for Significant Project – Project Traffic Coordinator (1-126)
- Special Note for Asphalt Mixture (1-132)
- Special Note for Category B Ride Quality (1-158)
- Special Note for Compaction Option A (1-160)
- Special Note for Longitudinal Joint Adhesive
- Special Note for Project Questions During Advertisement
- Special Note for Staking
- Special Note for Standard Drawings (2-750)
- Special Note for Maintain and Control Traffic
- Special Note for Fuel & Asphalt Pay Adjustment (1-157)
- Special Note for Connected Arrow Panels

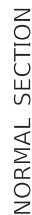
## PAVEMENT REMOVAL AND RECONSTRUCTION



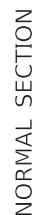
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NORMAL SECTION

KY 1892  
M.P. 1.946 TO M.P. 1.990



KY 1892  
M.P. 1.990 TO M.P. 2.063



KY 1892  
 M.P. 2.063 TO M.P. 2.125

## CROSS WALK SECTION





GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
0078	CRUSHED AGGREGATE SIZE NO.2 ①	TON	1000
1791	ADJUST MANHOLE FRAME TO GRADE	EACH	5
1792	ADJUST MANHOLE	EACH	1
1811	STANDARD CURB AND GUTTER MOD	LF	10,198
1923	STANDARD BARRIER MEDIAN TYPE 5	SQYD	323
2014	BARRICADE TYPE III	EACH	9
2159	TEMP DITCH	LF	300
2160	CLEAN TEMP DITCH	LF	150
2200	ROADWAY EXCAVATION	CUYD	6,315
2237	DITCHING	LF	272
2242	WATER ⑤	MGAL	139
2562	TEMPORARY SIGNS ①	SQFT	750
2568	MOBILIZATION	LS	1
2569	DEMOBILIZATION	LS	1
2585	EDGE KEY	LF	226
2604	FABRIC-GEOTEXTILE CLASS 1A ⑫	SQYD	1,449
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN ⑥	EACH	3
2701	TEMP SILT FENCE	LF	300
2704	SILT TRAP TYPE B	EACH	1
2705	SILT TRAP TYPE C	EACH	17
2707	CLEAN SILT TRAP TYPE B	EACH	1
2708	CLEAN SILT TRAP TYPE C	EACH	17
2720	SIDEWALK-4 IN CONCRETE ③	SQYD	512
2721	REMOVE CONCRETE SIDEWALK	SQYD	235
2726	STAKING ⑦	LS	1
3225	TUBULAR MARKERS	EACH	99
5950	EROSION CONTROL BLANKET	SQYD	242
5952	TEMP MULCH	SQYD	1,557
5953	TEMP SEEDING AND PROTECTION	SQYD	1,162
5963	INITIAL FERTILIZER ⑧	TON	0.1
5964	MAINTENANCE FERTILIZER ⑨	TON	1.4
5985	SEEDING AND PROTECTION	SQYD	2,323
5992	AGRICULTURAL LIMESTONE ⑩	TON	1.4
5997	TOPSOIL FURNISHED AND PLACED ④	CUYD	378
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	16,106
6511	PAVE STRIPING-TEMP PAINT-6 IN	LF	224
6542	PAVE STRIPING-THERMO-6 IN W	LF	9,061
6543	PAVE STRIPING-THERMO-6 IN Y	LF	7,045
6546	PAVE STRIPING-THERMO-12 IN W	LF	224
6550	PAVE STRIPING-TEMP REM TAPE-W	LF	6,753
6551	PAVE STRIPING-TEMP REM TAPE-Y	LF	11,471
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	242
6574	PAVE MARKING-THERMO CURV ARROW	EACH	9
6613	INLAID PAVEMENT MARKER-B W/R	EACH	92
6614	INLAID PAVEMENT MARKER-B Y/R	EACH	85
10020NS	FUEL ADJUSTMENT	DOLL	24,956
10030NS	ASPHALT ADJUSTMENT	DOLL	52,510
20099ES842	PAVE MARK TEMP PAINT STOP BAR	LF	242
20100ES842	PAVE MARK TEMP PAINT LINE ARROW	EACH	9
20512NS724	RED MAPLE	EACH	3
20550ND	SAWCUT PAVEMENT	LF	180
21289ED	LONGITUDINAL EDGE KEY	LF	1,554
21659NN	RELOCATE SIGNAL HEADS	EACH	20
23158ES505	DETECTABLE WARNINGS	SQFT	90
23319EC	HARDWOOD MULCH ②	SQYD	720
23835EC	STANDARD BARRIER MEDIAN TY 5-MOD	SQYD	402
23839EC	REMOVE CONCRETE MEDIAN	SQYD	423

- NOTES:
- ① TEMPORARY SIGNING SHALL FOLLOW KYTC STANDARD DRAWINGS AND/OR MUTCD AS REQUIRED
  - ② HARDWOOD MULCH COLOR WILL BE MATCHED IN KIND WITH EXISTING
  - ③ 177 SY TO BE USED FOR REPLACEMENT OF COLORED CONCRETE MEDIANS. BAJA RED COLORING WILL BE INCIDENTAL TO BID ITEM.  
  
250 SY QUANTITY TO BE USED AS DIRECTED BY ENGINEER FOR SIDEWALK REPLACEMENT.
  - ④ TO REPLACE MATERIAL EXCAVATED BEHIND CURB
  - ⑤ FOR CONTROLLING DUST CAUSED BY MAINTAINING TRAFFIC ONLY (200 MGAL/MILE)
  - ⑥ PORTABLE CHANGEABLE MESSAGE SIGNS WILL REMAIN THE PROPERTY OF THE CONTRACTOR UPON COMPLETION OF THE PROJECT
  - ⑦ STAKING WILL ALSO INCLUDE ALL WORK ASSOCIATED WITH "NOTES APPLICABLE TO PROJECT" NOTE 11.
  - ⑧ ESTIMATED AT 300 LBS PER ACRE DISTURBED AND CONTAINS A MINIMUM OF 100 LBS OF NITROGEN, 100 LBS OF PHOSPHATE, AND 100 LBS OF POTASH PER ACRE.
  - ⑨ ESTIMATED AT 11.5 LBS PER 1000 SQFT DISTURBED
  - ⑩ ESTIMATED AT 3 TONS PER ACRE DISTURBED
  - ⑪ 1,000 TONS OF CRUSHED STONE AGGREGATE NO.2 ADDED FOR UNDERCUTTING AS DIRECTED BY THE ENGINEER.
  - ⑫ 1,449 SQYD OF FABRIC GEOTEXTILE CLASS 1 ADDED FOR UNDERCUTTING AS DIRECTED BY THE ENGINEER.

GENERAL SUMMARY

① SEE TRAFFIC SIGNAL DETAIL SHEET, PG. 34, FOR TRAFFIC SIGNAL CONSTRUCTION LOCATION.

SEE GENERAL NOTES 3.H FOR INFORMATION REGARDING BID ITEM INSTALL RADAR PRESENCE DETECTOR TYPE A.

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
24631EC	BARCODE SIGN INVENTORY	EACH	1
26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	EACH	11
26237EC	CONNECTED ARROW PANEL	EACH	3
	<b>I-471 PIER WEB WALLS</b>		
8100	CONCRETE CLASS A	CUYD	179.4
8150	STEEL REINFORCEMENT	LB	7,896
23378EC	CONCRETE SEALING	SQFT	3,088
	<b>TRAFFIC SIGNAL ESTIMATE</b> ①		
4700	POLE 30' MTG HT	EACH	2
4740	POLE BASE	EACH	2
4750	TRANSFORMER BASE	EACH	2
4780	FUSED CONNECTOR KIT	EACH	6
4811	ELECTRICAL JUNCTION BOX TYPE B	EACH	4
4820	TRENCHING AND BACKFILLING	LIN FT	100
4821	OPEN CUT ROADWAY	LIN FT	100
4845	CABLE-NO. 14/7C	LIN FT	700
20188NS835	INSTALL SIGNAL-3 SECTION LED	EACH	2
21543EN	BORE AND JACK CONDUIT	LIN FT	100
24901EC	PVC CONDUIT - 2 INCH - SCHEDULE 80	LIN FT	175
26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	EACH	11
	<b>BROUGHT FORWARD FROM PAVING SUMMARY</b>		
0003	CRUSHED STONE BASE	TON	10,257
0005	GEOGRID REINFORCEMENT FOR SUBGRADE	SQYD	25,484
190	LEVELING & WEDGING PG64-22	TON	10
214	CL3 ASPH BASE 1.00D PG64-22	TON	5,692
216	CL3 ASPH BASE 1.00D PG76-22	TON	5,612
387	CL3 ASPH SURF 0.38B PG76-22	TON	2,127
2091	REMOVE PAVEMENT	SQYD	26,843
2602	FABRIC-GEOTEXTILE CLASS 1	SQYD	25,484
20071EC	JOINT ADHESIVE	LF	9,476
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT	651,339
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	17
	<b>BROUGHT FORWARD FROM DRAINAGE SUMMARY</b>		
1456	CURB BOX INLET TYPE A	EACH	4
	<b>BROUGHT FORWARD FROM PERFORATED PIPE SUMMARY</b>		
1000	PERFORATED PIPE-4 IN	LF	5,550
1001	PERFORATED PIPE-6 IN	LF	2,159
1010	NON-PERFORATED PIPE-4 IN	LF	160
1011	NON-PERFORATED PIPE-6 IN	LF	30
1740	CORED HOLE DRAINAGE BOX CON-4 IN	EACH	16
1741	CORED HOLE DRAINAGE BOX CON-6 IN	EACH	3
	<b>BROUGHT FORWARD FROM SHEET SIGN SUMMARY</b>		
6407	SBM ALUM SHEET SIGNS .125 IN	SQFT	20
6411	STEEL POST TYPE 2	LF	17
	<b>BROUGHT FORWARD FROM PERMANENT TRAFFIC DATA ACQUISITION STATION</b>		
4793	CONDUIT-1 1/4 IN	LF	40
4820	TRENCHING AND BACKFILLING	LF	32
4830	LOOP WIRE	LF	1490
4895	LOOP SAW SLOT AND FILL	LF	320
20360ES818	WOOD POST	EACH	2
20468EC	ELECTRICAL JUNCTION BOX-10 X 8 X 4	EACH	2



## PAVING AREAS SUMMARY


**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  

 TEAM KENTUCKY  
 TRANSPORTATION  
 CABINET

OpenRoads Designer v10.10.02.4  
USER: cweller  
FILE NAME: J:\12405\_KY\_1892 CAMPBELL CO REHAB\50 - PLAN SHEETS\10 - SUMMARY SHEETS\30 - PAVING SUMMARY\PAVING SUMMARY.DGN

## PAVING SUMMARY


**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  

**TEAM KENTUCKY**  
TRANSPORTATION CABINET

- OpenRoads Designer v10.12.02.4  
USER: mlawson  
FILE NAME: J:\12405\_KY\_1892 CAMPBELL CO REHAB\50 - PLAN SHEETS\10 - SUMMARY SHEETS\20 - PAVING SUMMARY\PAVING SUMMARY.DGN

## DRAINAGE SUMMARY


**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  
 TEAM KENTUCKY  
 TRANSPORTATION  
 CONCEPT

1 ALL QUANTITIES CARRIED OVER TO THE GENERAL SUMMARY SHEET

1 ALL QUANTITIES CARRIED OVER TO THE GENERAL SUMMARY SHEET

**KY 1892 PAVEMENT REHABILITATION**  
**M.P. 1.429 TO M.P. 2.125**

**SHEETING SIGN SCHEDULE**

[illegible]

**NOTES:**

1. ALL SHEETING SIGNS TO BE GAUGE 0.125 ALUMINUM  
2. ALL QUANTITIES CARRIED FORWARD TO THE GENERAL SUMMARY SHEET



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



## SHEETING SIGN SCHEDULE

**GENERAL NOTES**  
**KY 1892**  
**REHABILITATION PROJECT**  
**CAMPBELL COUNTY**  
**ITEM NO. 6-20014**

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**I. GENERAL**

Perform all work in accordance with the Department's 2019 Standard Specifications and current editions of the Supplemental Specifications, Special Provisions, and Standard Drawings except as specified in these notes or elsewhere in this proposal. Article references are to the Standard Specifications.

All existing mile markers within the project limits have been shown on the plan sheets. These can be used to relate the mile points shown in the summaries to their location in the field.

**II. MATERIALS**

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to the Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance of Traffic Plan.

**B. PAVEMENT STRIPING.** Use Pave Striping-Thermo-6" for permanent striping on asphalt surfaces and Pave Striping-Thermo 12" for striping for turn lanes. Use Pave Striping-Thermo- 24" for stop bars and Pave Striping-Thermo- 12" for transverse pedestrian crossings.

**C. EROSION CONTROL BLANKET.** Erosion Control Blanket is to be placed on any disturbed areas in the median, roadway side slopes, or other areas disturbed where work is required in the proposal.

**III. CONSTRUCTION METHODS**

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance of Traffic Plan.

**B. SITE PREPARATION.** Be responsible for all site preparation. This item shall include, but is not limited to, clearing and grubbing, excavation and backfilling, embankments, removal of obstructions or any other items, and disposal of materials. All site preparation shall be only as approved or directed by the Engineer. Except for the bid items listed, site preparation will not be measured for payment but shall be incidental to the other items of work.



- C. DITCHING** One area of ditching has been identified in the plan set. Final limits will be determined by the Engineer.
- D. INTEGRAL CURB** Removal of existing integral curb will be incidental to the Remove Pavement bid item.
- E. DISPOSAL OF WASTE.** Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The Contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right-of-way fence for direct access to waste sites off the right-of-way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits but will be incidental to the other items of the work.
- F. FINAL DRESSING, CLEANUP, AND SEEDING.** After all work is completed, completely remove all debris from the job site. Perform Final Dressing Class A on all disturbed areas. Sow all disturbed earthen areas with the seed mixtures specified by the Engineer or place Erosion Control blanket on the areas if directed to do so by the Engineer.
- G. SIDEWALK REPLACEMENT.** Final sidewalk replacement limits will be determined by the Engineer.
- H. INSTALL RADAR PRESENCE DETECTOR.** The contractor shall coordinate with the KYTC District 6 Traffic Engineer on the installation location of each radar presence detector and request the required equipment that will then be installed at each signalized intersection. Ordering of the equipment to be installed shall be undertaken by KYTC. The Contractor should allow 4 weeks for the ordering and delivery of materials required for installation. The Contractor shall arrange to pick up the equipment from the KYTC District 6 Office.

#### **INSTALL RADAR PRESENCE DETECTOR TYPE A**

Install Radar Presence Detector Type A shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by contractor), and controller interface assembly. Radar Presence Detector Type A bid item shall include all labor required to provide a functional detection system. Radar Presence Detector Type A shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others.

This includes the removal of all existing loop lead-in cable, conduits, and junction boxes from cabinet, poles, spans, and the ground.

- I. PAVEMENT STRIPING AND PAVEMENT MARKERS.** Permanent striping will be in accordance with Section 714, except that:
- (1) Striping will be 6" in width, except 12" for turn lanes, and 24" for stop bars.
  - (2) Permanent or Temporary Striping will be in place before a lane is opened to traffic.
  - (3) Permanent striping on asphalt surfaces will be Pave Striping-Thermo-6" or 12" Inch W or Y;
  - (4) Existing pavement marker removal shall be incidental to the Remove Pavement Bid Item.
  - (5) Inlaid Pavement Markers will be required.
  - (6) Transverse Pedestrian Crossing markings will be 12"
  - (7) At signalized intersections, Mainline left turn lanes will be offset 2' left (as oriented by driving direction) to encourage offset left turn lanes. See plans for Details.
- J. ON SITE INSPECTION.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.
- K. PROPERTY DAMAGE.** The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's work. Restore all disturbed features in like kind materials and design to the existing or proposed grades, as applicable, at no additional cost to the Department.
- L. CAUTION.** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the conditions encountered are not in accordance with the information shown.
- M. UTILITY CLEARANCE.** Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations at no additional cost to the Department.
- N. STAKING.** The Staking bid item shall also include all work described in **Notes Applicable to Project** Note 11.

#### **IV. METHOD OF MEASUREMENT**

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

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance of Traffic Plan.

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

**C. INLAID PAVEMENT MARKERS AND PERMANENT STRIPING.**

- (1) Pave Striping-Thermo 6", Pave Striping-Thermo 12" Inch, Pave Marking-thermo X-Walk-12 inch, and Pave Marking-Thermo Stop Bar-24 Inch are measured per linear foot.
- (2) Inlaid Pavement Markers are measured as each
- (3) Curved Arrows will be measured as each.
- (4) Left turn lane offsets at signalized intersections will be measured per linear feet.

**V. BASIS OF PAYMENT**

Except as specified in these notes, or elsewhere in the drawings or this proposal, basis of payment will be in accordance with the Standard Specifications. No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at the Contractor's expense.

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance Of Traffic Plan.

**B. SITE PREPARATION.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.

**D. INLAID PAVEMENT MARKERS AND PERMANENT STRIPING.**  
See the General Summary Sheet.

**NOTES APPLICABLE TO PROJECT**  
**KY 1892**  
**REHABILITATION PROJECT**  
**CAMPBELL COUNTY**  
**ITEM NO. 6-20014.00**

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1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened except where specified in the Proposal.
2. The Contractor is to be advised that low wires and underground utilities may exist throughout the project. The following locations are approximate:
  - Underground junction box:

M.P. 1.605 RT. behind back of sidewalk
  - Longitudinal gas line:

Marker at M.P. 1.415 RT  
Marker at M.P. 1.458 RT
  - Low wires:

M.P. 1.435      M.P. 1.450  
M.P. 1.558      M.P. 1.559  
M.P. 1.950      M.P. 1.956  
M.P. 2.132      M.P. 2.152
  - Storm Sewers:

M.P. 1.433      M.P. 1.520  
M.P. 1.560      M.P. 1.604  
M.P. 1.729      M.P. 1.793  
M.P. 1.804      M.P. 1.881  
M.P. 1.945
  - Sanitary Sewer:

M.P. 1.585 to M.P. 2.111 Longitudinally along and under KY 1892  
M.P. 1.622  
M.P. 1.632
  - Watermain:

M.P. 1.593 to M.P. 2.123 Longitudinally along and under KY 1892  
M.P. 1.610  
M.P. 2.083

**CAUTION:** Other locations may exist. These and all utilities should be avoided on this project. If any utility is impacted, it will be the Contractor's responsibility to contact the affected utility and cover any costs associated with the impact.

3. Any roadway signs that are damaged during construction are to be replaced at the Contractor's expense.
4. Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.
5. Unless otherwise noted, the Department estimates the rate of application for CSB to be 115 lbs/sy per inch of depth.
6. Pavement rideability requirements, in accordance with section 410 of the Standard Specifications, shall apply on this project. Category B Shall apply for the length of the project.
7. The Department will accept the compaction of asphalt mixtures furnished for the driving lanes at one inch or greater on this project by Option A according to subsections 402 and 403 of the Standard Specifications, current edition. The Department will accept the compaction of all other mixtures by Option B.
8. The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.
9. This project is considered a Significant Project pursuant to section 112.03.12 of the Standard Specifications.
10. The Contractor shall be responsible for the repair of any pavement in the travelled lanes that becomes detrimental or hazardous to the travelling public during construction. Areas needing repair will be at the discretion of the Engineer. Repairs will be undertaken by the Contractor using "Levelling and Wedging" and will be paid for at this bid item. All work required to maintain traffic to undertake the repairs shall be incidental to "Maintain and Control Traffic" bid item.
11. The intent of this project is to reconstruct the pavement to its existing grade and cross-slope. The Contractor is to use extreme care to ensure that cross slopes of pavements are not altered from the original cross slope of driving lanes. The Engineer reserves the right to direct the Contractor to monitor cross slopes to restore crown in tangent sections, and/or restore original design cross slope in curves. Grade at shoulder in Curb and Gutter areas may be adjusted to match Existing Surface Elevation. The contractor shall survey the gutter line at existing and constructed to ensure preservation of elevations. The survey should take shots at a minimum 50-foot interval at both gutter lines in each direction of travel and where the

cross slope changes at turn lanes. The Contractor shall provide the survey information to KYTC District 6 a minimum of 2 (two) weeks prior to beginning construction. All work required by this note will be incidental to the "Staking" Bid Item.

12. The Contractor is advised that the planned locations of work established by mile points are referenced from the existing reference markers.
13. The Contractor will remove concrete pavement and aggregate as detailed on the Typical Sections in order to accommodate the new pavement section. As-Built plans indicate 9" of Concrete Pavement and 4" of Aggregate". The Contractor is expected to remove all Concrete pavement and aggregate plus 4" to accept the Proposed pavement schedule except where detailed in the plans. The asphalt pavement will consist of Asphalt surface, two lifts of Asphalt base, CSB, Geogrid Reinforcement, and Fabric Geotextile Class 1. Geogrid Reinforcement and Fabric Geotextile Class 1 to be installed beneath CSB as per SN for Geogrid Placement.
14. This project includes areas with guardrail. The contractor shall not impact existing guardrail or surface elevation at face of guardrail. Refer to Typical Sections.
15. Traffic loops at the signalized intersections of KY 1892 and: Churchill Drive, I-471 SB off ramp, and Pavillion Parkway will be replaced with Radar Detection. Supplementary signals for right turn off I-471 SB. Removal of existing traffic loops shall be incidental to the "Remove Pavement" bid item. Radar detection systems shall be installed and operational before traffic loops are removed.
16. Install Radar Presence Detector Type A's for each approach at the following intersections:
  - I-471 / Churchill Drive M.P. 1.443
  - I-471 / I-471 SB off ramp M.P. 1.957
  - I-471 / Pavillion Parkway M.P. 2.138

The contractor shall coordinate with KYTC District 6 Traffic Engineer to agree on the installation location of each radar presence detector and request the required equipment that will then be installed at each signalized intersection. Ordering of the equipment to be installed shall be undertaken by KYTC. The Contractor should allow 4 weeks for the ordering and delivery of materials required for installation. The Contractor shall arrange to pick up the equipment from the KYTC District 6 Office. Warehouse release form for Signal and Lighting on Pg. 35.

17. Additional signal heads will be constructed Left and Right of SB I-471 offramp to give drivers more information to cross traffic behavior in front of them. See Traffic Signal Detail. Pg.34 for more information. Warehouse release form for Signal and Lighting on Pg. 35.

18. Removal of existing permanent traffic data acquisition station loops shall be incidental to the "Remove Pavement" bid item.
19. Permanent traffic data acquisition stations will be constructed at M.P. 1.49 (Station ID: 019A67) and M.P. 2.07 (Station ID: 019E67) as detailed in the Special Note for Permanent Traffic Data Acquisition Stations.
20. One permanent regulatory speed limit sign (35 mph) will be installed at M.P. 0.0325 RT of NB I-471 off ramp.
21. Quantities of Non-Perforated Pipe 4in/6in, Perforated Pipe 4in/6in, and cored hole drainage box con 4in/6in shall be installed per Perforated Pipe Summary Sheet.
22. Existing manholes at the following locations are within the proposed driving lanes of KY 1892 and are to have their top phase adjusted to constructed surface elevation (same as existing surface elevation):
  - M.P. 1.932 LT
  - M.P. 1.961 LT
  - M.P. 2.073 RT
  - M.P. 2.116 RT
  - M.P. 1.922 LT Median will be reset to allow the contractor to better fit the manhole within the extents of the concrete median.
23. Repair Curb Box Inlets LT of M.P. 1.596, M.P. 1.945, and M.P. 1.643, and M.P. 2.116 on Median. At these locations curb boxes have been damaged. The contractor shall repair the curb box inlets by removing existing concrete to expose the existing steel and form and place Concrete Class A. Work will be bid as CBI TYA
24. At the east end of the project a concrete median that extends above existing asphalt pavement and existing concrete pavement is to be removed. See the plan sheets for specific location and details. The median will not be replaced. The surface will be replaced flush.
25. Sidewalk crossings will be reconstructed to ADA compliance. Paid for as Paid for as Sidewalk – 4 in Concrete.
26. The contractor will replace sidewalk to eliminate tripping hazards at:
  - M.P. 1.614 to M.P. 1.629 LT.
  - M.P. 1.790 to M.P. 1.795 LT.

As directed by the Engineer.
27. Colored concrete median will be removed and replaced in kind (Sidewalk – 4in -Color Baha Red as approved by the Engineer).

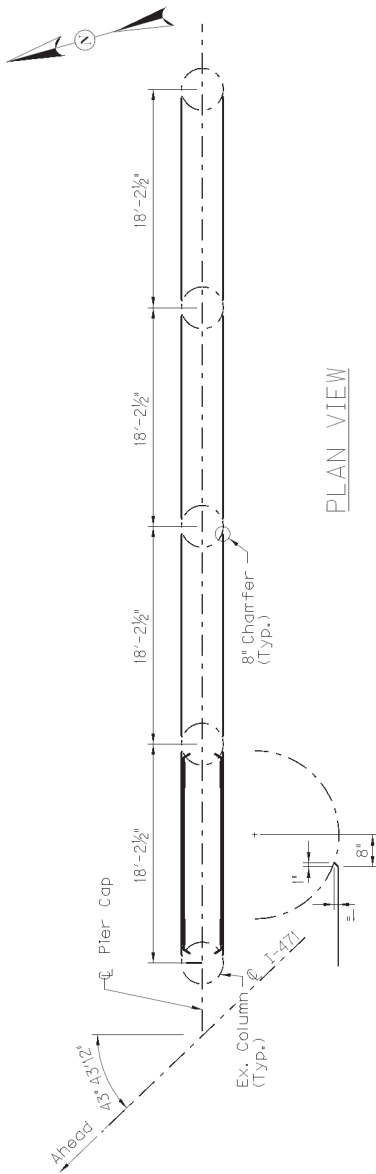


- M.P. 1.552 to M.P. 1.559 – 61 SQYD
  - M.P. 1.793 to M.P. 1.802 – 70 SQYD
  - M.P. 2.042 to M.P. 2.047 – 46 SQYD
28. Trees in median, M.P. 1.964 to M.P. 1.973, removed for MOT will be replaced in kind. The trees shall be Red Maple or as directed by Engineer.
  29. There is an existing transit stop at M.P. 1.560 constructed with concrete pavement. This concrete pavement will be left in place. The Contractor shall sawcut to separate the transit stop pavement from the driving lane.
  30. The Median Cross walk at M.P. 1.560 will be constructed to 10' width from face of Curb to face of Curb. Paid for as Sidewalk – 4 in Concrete.
  31. The median will be removed 1 foot beyond back of curb to facilitate compaction of subgrade, unless sidewalk is directly behind the back of curb, as shown on the typical sections.
  32. Trees and Shrubbery within the median and outside of roadway will not be disturbed.
  33. The existing piers for the I-471 over bridges, located at M.P. 1.870 and M.P. 1.890, shall be modified as per the drawings having web wall installed between the pier columns. The web walls vary from 10.5' to 12' in height and dowelled into the existing piers as shown in the proposal. Care should be taken not to damage the existing piers during web wall construction. Newly placed concrete shall be coated with Concrete Sealer and paid for as "Concrete Sealing", see Special Note for Concrete Sealing.



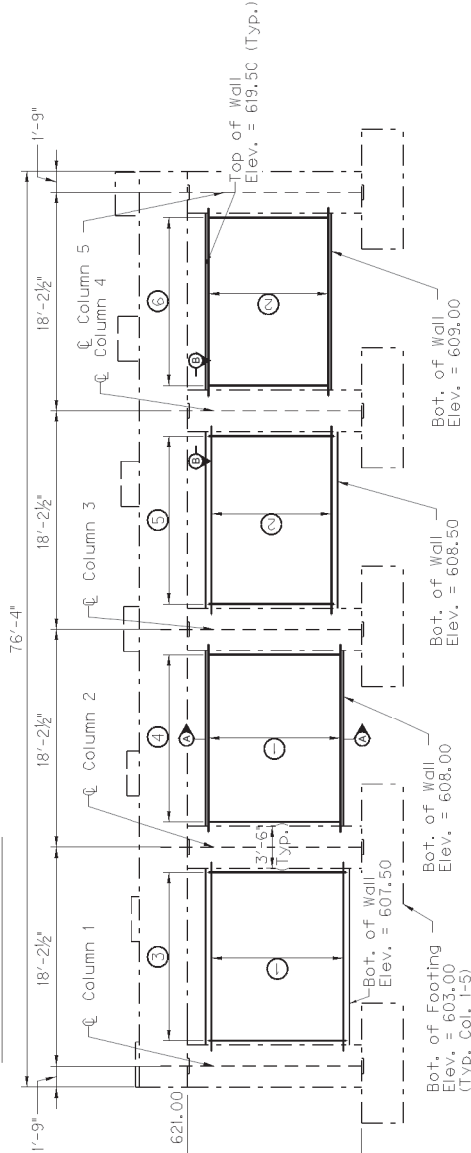
COUNTY OF		ITEM NO.	SHEET NO.
CAMPBELL		6-20014	S01

BILL OF REINFORCEMENT											
Mark	Type	No.	Size	Length	Location	a	b	c	d	e	f
				ft		ft	in	ft	in	ft	in
5P100	8	184	5	3	2	2	7	0	8	0	7 1/8
5P101	Str	100	5	15	6						
5P102	Str	30	5	11	6						
5P103	Str	30	5	11	0						
5P104	Str	30	5	10	0						
5P105	Str	30	5	10	0						
5P106	2	60	5	6	2	1	6	3	2		



PLAN VIEW

CHAMFER DETAIL

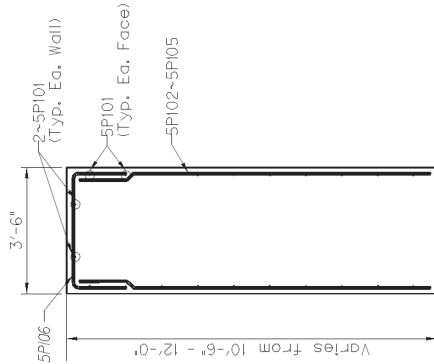
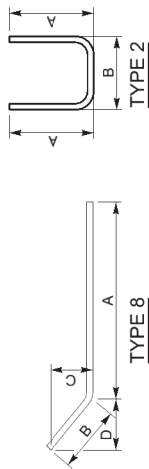


NORTHBOUND PIER ELEVATION VIEW

Elevations are based on existing plans.  
Top of wall shall extend 8'-0" above existing ground line and bottom of wall shall extend 2'-0" below finished ground line.

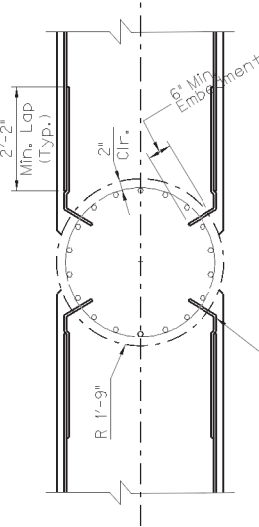
- 1 12-5P101 Spa. @ 1'-0" = 11'-0" (Typ. Ea. Face)
- 2 w/ 12-5P100 (Ea. Column, Ea. Face)
- 3 11-5P101 Spa. @ 1'-0" = 10'-0" (Typ. Ea. Face)
- 4 w/ 11-5P100 (Ea. Column, Ea. Face)
- 5 15-5P102 Spa. @ 1'-0" = 14'-0" (Typ. Ea. Face)
- 6 w/ 15-5P106 (Top of Wall)
- 7 15-5P103 Spa. @ 1'-0" = 14'-0" (Typ. Ea. Face)
- 8 w/ 15-5P106 (Top of Wall)
- 9 15-5P104 Spa. @ 1'-0" = 14'-0" (Typ. Ea. Face)
- 10 w/ 15-5P106 (Top of Wall)
- 11 15-5P105 Spa. @ 1'-0" = 14'-0" (Typ. Ea. Face)
- 12 w/ 15-5P106 (Top of Wall)

NOTES:  
CONCRETE: CLASS "A" REINFORCED F/C = 3500PSI  
STEEL REINFORCEMENT FY=60000PSI  
NEW WEBCAST CONSTRUCTION SHALL HAVE CONCRETE SEALER APPLIED TO ALL EXPOSED FACES.  
REINFORCEMENT CLEAR COVER SHALL BE 2" UNLESS OTHERWISE NOTED.



SECTION A

Reinforcement typical between columns

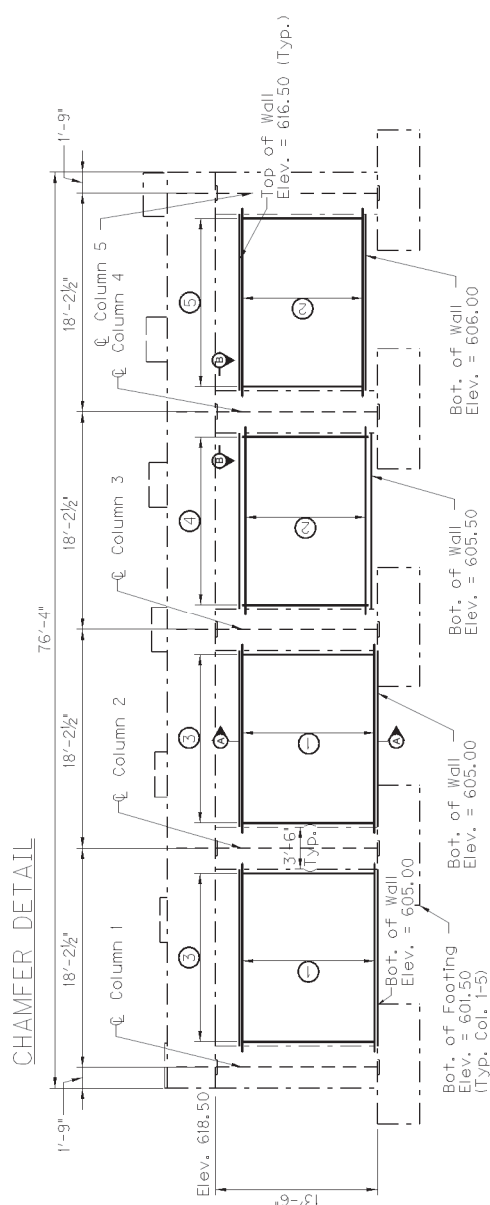
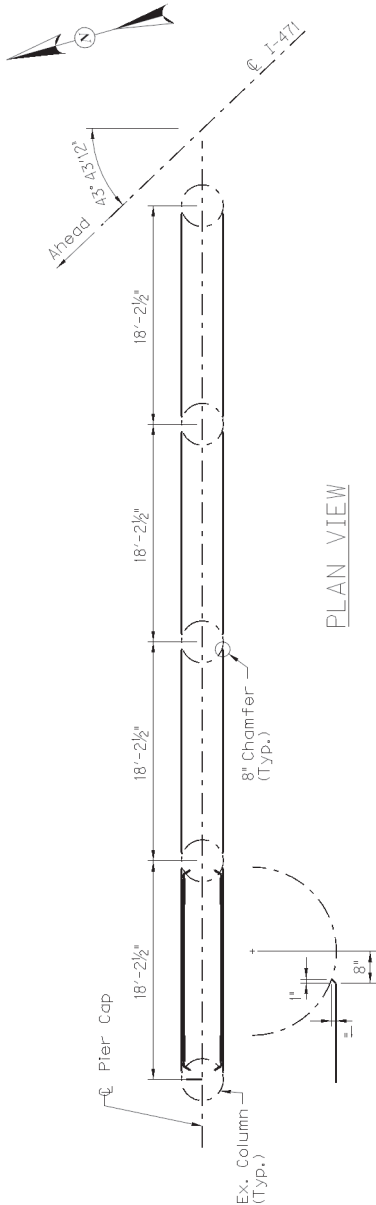


SECTION B

5P100 Spa. with 5P101 Bars (Typ. Ea. Face) Grout in place. Locate existing column rebar prior to drilling and grouting.

COUNTY OF		ITEM NO.	SHEET NO.
CAMPBELL		6-20014	S02

BILL OF REINFORCEMENT											
Mark	Type	No.	Size	Length	Location	a	b	c	d		
				ft.		ft.	ft.	ft.	ft.	in.	in.
5P100	8	184	5	3	2	2	7	0	8	0	7 1/8
5P101	Str	100	5	15	6						4
5P103	Str	60	5	11	0						
5P104	Str	30	5	10	6						
5P105	Str	30	5	10	0						
5P106	2	60	5	6	2	1	6	3	2		



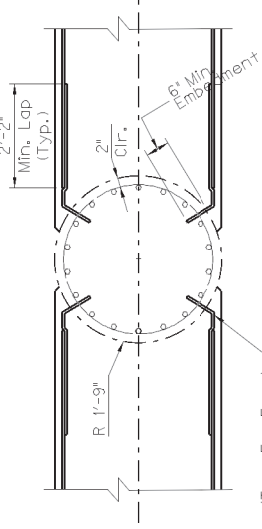
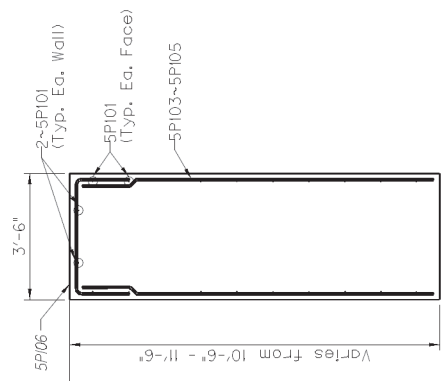
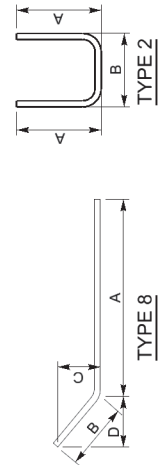
NOTES:

CONCRETE: CLASS "A" REINFORCED F/C = 3500PSI

STEEL REINFORCEMENT FY=60000PSI

NEW WEIRWALL CONSTRUCTION SHALL HAVE CONCRETE SEALER APPLIED TO ALL EXPOSED FACES.

REINFORCEMENT CLEAR COVER SHALL BE 2" UNLESS OTHERWISE NOTED.



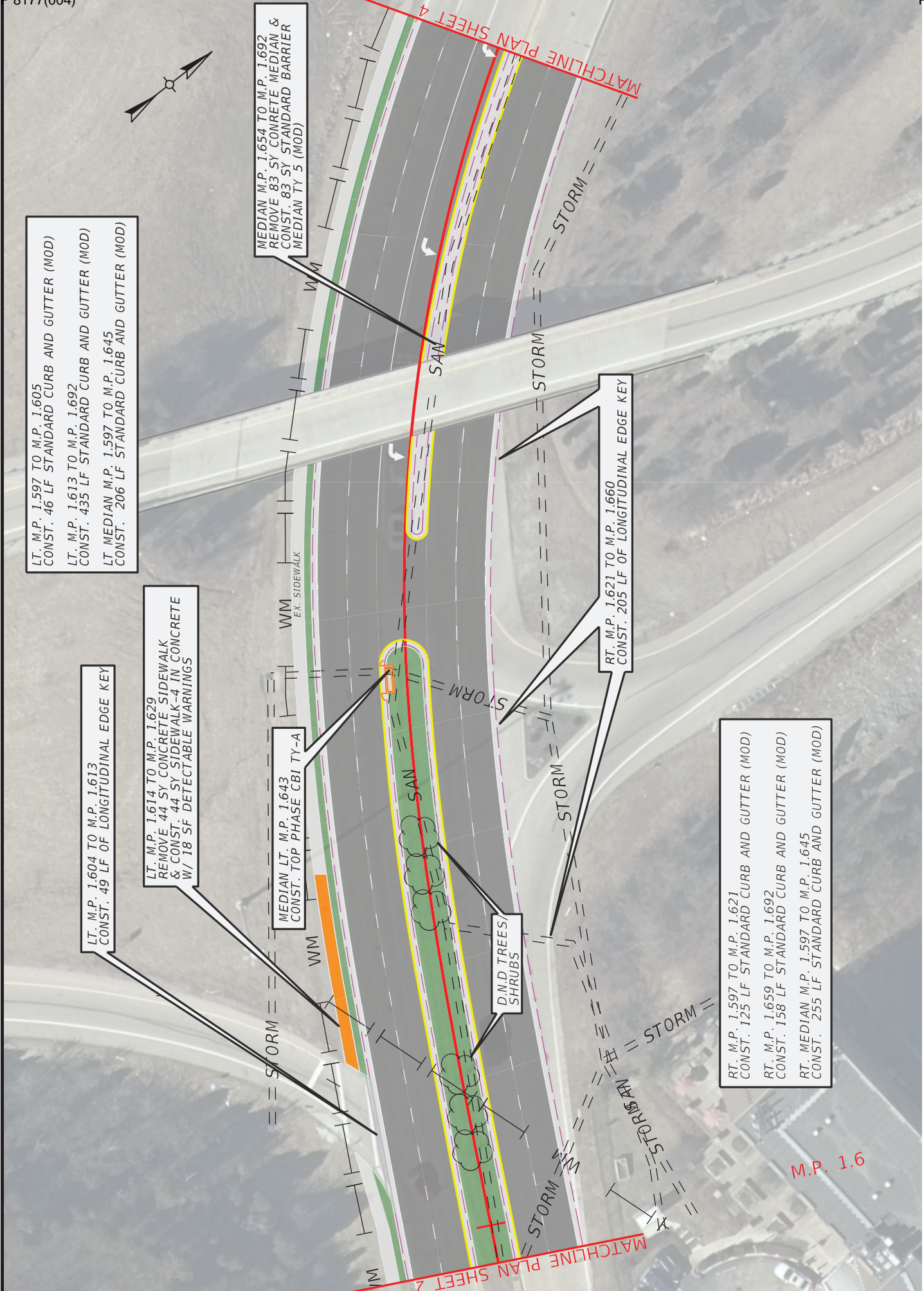
Reinforcement typical between columns











COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

PLAN SHEET:  
KY 1892

ITEM NO.  
6-20014.00

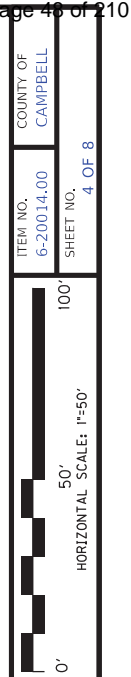
COUNTY OF  
CAMPBELL

SHEET NO.  
3 OF 8

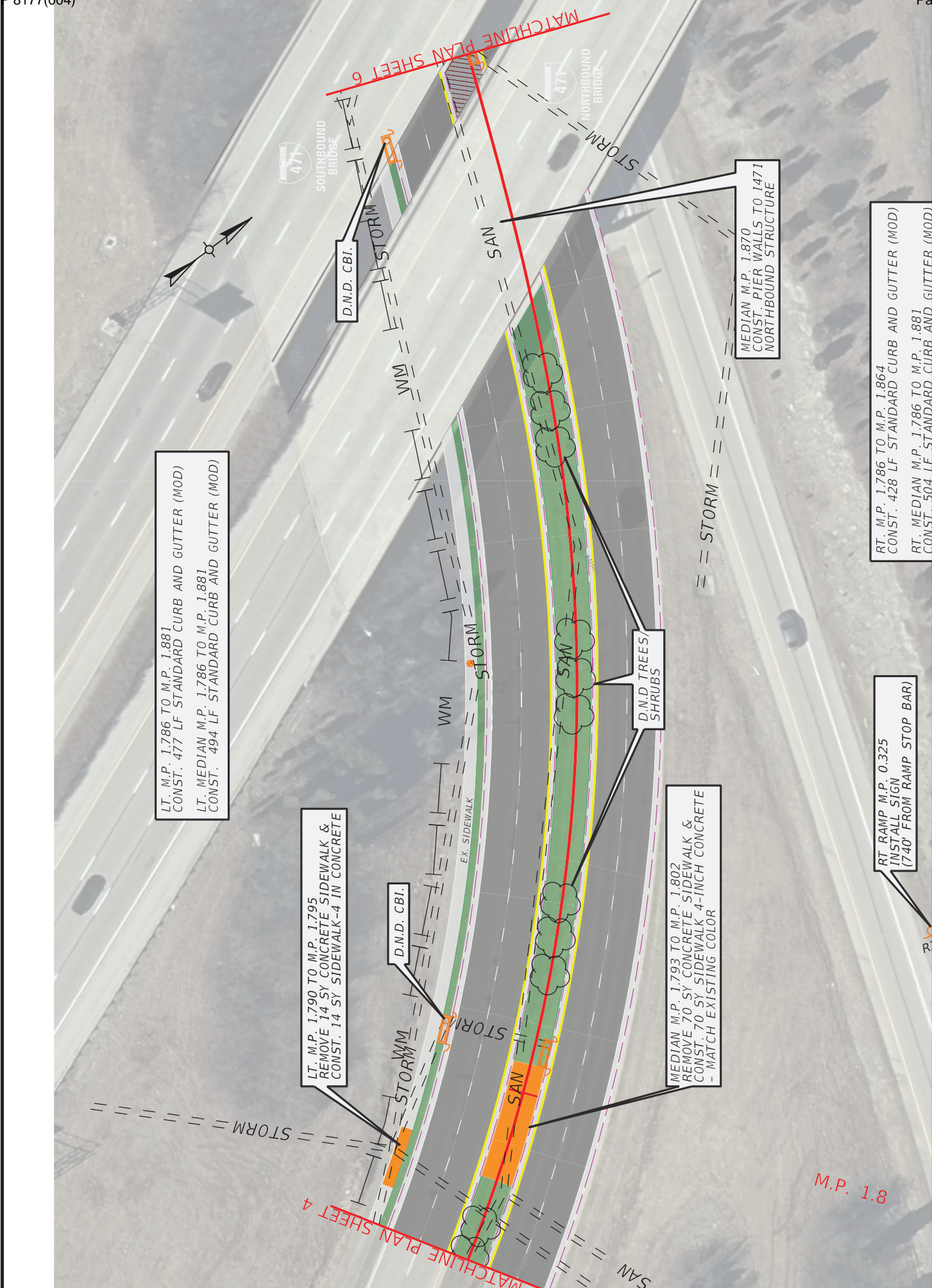
0' 50' 100'

HORIZONTAL SCALE: 1"=50'









COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

PLAN SHEET:  
KY 1892

USER: dplanning

ITEM NO.  
6-20014.00

COUNTY OF  
CAMPBELL

SHEET NO.  
5 OF 8

0'  
50'  
100'

HORIZONTAL SCALE: 1"=50'

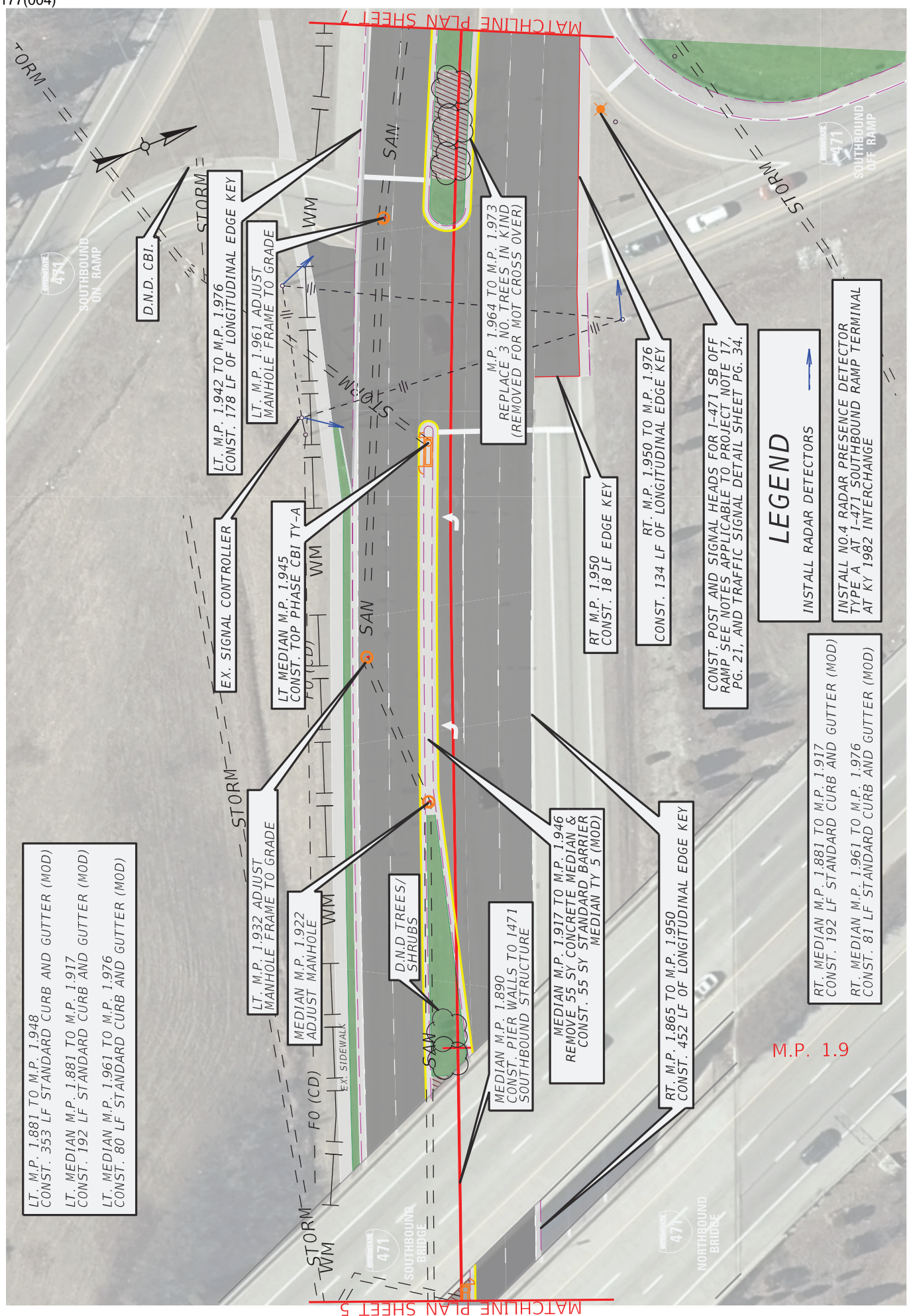
RT. M.P. 1.786 TO M.P. 1.864  
CONST. 428 LF STANDARD CURB AND GUTTER (MOD)

RT. MEDIAN M.P. 1.786 TO M.P. 1.881  
CONST. 504 LF STANDARD CURB AND GUTTER (MOD)

OpenRoads Designer v10.12.02.4  
FILE NAME: J:\12405\_KY 1892 CAMPBELL CO REHAB\50 - PLANS AND PROFILES\PLAN SHEETS 1-50.DGN

Team Kentucky logo





COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

PLAN SHEET:

KY 1892

ITEM NO.

6-20014.00

COUNTY OF

CAMPBELL

SHEET NO.

6 OF 8

0'

50'

100'

HORIZONTAL SCALE: 1"=50'

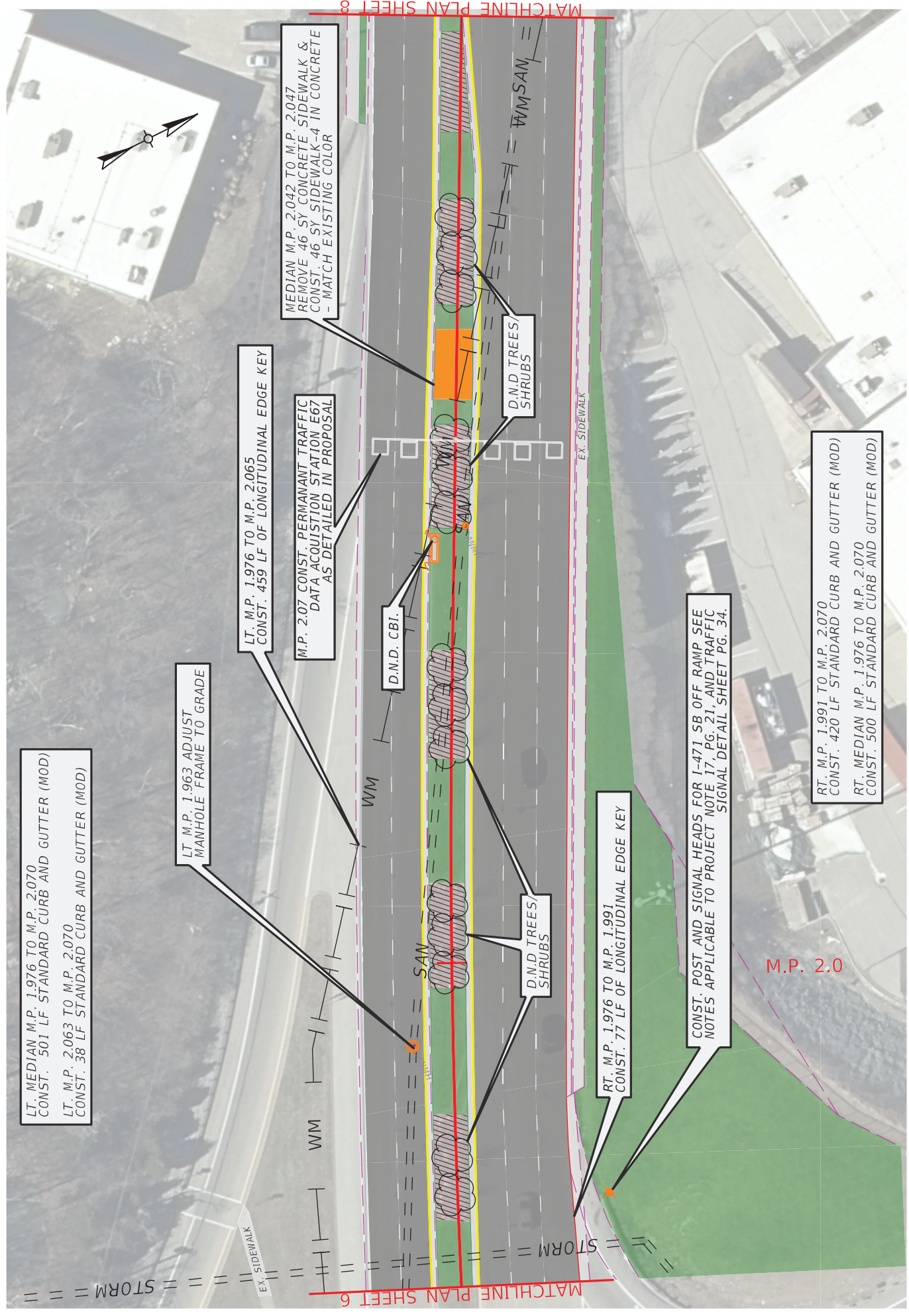
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FILE NAME: J:\12405\_KY 1892 CAMPBELL CO REHAB\30 - PLANS AND PROFILES\PLAN SHEETS 1-50.DGN

USER: dplanning

OpenRoads Designer v10.12.02.4





**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

**PLAN SHEET:**  
KY 1892

**ITEM NO.**  
6-20014.00

**COUNTY OF**  
CAMPBELL

**SHEET NO.**  
7 OF 8

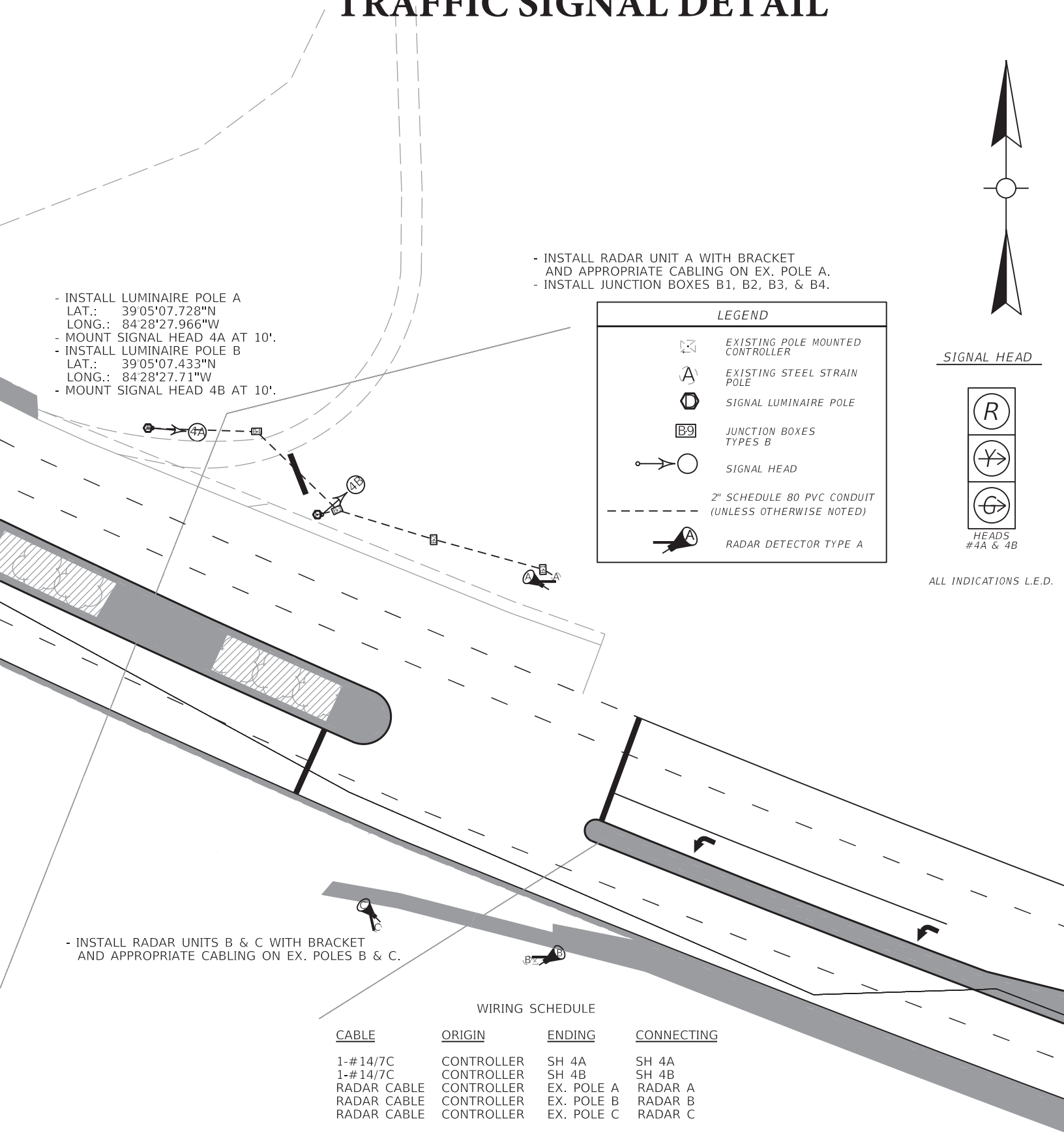
**0' 50' 100'**  
HORIZONTAL SCALE: 1"=50'

**Contract ID: 25017**  
**Page 51 of 210**





TRAFFIC SIGNAL DETAIL



PROJECT MATERIALS RELEASE FORM  
FOR SIGNAL AND LIGHTING

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: 6-20014.00  
County: Campbell  
Description: KY 1892 Pavement Rehab

Signals		
2	T-02-0009	Siemens 3 Section Signal
2	T-02-0032	Siemen 3 section backplate
2	T-02-0330	LED Module 12" red ball
2	T-02-0310	LED Module 12" yellow arrow
2	T-02-0320	LED Module 12" green arrow

Special items			
1		Radar	

REQUIRED

Electrical Contractor Supervisor  
Project Engineer  
Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project  
Signature of Project Engineer or Designee

Contact number for Supervisor  
Contact number for Project Engineer

**TRAFFIC CONTROL PLAN**  
**KY 1892**  
**REHABILITATION PROJECT**  
**CAMPBELL COUNTY**  
**ITEM NO. 6-20014**

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**TRAFFIC CONTROL GENERAL**

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the KYTC Standard Specifications and the KYTC Standard Drawings, current editions. Except for the roadway and traffic control bid items included in the project, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project shall be in compliance with the appropriate Standard Drawings and the Manual on Uniform Traffic Control Devices (MUTCD), current edition.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to current MUTCD.

Reduce the speed limit in work areas and establish higher fines for work zone speeding violations throughout the project during the area is under construction.

The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the higher fine signs. At the beginning of the work zone, the "BEGIN HIGHER FINES ZONE" signs will be dual mounted. At the end of the work zone, the "END WORK ZONE SPEED LIMIT" signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period. Payment for the signs will be at the unit bid price for temporary signs. Any relocation or covering of the signs will be incidental to "Maintain and Control Traffic".

The Contractor shall maintain traffic with a minimum of 10 foot lanes.

**PROJECT PHASING & CONSTRUCTION PROCEDURES**

This project has a fixed completion date. See the special note for Fixed Completion Date and Liquidated Damages.

Note that lane closures are required for the project. Sign, stripe, barrel, and taper according to the current versions of the MUTCD and Standard Drawings.

Short term lane closures will not be allowed on any of the holidays shown in Section 101.03 of the current KYTC Standard Specifications for Road and Bridge Construction. The Engineer may



restrict closures for additional days before or after these holidays or for other special local events.

When a lane closure is allowed, implement the following procedures:

- Maintain traffic as specified in the phasing notes and MOT typical sections.

The contractor must notify the Engineer at least fourteen (14) days prior to the beginning of each construction phase.

All work in the following Phases must be completed with the following restrictions unless prior approval is given by the Engineer:

- 1 lanes of traffic shall be maintained North bound and South bound on KY 1892
- Construction of Churchill Road intersection will be done part width as to maintain access to southwest leg of intersection(Newport/Ft. Thomas Urgent Care)
- Traffic shall not be reduced to one lane in each direction during the winter shutdown period of November 30<sup>th</sup> to April 1<sup>st</sup>.
- If pavement removal begins in one direction prior to the winter shutdown, work must be completed such that traffic can be returned two lanes in each direction in their current configuration prior to the winter shutdown.

#### **PHASE 1 – SIGNAL RADAR DETECTION SOUTHBOUND KY1892 CONSTRUCTION FROM PAVILLION PKWY TO I-471 SB RAMPS.**

The Contractor shall obtain approval from the Engineer prior to beginning the following work:

##### ***PHASE 1***

Install Radar detection at the following signalized intersections:

- KY 1892 and Churchill Drive
- KY 1892 and SB I-471
- KY 1892 and Pavillion Pkwy

Signal and Sign Northbound KY 1892 to one lane each direction starting at Pavillion Parkway intersection and ending at SB I-471 intersection.

NB I-471 off ramp (from under overpass) to be brought into single lane with Northbound KY 1892 traffic. Shift left turn lane onto SB I-471 onramp to offset from opposing traffic.

Southbound left turn lane from Pavilion Parkway shall be reduced from dual left turns to a single left turn lane on to KY 1892.

To construct Southbound KY 1892 from Pavillion Parkway M.P. 2.125 to SB I-471 ramp intersection M.P. 1.946; the contractor shall remove existing concrete pavement, existing aggregate, and approximately 4 inches of subgrade to accommodate the proposed asphalt pavement design. The Contractor shall remove 1 foot beyond existing back of curb in median to allow better compaction of Crushed Stone Base and then construct asphalt pavement as per the Typical Sections.

Closing the I-471 SB on ramp and sign a detour using the I-471 and KY 1120 intersection to the north for drivers to make SB movements.

- Ramp closure of SB I-471 on ramp will be limited to one weekend, Friday 9pm to Monday 6am, to facilitate construction of intersection
- Once the ramp is reopened, Northbound KY 1892 traffic will be permitted to turn right onto SB I-471 on ramp.

Removing earth median M.P. 1.960 to M.P. 1.980 and adding temporary pavement as per MOT detail sheet will be required to facilitate maintenance of traffic.

### ***PHASE 1A***

Construct Peir Web Walls M.P. 1.870 – M.P. 1.890 on I-471 Overpass Structure as per Structural Drawings.

The Contractor shall maintain one (1) lane of traffic in each direction at all times during construction.

The order of paving shall be as shown on the Maintenance of Traffic Phasing Typical Detail Sheet. The Contractor shall ensure the base layer joints are not within 6 inches of the ultimate surface layer joints and shall be less than 1.5 feet from the lane line for the ultimate lane configuration.

### **PHASE 2 – NORTHBOUND KY1892 CONSTRUCTION FROM PAVILLION PKWY TO I-471 SB RAMPS.**

The Contractor shall obtain approval from the Engineer prior to beginning the following work:

In Phase 2, flipping traffic from having one lane both directions on Existing Northbound KY 1892 to Constructed South bound KY 1892 having one lane of traffic in both directions. Northbound KY 1892 will be reduced to one lane from Churchill Dr to I-471 Southbound ramp intersection. North bound KY 1892 traffic will transition at SB I-471 ramp intersection.

In the same manner, the Contractor shall construct the Northbound KY 1892 section between the Pavillion Pkwy M.P. 2.125 intersection and SB I-471 ramp intersection M.P. 1.946.

NB I-471 off ramp to be brought into single lane with Northbound KY 1892 traffic on previously constructed Southbound KY 1892 at SB I-471 ramp intersection.

Southbound left turn lane from Pavillion Parkway shall be reduced from dual left turns to a single left turn lane on to KY 1892.

Closing the I-471 SB off ramp and sign a detour using the I-471 and US 27 intersection to the

south for drivers to enter KY 1892.

- Ramp closure of SB I-471 off ramp will be limited to two weeks, Friday 9pm to two weeks later Monday 6am, to facilitate construction of intersection.

The Contractor shall maintain one (1) lane of traffic in each direction at all times during construction.

The order of paving shall be as shown on the Maintenance of Traffic Phasing Typical Detail Sheet. The Contractor shall ensure the base layer joints are not within 6 inches of the ultimate surface layer joints and shall be less than 1.5 feet from the lane line for the ultimate lane configuration.

### **PHASE 3 – NORTHBOUND KY1892 CONSTRUCTION FROM SB I-471 RAMP INTERSECTION TO CHURCH HILL DRIVE**

The Contractor shall obtain approval from the Engineer prior to beginning the following work:

In Phase 3, both Northbound and Southbound KY 1892 will be previously constructed from Pavillion Pkwy to SB I-471 ramp intersection. North bound traffic will be transitioned at the Churchill Drive intersection to Southbound KY 1892 where traffic will be one lane in both directions. The contractor will construct Northbound KY 1892 from the SB I-471 ramp M.P. 1.946 intersection to Churchill Drive intersection M.P. 1.429 as per the Typical Sections.

- Access to Newport/St.Thomas Urgent care shall be maintained at all times.

Southbound I-471 on and off ramps will be reopened in this phase.

The Contractor shall maintain one (1) lane of traffic in each direction at all times.

The order of paving shall be as shown on the Maintenance of Traffic Phasing Typical Detail Sheet. The Contractor shall ensure the base layer joints are not within 6 inches of the ultimate surface layer joints and shall be less than 1.5 feet from the lane line for the ultimate lane configuration.

### **PHASE 4 – SOUTHBOUND KY1892 CONSTRUCTION FROM SB I-471 RAMP INTERSECTION TO CHURCH HILL DRIVE**

The Contractor shall obtain approval from the Engineer prior to beginning the following work:

In Phase 4, both Northbound and Southbound KY 1892 will be previously constructed from Pavillion Pkwy to SB I-471 ramp intersection. southbound traffic will be transitioned at the SB I-471 intersection to previously Northbound KY 1892 where traffic will be one lane in both



directions. The contractor will construct Southbound KY 1892 from the SB I-471 ramp intersection M.P. 1.946 to Churchill Drive intersection M.P. 1.429 as per the Typical Sections.

- Access to Newport/St.Thomas Urgent care shall be maintained at all times.
- Access to North Churchhill drive may be closed once, if desired, for no more than 3 consecutive days.

The Contractor shall maintain one (1) lane of traffic in each direction at all times during construction.

The order of paving shall be as shown on the Maintenance of Traffic Phasing Typical Detail Sheet. The Contractor shall ensure the base layer joints are not within 6 inches of the ultimate surface layer joints and shall be less than 1.5 feet from the lane line for the ultimate lane configuration.

#### **PHASE 5 – SURFACE, PERMANENT STRIPING, STRIPING & PAVEMENT MARKER INSTALLATION**

Install loops, A67 and E67, for permanent traffic data acquisition stations prior to surfacing.

After all other work is completed, or when approved by the Engineer, place final surface, place permanent striping, install inlaid pavement markers and complete rumble strips. Mobile operations may be utilized. Access to Newport/St.Thomas Urgent care shall be maintained at all times.

#### **LANE CLOSURES**

Limit the lengths of lane closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic”.

#### **RAMP CLOSURES**

Limit ramp closures to only those needed for actual operations in accordance specified herein, or as directed by the Engineer. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic”.

Liquidated damages will be assessed in the amount of \$1,000 per every fifteen (15) minutes for the first hour and then \$2,500 for each additional hour, or fraction thereof, when a lane closure remains in place during a prohibited period specified in the Traffic Control Notes of this Proposal.

#### **TUBULAR MARKERS**

Tubular markers will be utilized on temporary double yellow lines where traffic is shifted to the opposite side of the road.

## **SIGNS**

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

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

## **CONNECTED ARROW PANELS**

Connected Arrow Panels will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the Connect Arrow Panels upon completion of the work.

## **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message signs (PCMS) in advance of and within the Project at locations to be determined by the Engineer. PCMS being bid independently of the Queue Warning System shall be used as directed 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 immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the signs upon completion of the work.

## **TRUCK MOUNTED ATTENUATORS**

Furnish and install MUTCD approved truck mounted attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location as directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits.

All details of the TMA installations shall be approved by the Engineer. TMAs will not be measured for payment but are incidental to "Maintain and Control Traffic". The Department **WILL NOT** take possession of the TMAs upon completion of the work.

## **PAVEMENT MARKINGS**

If lane closures are in place during nighttime hours, remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the

Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but this work will be incidental to "Maintain and Control Traffic," lump sum.

Any striping removal (temporary or permanent) shall be removed by water blasting. Water blasting and removal of temporary tape will be considered incidental to the "Maintain and Control Traffic" bid item.

Temporary striping will be paid for by the appropriate bid item shown in the General Summary. Place temporary striping in accordance with Section 112, except that:

1. Temporary markings will be 6" in width.
2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement or existing surface pavement, an approved removable lane tape will be used.
3. Edge lines will be required for temporary striping at lane closures lasting longer than 3 days.
4. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.

## **PAVEMENT EDGE DROP-OFFS**

No vertical drop-off, two inches or greater, should occur between adjacent lanes where traffic is expected to cross in a lane-change maneuver.

- Less than two inches – no protection required

Note: Warning signs (MUTCD – Uneven Lane, W8-11) should be placed in advanced of and at 1500 foot intervals, or as directed by the Engineer, throughout the drop-off area, Dual posting on both sides of the traveled way shall be required.

- Two to four inches – plastic drums or vertical panels should be used in accordance with the MUTCD and Kentucky Standard Drawings. Place Type III Barricades at the beginning of the lane or shoulder closures, and place additional Type III Barricades spaced at 2,500 feet, or as directed by the Engineer, during the time the lane closure is in place.
- Greater than four inches – Channelizing devices should be used in accordance with the MUTCD, Kentucky Standard Drawings and these notes. A 5 foot buffer between the edge of the travel lane and the drop-off should be provided with channelization devices. A positive separation is needed when the buffer cannot be achieved. In lieu of positive separation, a pavement wedge may be constructed with compacted cuttings from milling, DGA, or asphalt mixture with a 3:1 or flatter slope when workers are not present. When the drop-off is greater than 4 inches and within 10 feet of the traveled lane, positive separation should be considered. Place Type III Barricades at the beginning of the lane or shoulder closures, and place additional Type III Barricades spaced at 2,500 feet,

or as directed by the Engineer, during the time lane closure is in place, except when positive separation is in use. When concrete barriers are used, special reflective devices or steady-burn lights should be used for overnight installations.

## **TRAFFIC COORDINATOR**

Be advised this project is a significant project pursuant to section 112.03.12.

Designate an employee to be Traffic Coordinator. The designated Traffic Coordinator must be certified in accordance with the Department's 2019 Standard Specifications Sec. 112.03.12. The Traffic Coordinator will inspect the project maintenance of traffic once per shift as specification, including weekends, during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a special weekend ramp closure for intersection construction and during traffic lane switches, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control and maintain the signing and devices and ensure business access is maintained. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

## **COORDINATION OF WORK**

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

## **CONTRACTOR'S VEHICLES**

Do not use or allow employees to use median crossovers at any time except when inside lanes are closed for construction. In all other phases of construction, change vehicular direction of travel only at intersections or interchanges.

# MOT PHASING NOTES

PHASING NOTES:

PHASE 1 - CONSTRUCT INTERSECTIONS WITH RADAR PRESENCE DETECTORS AS SUPPLIED AND DIRECTED BY KYTC DISTRICT 6. CONSTRUCT SOUTHBOUND KY 1892 FROM PAVILLION PARKWAY TO SB I-471 RAMP INTERSECTION. TRAFFIC SIGNAL HEADS AT PAVILLION PKWY AND SB I-471 RAMP INTERSECTION WILL BE ADJUSTED AND CONCRETE MEDIAN WILL BE REMOVED AND TEMPORARY PAVEMENT WILL BE CONSTRUCTED TO FACILITATE TRAFFIC CROSSOVER AT THESE LOCATIONS. RIGHT TURN LANE NORTHBOUND KY 1892 ONTO PAVILLION PKWY WILL BE MAINTAINED. SB I-471 ON RAMP WILL BE CLOSED TO FACILITATE INTERSECTION CONSTRUCTION FOR A MAXIMUM OF 1 WEEKEND (FRIDAY 9PM TO THE FOLLOWING MONDAY 6AM) AND A DETOUR TO I-471 AND KY 1120 TO THE NORTH WILL BE SIGNED. KY 1892 SB RIGHT TURN ONTO I-471 SOUTHBOUND WILL BE OPENED FOLLOWING INTERSECTION CONSTRUCTION.

LEFT TURN LANE NORTHBOUND KY 1892 TO SOUTHBOUND I-471 WILL BE OPEN AFTER INTERSECTION CONSTRUCTION AND WILL BE OFFSET LEFT TO AVOID FACING ONCOMING TRAFFIC AT CROSSOVER.

PHASE 1A - CONSTRUCT I-471 PIER WEB WALLS.

PHASE 2 - CONSTRUCT NORTH BOUND KY 1892 FROM PAVILLION PARKWAY TO SB I-471 RAMP INTERSECTION. TRAFFIC WILL BE TRANSITIONED AT PAVILLION PKWY AND SB I-471 RAMP INTERSECTION. SB I-471 OFF RAMP WILL BE CLOSED FOR A MAXIMUM OF TWO WEEKS (FRIDAY 9PM TO TWO WEEKS LATER MONDAY 6AM) AND A DETOUR TO I-471 AND US 27 TO THE SOUTH WILL BE SIGNED. TO ALLOW EASIER MERGING OF NORTHBOUND KY 1892 AND NORTHBOUND I-471 OFF RAMP, ONE LANE OF NORTHBOUND KY 1892 WILL BE CLOSED BEGINNING AT CHURCHILL DRIVE INTERSECTION. ONE LANE WILL BE CLOSED NORTHBOUND KY 1892 FROM CHURCHILL DRIVE TO I-471 SOUTHBOUND RAMP INTERSECTION TO FAICIALTE LANE MERGES FROM NORTHBOUND I-471 OFF RAMP AND MEDIAN CROSSOVER.

PHASE 3 - CONSTRUCT NORTHBOUND KY 1892. TRAFFIC WILL BE TRANSITIONED AT SB I-471 RAMP INTERSECTION AND BEFORE THE PROJECT PRECEDING THE CHURCHILL DRIVE INTERSECTION. TRAFFIC SIGNAL HEADS WILL BE ADJUSTED TO FACILITATE TRAFFIC CROSSOVER. SOUTHBOUND KY 1892 WILL HAVE ONE LANE CLOSED FROM PAVILLION PARKWAY INTERSECTION TO I-471 SOUTHBOUND RAMP INTERSECTION. RAMP AND LANE FROM SOUTHBOUND KY 1892 TO SOUTHBOUND I-471 ON RAMP WILL BE MAINTAINED DURING THIS PHASE.

PHASE 4 - CONSTRUCT SOUTHBOUND KY 1892. TRAFFIC WILL BE TRANSITIONED AT SB I-471 RAMP INTERSECTION AND BEFORE THE PROJECT PRECEDING THE CHURCHILL DRIVE INTERSECTION. SOUTHBOUND KY 1892 WILL HAVE ONE LANE CLOSED FROM PAVILLION PARKWAY INTERSECTION TO I-471 SOUTHBOUND RAMP INTERSECTION. RAMP AND LANE FROM SOUTHBOUND KY 1892 TO SOUTHBOUND I-471 ON RAMP WILL BE MAINTAINED DURING THIS PHASE.

AT CHURCHILL DRIVE INTERSECTION PART WIDTH CONSTRUCTION WILL BE UTILIZED TO MAINTAIN TRAFFIC. CHURCHILL DRIVE ON THE NORTH/EAST SIDE MAY BE CLOSED FOR A MAXIMUM OF 3 CONSECUTIVE DAYS. CHURCHILL DRIVE ON THE SOUTH/WEST SIDE IS NOT PERMITTED TO BE CLOSED DUE TO BEING THE ONLY ACCESS TO THE URGENT CARE CENTER.

PHASE 5 - FINAL SURFACING WILL BE DONE AS PART WIDTH CONSTRUCTION THROUGHOUT THE LENGTH OF THE PROJECT TO ACHEIVE A CONSISTANT SURFACE. FINAL STRIPING WILL BE DONE IN THIS PHASE.

\*\*THE CONTRACTOR MAY NEED TO ADJUST RADAR DETECTION HEADS AT THE INTERSECTIONS OF THE PROJECT DURING MOT PHASES. ANY ADJUSTMENTS REQUIRED BY THE ENGINEER WILL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC.\*\*



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY  
KENTUCKY  
TRANSPORTATION

USER: cwallier

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

HORIZONTAL SCALE: N.T.S.

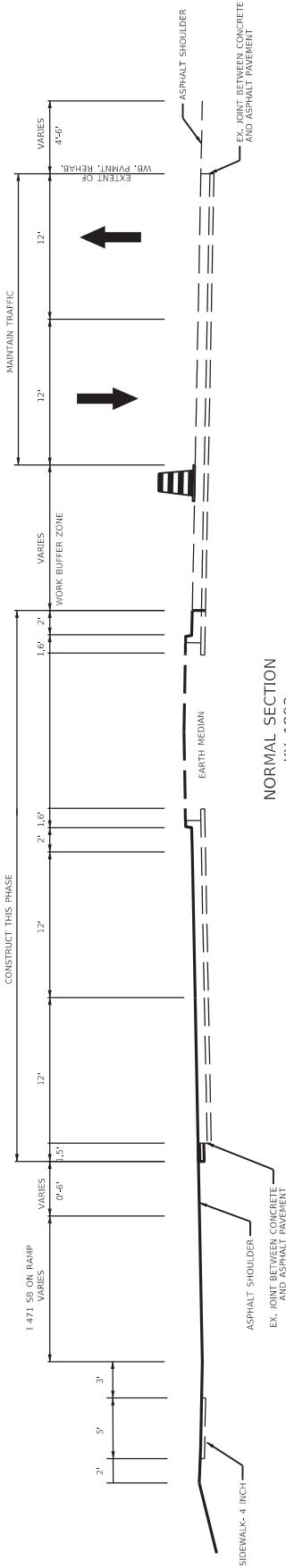
ITEM NO.  
6-20014.00

SHEET NO.

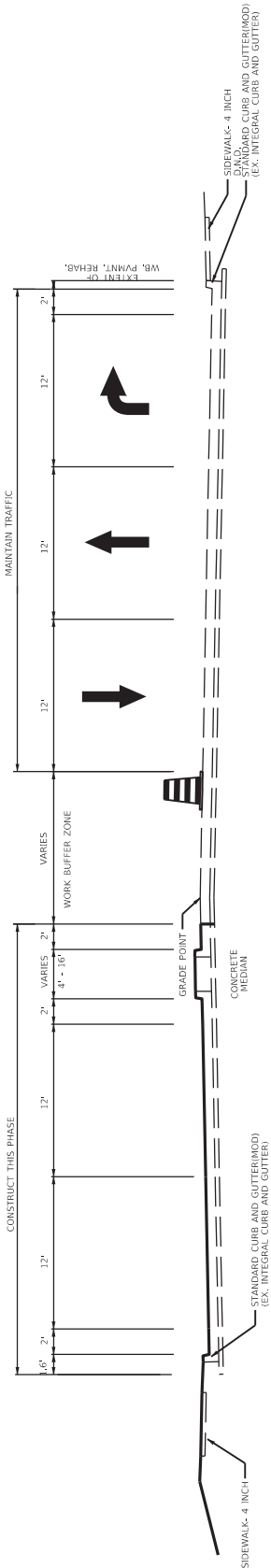
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\*\*THE CONTRACTOR MAY NEED TO ADJUST RADAR DETECTION HEADS AT THE INTERSECTIONS OF THE PROJECT DUE TO VARIOUS TYPES OF PAVEMENT. ANY SUCH ADJUSTMENTS REQUIRED BY THE ENGINEER WILL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC.\*\*

PHASE 1



NORMAL SECTION  
KY 1892  
STA. 1.946 TO STA. 2.063



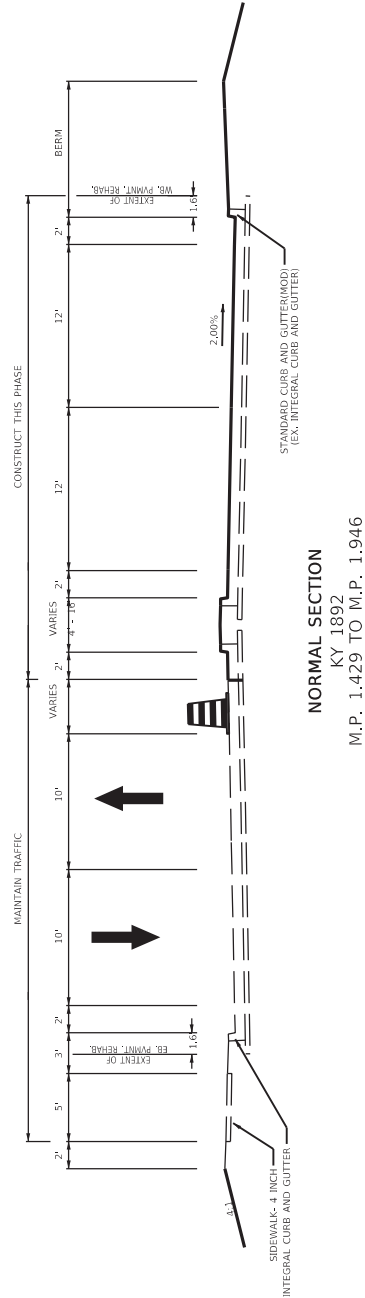
NORMAL SECTION  
KY 1892  
STA. 2.063 TO STA. 2.125

1 ALL AREAS WITH TEMPORARY BI-DIRECTIONAL TRAFFIC FOR MORE THAN 3 DAYS WILL BE STRIPED WITH 4" DOUBLE YELLOW CENTERLINE WITH TEMPORARY PAVEMENT MAKERS

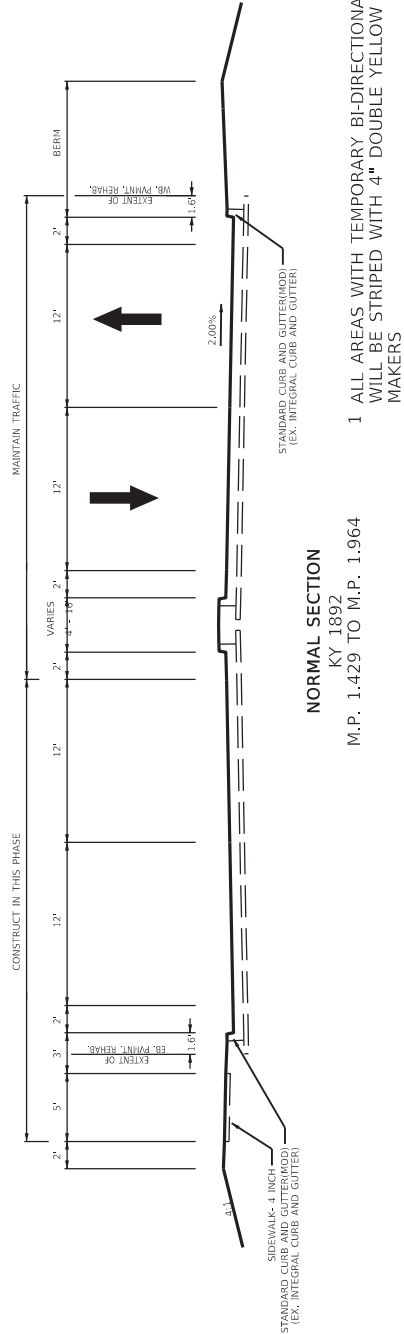
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1 ALL AREAS WITH TEMPORARY BI-DIRECTIONAL TRAFFIC FOR MORE THAN 3 DAYS  
WILL BE STRIPED WITH 4" DOUBLE YELLOW CENTERLINE WITH TEMPORARY PAVEMENT  
MAKERS

PHASE 3

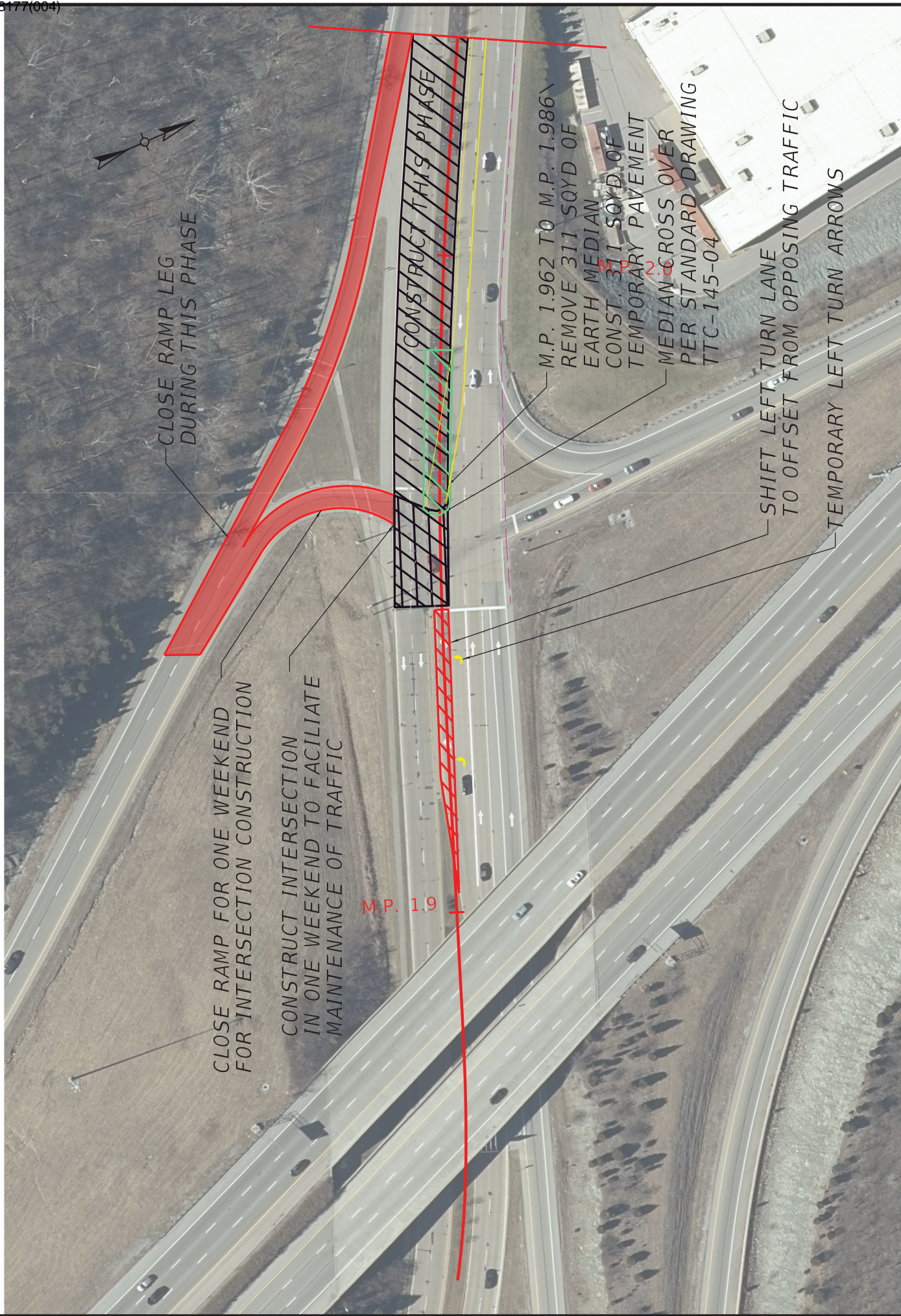


PHASE 4



- 1 ALL AREAS WITH TEMPORARY BI-DIRECTIONAL TRAFFIC FOR MORE THAN 3 DAYS WILL BE STRIPED WITH 4" DOUBLE YELLOW CENTERLINE WITH TEMPORARY PAVEMENT MAKERS





**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

**MOT PHASE 1 PAGE 1**

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COUNTY OF  
CAMPBELL

SHEET NO.

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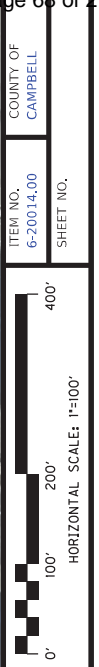
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USER: mawson

OpenRoads Designer v10.12.02.4

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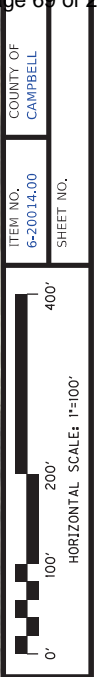




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6-20014.00	CAMPBELL
SHEET NO.	

MOT PHASE 1 PAGE 2





ITEM NO.	COUNTY OF
6-20014.00	CAMPBELL
SHEET NO.	

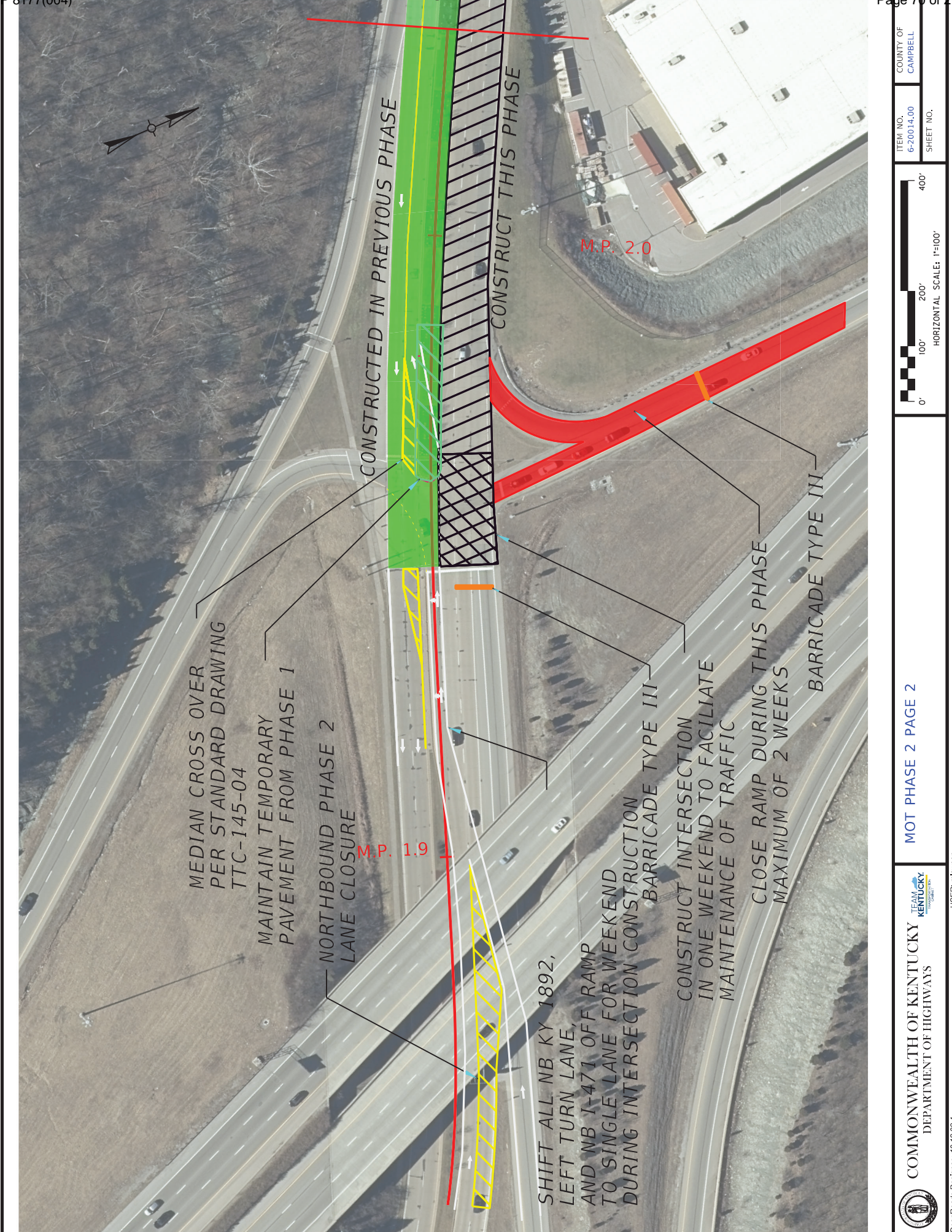
MOT PHASE 2 PAGE 1

**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

**TEAM KENTUCKY**  
TRANSPORTATION

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COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

MOT PHASE 2 PAGE 2

USER: mawson

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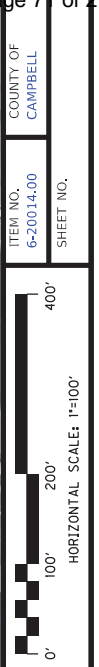
ITEM NO.  
6-20014.00  
SHEET NO.

COUNTY OF  
CAMPBELL

0' 100' 200' 400'

HORIZONTAL SCALE: 1"=100'





ITEM NO.	COUNTY OF
6-20014.00	CAMPBELL
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MOT PHASE 2 PAGE 3



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



TEAM KENTUCKY

USER: mlawson





ITEM NO.	COUNTY OF
6-20014.00	CAMPBELL
SHEET NO.	

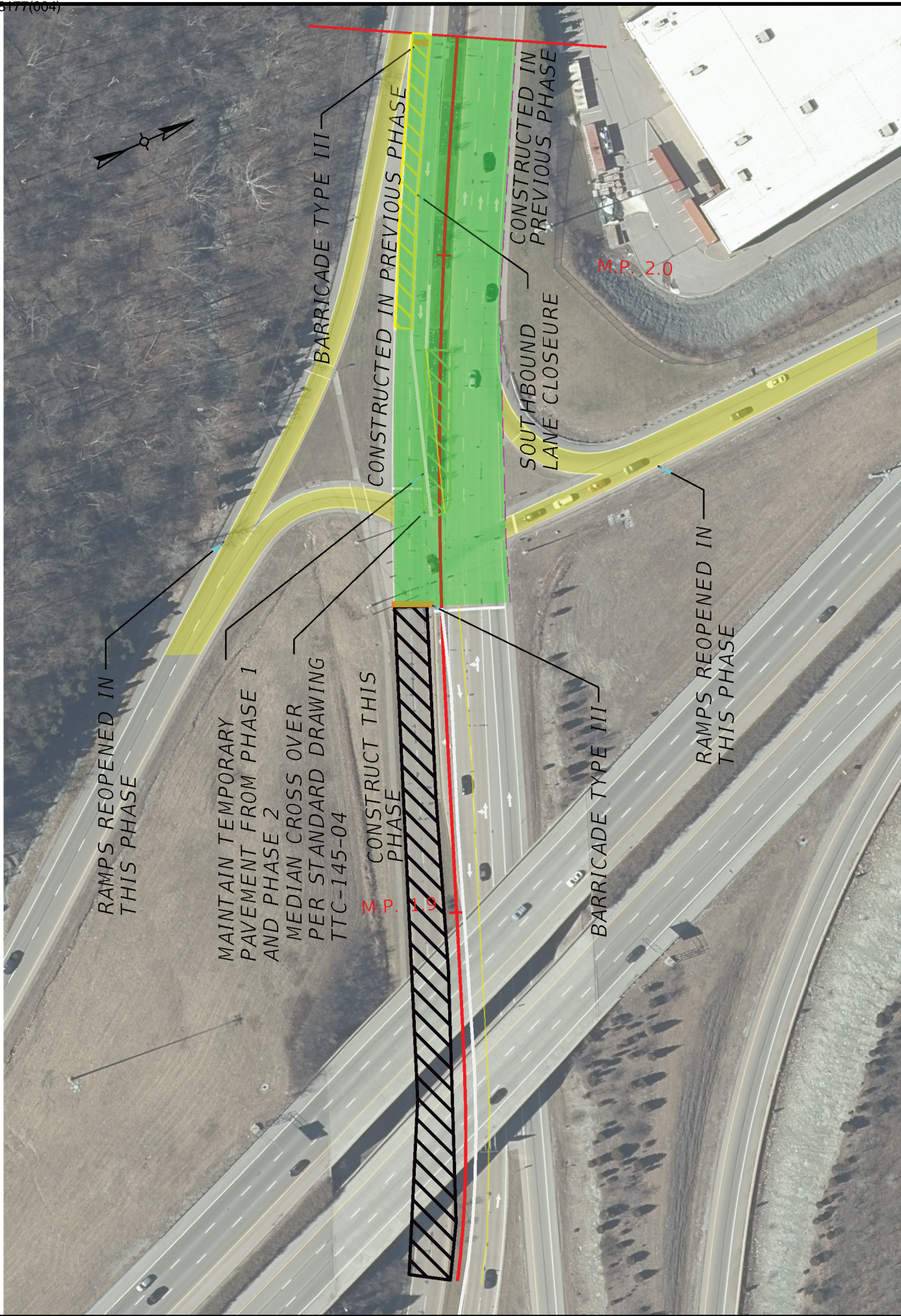
MOT PHASE 3 PAGE 1

**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY  
TRANSPORTATION

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**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

**MOT PHASE 3 PAGE 2**

USER: mlawson

OpenRoads Designer v10.12.02.4

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COUNTY OF  
CAMPBELL

ITEM NO.  
6-20014.00

SHEET NO.

0' 100' 200' 400'

HORIZONTAL SCALE: 1"=100'





COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

MOT PHASE 4 PAGE 1

ITEM NO.  
6-20014.00

COUNTY OF  
CAMPBELL

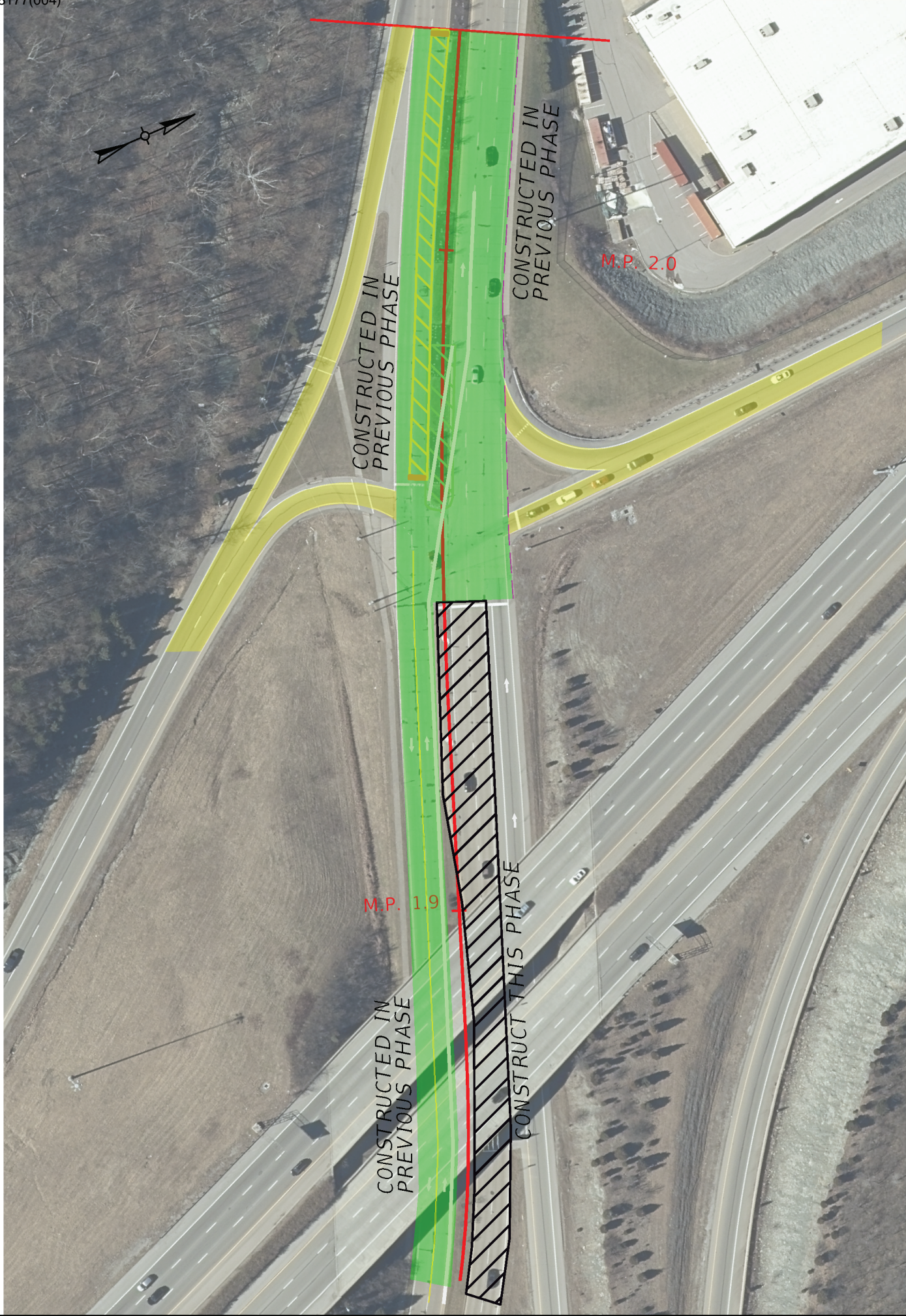
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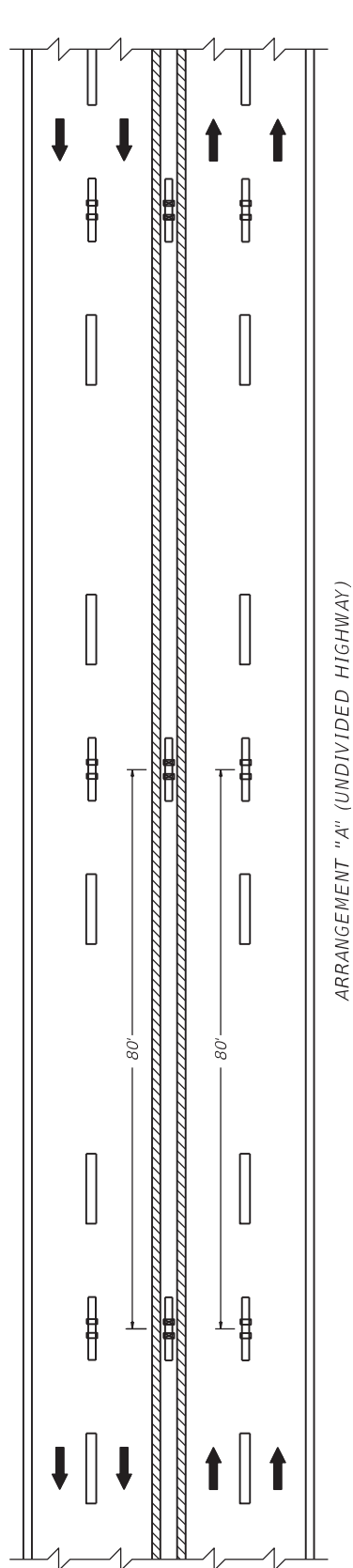
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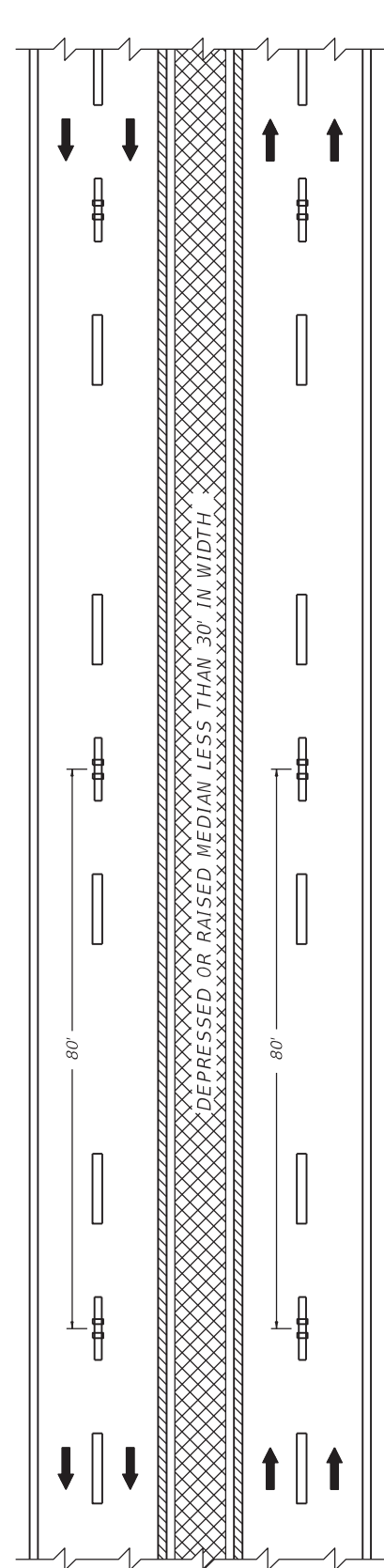


ITEM NO.	COUNTY OF
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SHEET NO.	





ARRANGEMENT "A" (UNDIVIDED HIGHWAY)



ARRANGEMENT "B" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN LESS THAN 30' IN WIDTH)

- ~ NOTES ~
1. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHOULD BE PLACED BETWEEN THE TWO LINES.
  2. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
  4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.
- BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY
- UNIT TO BID  
EACH  
EACH

LEGEND

BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

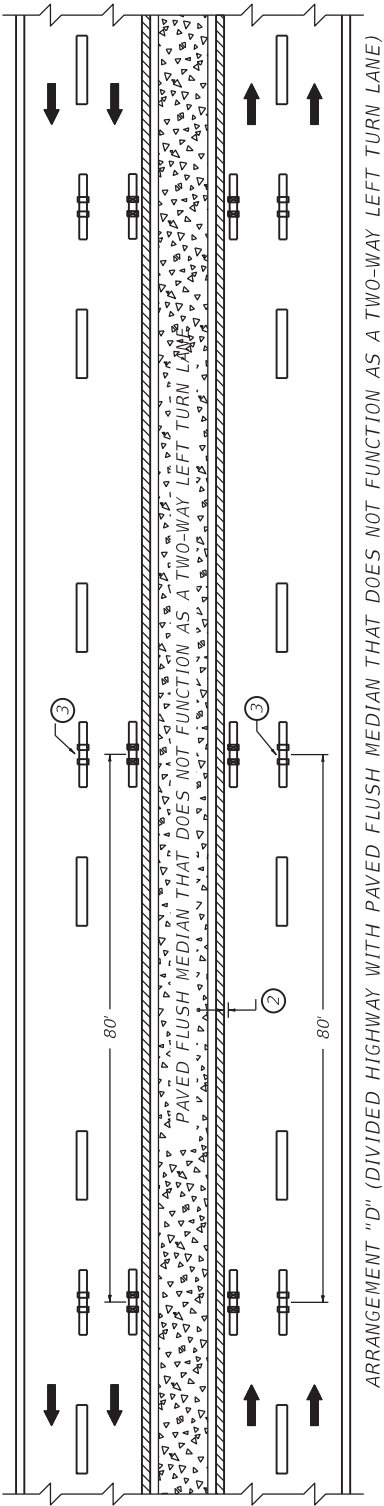
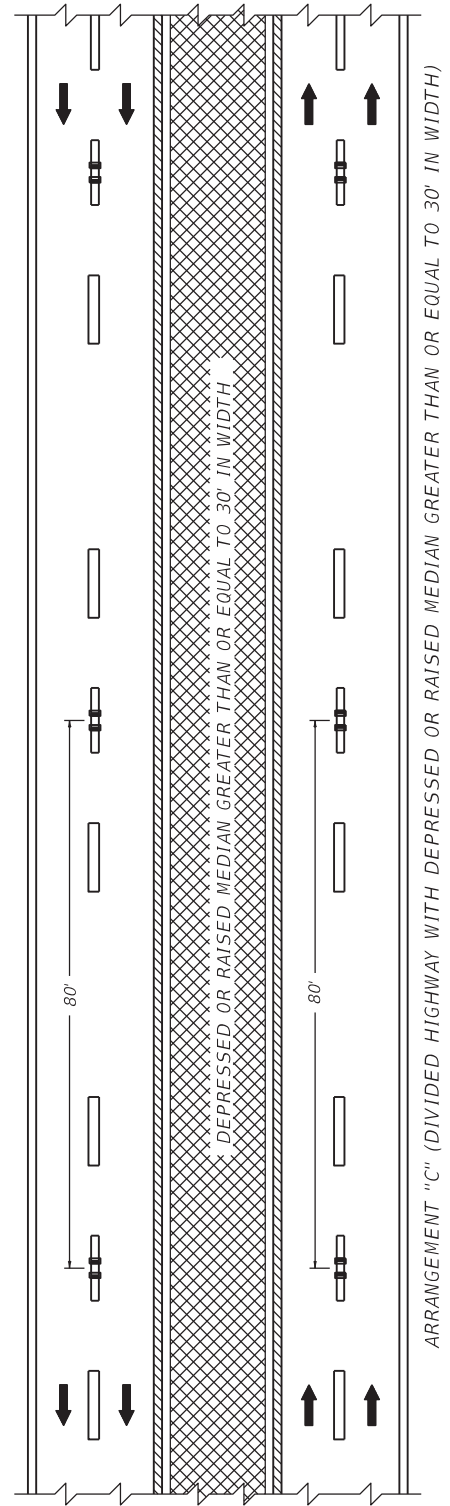
MARKINGS (YELLOW)

MARKINGS (WHITE)

DEPRESSED OR RAISED MEDIAN

DRAWING NOT TO SCALE

SUBMITTED *[Signature]* 06-09-21  
DIVISION DIRECTOR DATE

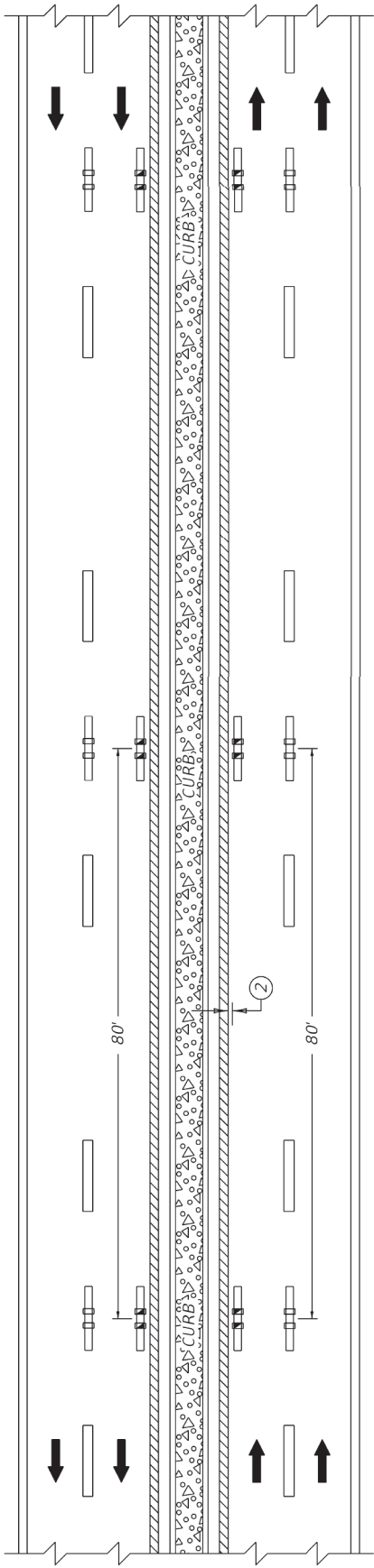


LEGEND	
	BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
	BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)
	MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
	MARKINGS (YELLOW)
	MARKINGS (WHITE)
	FLUSH MEDIAN
	DEPRESSED OR RAISED MEDIAN

- ~ NOTES ~
- MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  - MARKERS INSTALLED ALONG EDGE LINES SHOULD BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
  - IF WIDTH OF PAVED FLUSH MEDIAN IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.
  - MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFF-SET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
  - MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.
- BID ITEMS
- |  |             |
|--|-------------|
| 06610 - INLAID PAVEMENT MARKER - MW    | UNIT TO BID |
| 06612 - INLAID PAVEMENT MARKER - BY    | EACH        |
| 06613 - INLAID PAVEMENT MARKER - B W/R | EACH        |

DRAWING NOT TO SCALE

SUBMITTED DIVISION DIRECTOR 06-09-21 DATE



ARRANGEMENT "E" (DIVIDED HIGHWAY WITH CURB WITHIN 8' OF DRIVING LANE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
- ② MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.  
UNIT TO BID  
EACH  
EACH  
BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06611 - INLAID PAVEMENT MARKER - MY

LEGEND

MONO-DIRECTIONAL PAVEMENT MARKER (YELLOW)

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

MARKINGS (YELLOW)

MARKINGS (WHITE)

DRAWING NOT TO SCALE

SUBMITTED

06-09-21  
DATE

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE:  
SEPIA 008 - INLAID PAVEMENT MARKER ARRANGEMENTS  
MULTI-LANE ROADWAYS

HORIZONTAL SCALE: N.T.S.

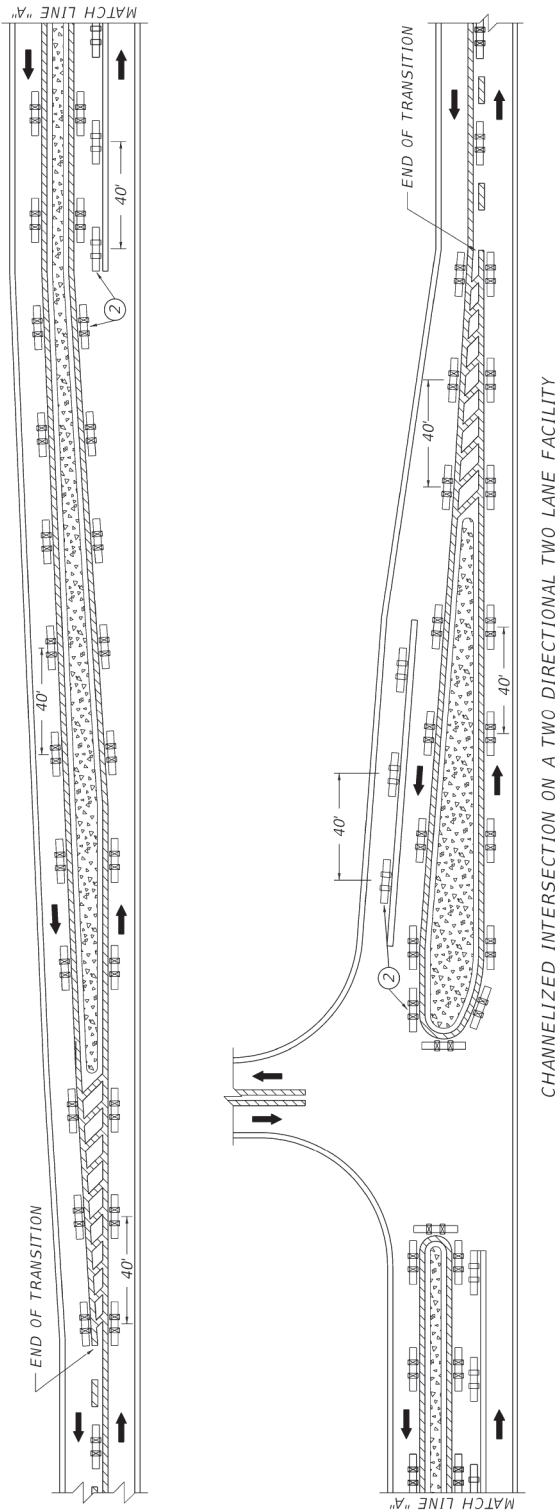
ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL

SHEET NO.  
R--

OpenRoads Designer v10.16.2.267  
FILE NAME: J:\12307-WASHINGTON COUNTY PAVEMENT REHAB\50 - PLAN SHEETS\10 - TYPICAL SECTIONS\TYPICALS.DGN

USER: cwallier



CHANNELIZED INTERSECTION ON A TWO DIRECTIONAL TWO LANE FACILITY

LEGEND

BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

CURBED OR FLUSH MEDIAN

MARKINGS (YELLOW)

MARKINGS (WHITE)

- ~ NOTES ~
1. MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  2. MARKERS INSTALLED ALONG EDGE LINES OR CHANNELIZING LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
  3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
- BID ITEMS

06610 - INLAID PAVEMENT MARKER - MW

06612 - INLAID PAVEMENT MARKER - BY

UNIT TO BID

EACH

EACH

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWG.  
TPM-205

SUBMITTED 06-09-21  
DIVISION DIRECTOR DATE

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY  
CONSULTANTS

USER: cwallier

DRAWING TITLE:  
SEPIA 016 - INLAID PAVEMENT MARKER ARRANGEMENT  
CHANNELIZED INTERSECTION

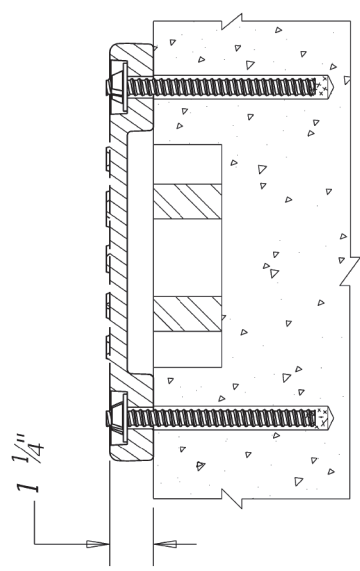
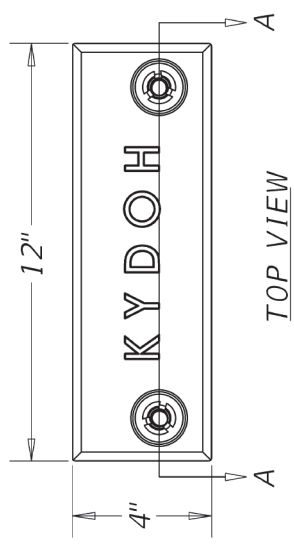
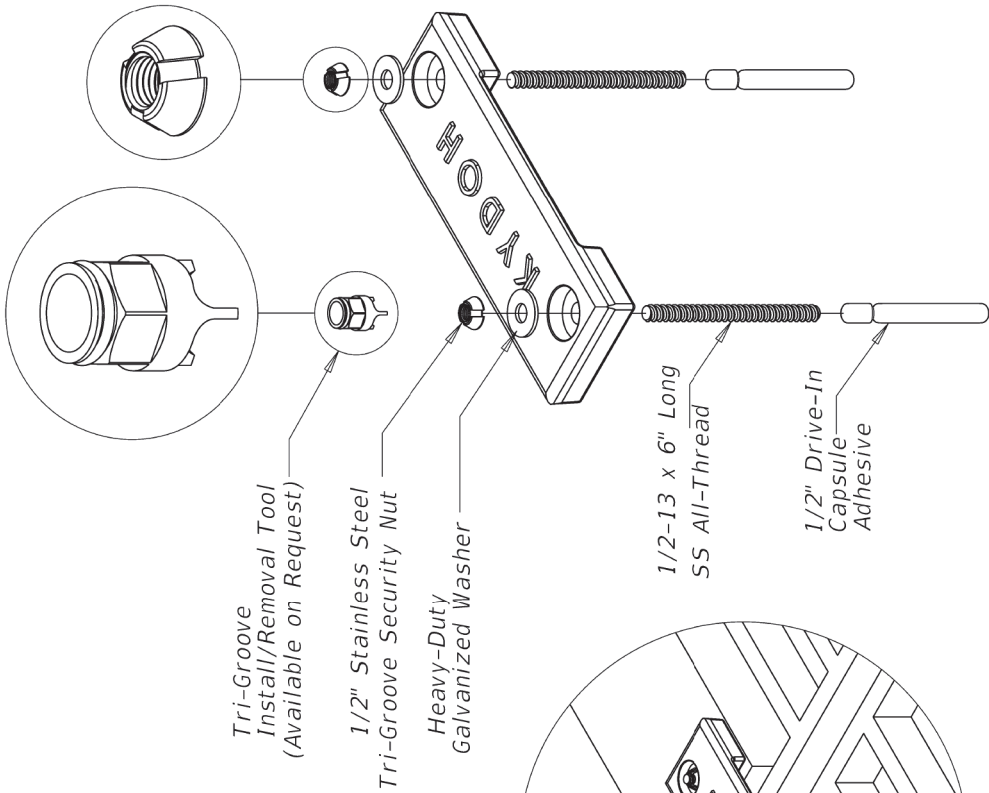
HORIZONTAL SCALE: N.T.S.

ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL

SHEET NO.  
R--

FILE NAME: J:\12307-WASHINGTON COUNTY PAVEMENT REHAB\50 - PLAN SHEETS\10 - TYPICAL SECTIONS\TYPICALS.DGN



MOUNTED

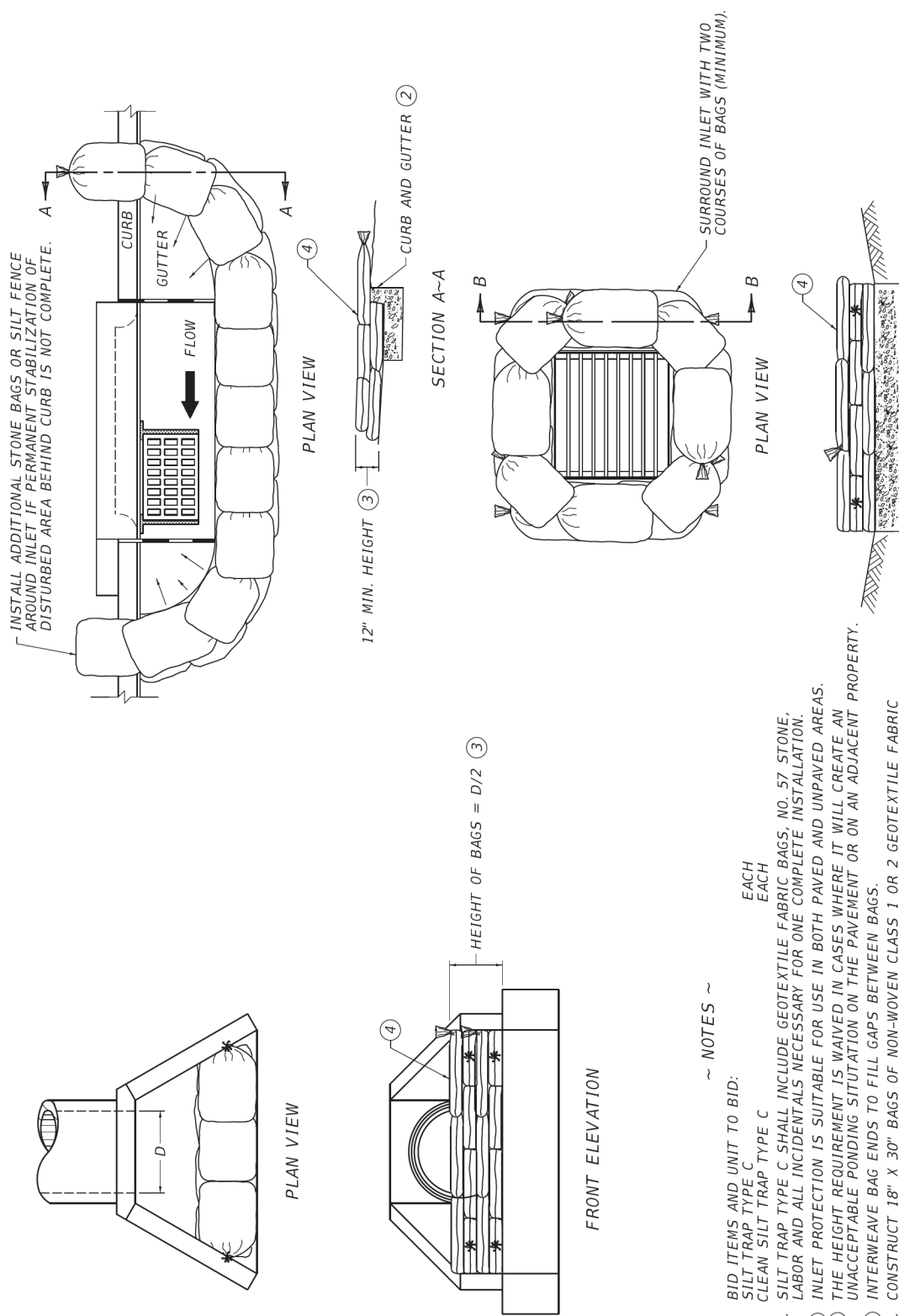
BID ITEMS AND UNITS TO BID

EACH

24585EC SECURITY PLATE ASSEMBLY

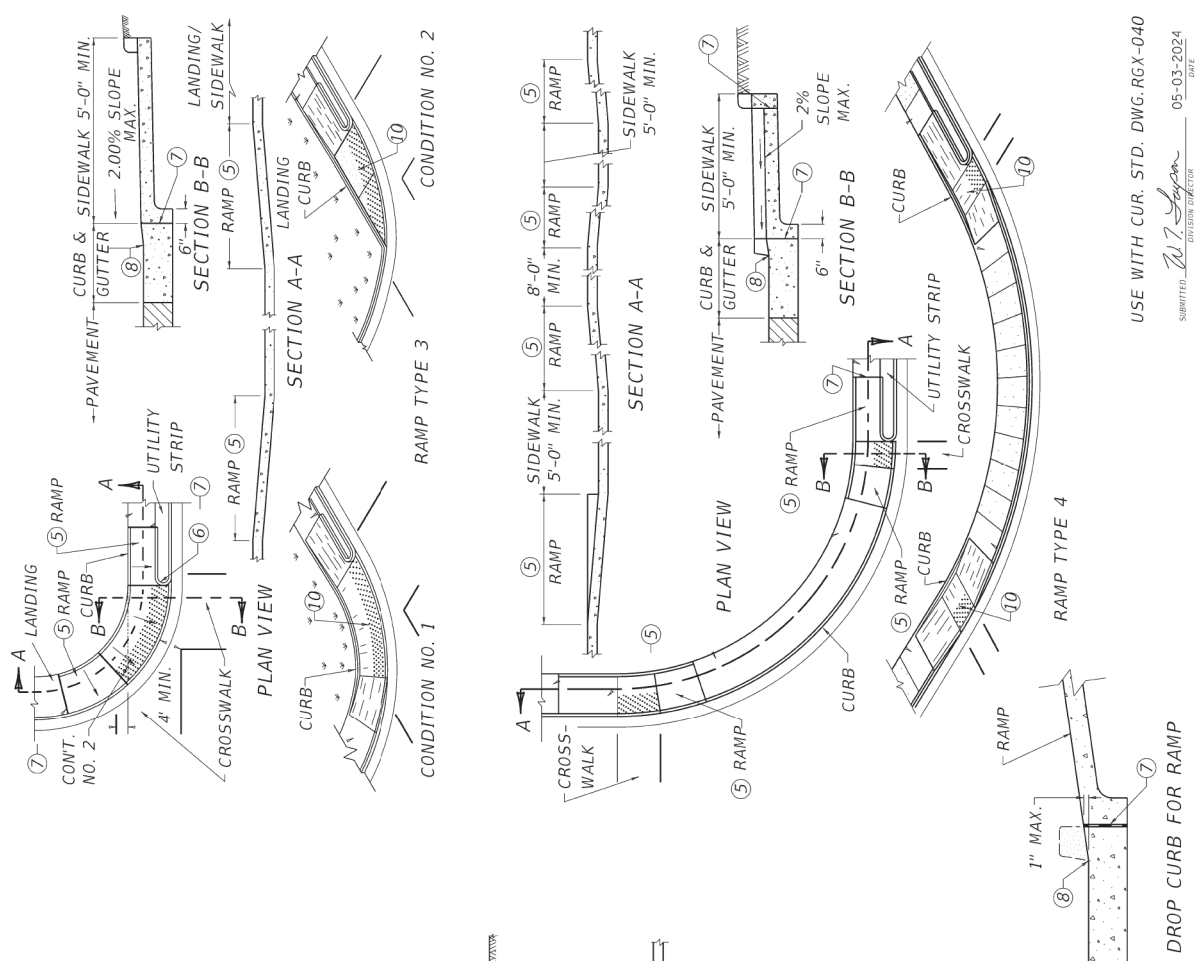
SUBMITTED W. J. S. / 02-26-2021  
DIVISION DIRECTOR DATE





- BID ITEMS AND UNIT TO BID:  
SILT TRAP TYPE C  
EACH
1. SILT TRAP TYPE C SHALL INCLUDE GEOTEXTILE FABRIC BAGS, NO. 57 STONE, LABOR AND ALL INCIDENTALS NECESSARY FOR ONE COMPLETE INSTALLATION.
  2. INLET PROTECTION IS SUITABLE FOR USE IN BOTH PAVED AND UNPAVED AREAS.
  3. THE HEIGHT REQUIREMENT IS WAIVED IN CASES WHERE IT WILL CREATE AN UNACCEPTABLE PONDING SITUATION ON THE PAVEMENT OR ON AN ADJACENT PROPERTY.
  4. INTERWEAVE BAG ENDS TO FILL GAPS BETWEEN BAGS.
  5. CONSTRUCT 18" X 30" BAGS OF NON-WOVEN CLASS 1 OR 2 GEOTEXTILE FABRIC CONFORMING TO SECTION 843 OF THE STANDARD SPECIFICATIONS. DOUBLE STITCH BAG SEAMS WITH 1 LB. POLYESTER THREAD. ATTACH ONE (1) TIE STRING TO EACH BAG. BAG OPENING SHALL BE ON 18" SIDE.
  6. FILL BAGS WITH NO. 57 STONE BETWEEN 1/2 TO 3/4 FULL (50 LB TO 60 LB).
  7. SILT TRAP TYPE C SHALL NOT BE USED IN BLUE LINE STREAMS.

SUBMITTED *W. J. Lapan* 05-08-2023  
DIVISION DIRECTOR DATE



USE WITH CUR. STD. DWG. RGX-040  
SUBMITTED *W. J. Seaman* DIVISION DIRECTOR 05-03-2024 DATE

- ~ NOTES ~
1. THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.
  2. RAMP GRADE SHALL NOT EXCEED 12:1. CROSS SLOPE SHALL NOT EXCEED 2.00%. ON RETROFIT CURB RAMP, GRADES OF 12.5% FOR 2'-0" OR 10% FOR 5'-0" ARE PERMISSIBLE.
  3. CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4' OR GREATER. FOR UTILITY STRIPS LESS THAN 4', THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.
  4. 1/2" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.
  5. NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT. RAMP SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.
  6. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 5% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.
  7. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 2.00% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.

BID ITEMS AND UNIT TO BID  
SIDEWALK-4 IN CONCRETE  
DETECTABLE WARNINGS  
SQYD  
SQFT



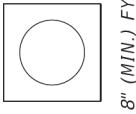
R2-10



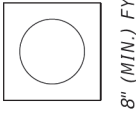
R2-11



S4-4P



8" (MIN.) FY



8" (MIN.) FY

APPLICATION

IN ACCORDANCE WITH KRS 189.2327, IN ORDER FOR HIGHER FINES TO BE ESTABLISHED IN A HIGHWAY WORK ZONE, SIGNS INFORMING DRIVERS OF THE WORK ZONE AND THAT FINES ARE HIGHER MUST BE DISPLAYED AND AT LEAST ONE (1) BONA FIDE WORKER MUST BE PRESENT.

THE ENGINEER MAY DETERMINE WHETHER TO ESTABLISH A HIGHER FINES ZONE WITHIN A HIGHWAY WORK ZONE BASED ON ENGINEERING JUDGMENT.

~ NOTES ~

1. THE BEGIN AND END HIGHER FINES ZONE SIGNS SHALL BE 36" X 48" FOR FREEWAYS AND EXPRESSWAYS AND 24" X 30" FOR OTHER ROADWAYS. "WHEN FLASHING" PLAQUES SHALL BE 36" X 18" FOR FREEWAYS EXPRESSWAYS AND 24" X 12" FOR OTHER ROADWAYS.
2. SIGNS SHALL HAVE A WHITE BACKGROUND WITH A BLACK LEGEND AND SHALL BE MOUNTED AT ELEVATIONS AND OFFSETS PRESCRIBED IN THE MUTCD.
3. USE ENGINEERING JUDGMENT WHEN DETERMINING THE LIMITS OF HIGHER FINES ZONES. FOR SHORT LENGTH PROJECTS WHERE WORK WILL OCCUR THROUGHOUT THE PROJECT LIMITS, LOCATE "BEGIN HIGHER FINES ZONE" SIGN ASSEMBLY BETWEEN THE LAST ADVANCE WARNING SIGN AND THE BEGINNING OF THE ACTIVITY AREA AND LOCATE THE "END HIGHER FINES ZONE" SIGN 250' IN ADVANCE OF THE "END ROAD WORK" SIGN. FOR LONG LENGTH PROJECTS WHERE WORK WILL NOT OCCUR THROUGHOUT THE PROJECT LIMITS, CONSIDER PLACING SIGNS ONLY IN AREAS WHERE ACTIVITY IS OCCURRING.
4. SIGNS SHALL BE DUAL-MOUNTED ON MULTI-LANE HIGHWAYS WHERE MEDIUM IS WIDE ENOUGH TO MAINTAIN LATERAL CLEARANCES AS PRESCRIBED IN THE MUTCD. WHERE CONSTRUCTION ONLY AFFECTS ONE DIRECTION OF A DIVIDED HIGHWAY WITH A BARRIER OR WIDE MEDIAN, SIGNS SHALL NOT BE ERECTED FOR OPPOSING DIRECTION.
5. ADDITIONAL SIGNS MAY BE REQUIRED FOR LONG HIGHWAY WORK ZONES OR WHERE RAMPS OR INTERSECTING STREETS JUNCTION WITHIN THE PROJECT LIMITS.
6. "BEGIN HIGHER FINES ZONE" SIGN ASSEMBLIES MAY INCLUDE A "WHEN FLASHING" PLAQUE AND FLASHING BEACONS. BEACONS SHALL BE YELLOW, AT LEAST 8" IN DIAMETER, AND MOUNTED HORIZONTALLY NEAR THE TOP OF THE SIGN ASSEMBLY. BEACONS SHALL FLASH ALTERNATELY AND CONFORM TO PART 4S OF THE MUTCD.
7. HIGHER FINES ZONES SIGNS SHALL BE COVERED IF A BONA FIDE WORKER WILL NOT BE PRESENT FOR A SIGNIFICANT PERIOD OF TIME. IN SUCH CASES, ASSEMBLIES WITH FLASHING BEACONS SHALL BE TURNED OFF.

BID ITEM UNIT TO BID  
TEMPORARY SIGNS SQFT

SUBMITTED  
*[Signature]*  
DIVISION DIRECTOR

04-10-2025  
DATE

APPROVED

STATE HIGHWAY ENGINEER

DATE

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY  
TRANSPORTATION

USER: cwallier

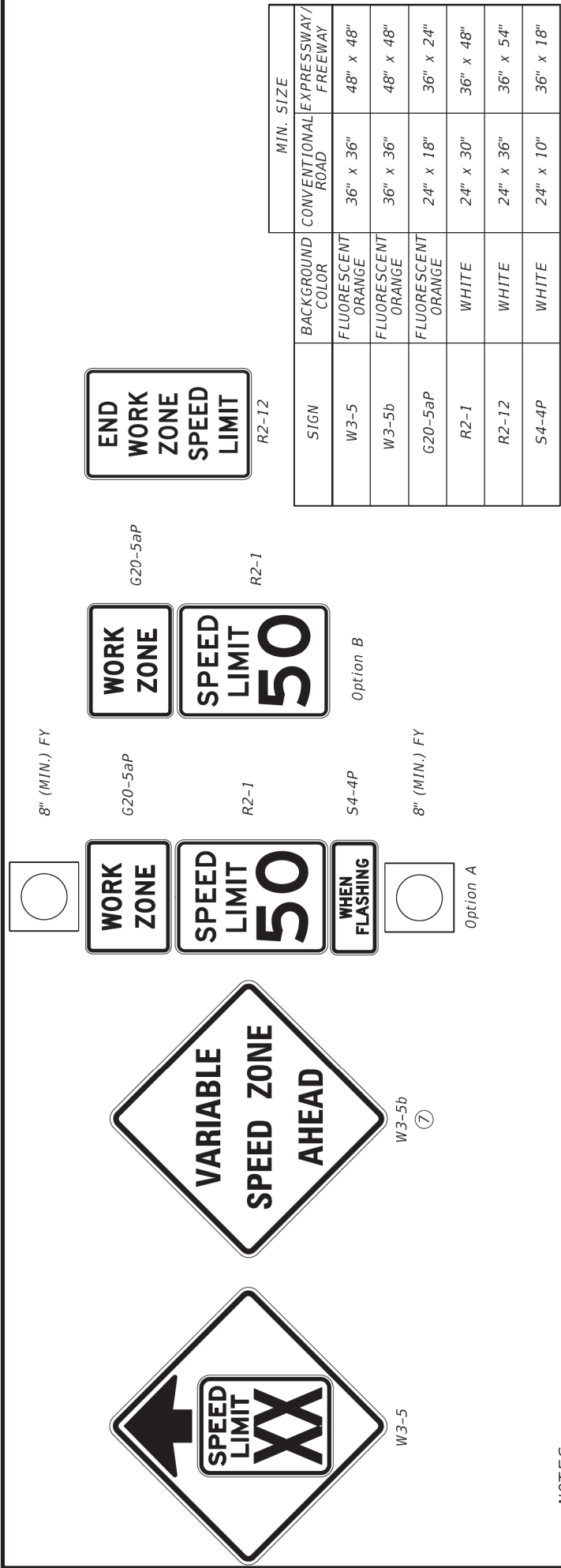
DRAWING TITLE:  
SEPIA S-TTD-120-03 - HIGHER FINES ZONE SIGNS

ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL

SHEET NO.  
R--

HORIZONTAL SCALE: N.T.S.



~ NOTES ~

- REDUCED SPEED LIMITS SHOULD BE USED ONLY IN SPECIFIC PORTIONS OF THE WORK ZONE WHERE CONDITIONS OR RESTRICTIVE FEATURES ARE PRESENT. LOWERING THE REGULATORY SPEED LIMIT SHOULD BE AVOIDED AS MUCH AS PRACTICAL BECAUSE DRIVERS REDUCE THEIR SPEEDS ONLY IF THEY CLEARLY PERCEIVE A NEED TO DO SO.
- SPEED LIMIT MAY BE REDUCED BY 15 MPH WITHOUT A TRAFFIC ENGINEERING INVESTIGATION ON HIGHWAYS WHERE THE NORMAL POSTED SPEED LIMIT IS 70 MPH. THE SPEED LIMIT MAY BE REDUCED BY 10 MPH WITHOUT A TRAFFIC ENGINEERING INVESTIGATION ON OTHER HIGHWAYS. LARGER SPEED REDUCTIONS REQUIRE A TRAFFIC ENGINEERING INVESTIGATION AND APPROVAL OF THE SECRETARY OF TRANSPORTATION.
- A REDUCED SPEED LIMIT AHEAD (W3-5) SIGN SHALL BE INSTALLED IN ADVANCE OF A WORK ZONE WITH A TEMPORARY WORK ZONE SPEED LIMIT. SIGNS SHALL BE DUAL-MOUNTED ON MULTI-LANE HIGHWAYS WHERE MEDIAN IS WIDE ENOUGH TO MAINTAIN LATERAL CLEARANCES AS PRESCRIBED IN THE MUTCD. THE SPEED LIMIT DISPLAYED ON THE SIGN SHALL MATCH THE DESIRED SPEED LIMIT THROUGH THE WORK ZONE.
- IF THE END OF THE REDUCED SPEED ZONE DOES NOT COINCIDE WITH THE "END ROAD WORK" SIGN, AN "END WORK ZONE SPEED LIMIT" (R2-12) SIGN SHOULD BE INSTALLED AT THE END OF THE REDUCED SPEED ZONE.
- SPEED LIMIT ASSEMBLIES MAY INCLUDE A "FLASHING" PLAQUE AND FLASHING BEACONS. BEACONS SHALL BE YELLOW, AT LEAST EIGHT (8) INCHES IN DIAMETER, AND MOUNTED VERTICALLY. BEACONS SHALL FLASH ALTERNATELY AND CONFORM TO PART 4S OF THE MUTCD.
- IF A SPEED LIMIT IS TO APPLY TO THE ENTIRE LENGTH OF THE WORK ZONE, THE REDUCED SPEED LIMIT AHEAD (W3-5) SIGN SHOULD BE INSTALLED BETWEEN THE FIRST AND SECOND ADVANCE WARNING SIGN, AND THE SPEED LIMIT (R2-1) SIGN OR FLASHER ASSEMBLY SHOULD BE INSTALLED BETWEEN THE SECOND AND THIRD ADVANCE WARNING SIGN. IF A SPEED LIMIT ONLY APPLIES TO A SHORT SECTION OF A LONGER WORK ZONE, THE W3-5 SIGN SHOULD BE MOUNTED APPROXIMATELY 500 FEET IN ADVANCE OF THE SPEED LIMIT SIGN ASSEMBLY AND NO CLOSER THAN 250 FEET TO ANY OTHER SIGNS.
- A "VARIABLE SPEED ZONE AHEAD" (W3-5b) SIGN SHOULD ONLY BE USED INSTEAD OF A REDUCED SPEED LIMIT AHEAD (W3-5) SIGN IF THE ENGINEER HAS APPROVED THE USE OF VARIABLE WORK ZONE SPEED LIMITS, I.E. WHEN THE WORK ZONE SPEED LIMIT IS VARIED BY TIME OF DAY OR AS CONDITIONS CHANGE. VARIABLE WORK ZONE SPEED LIMITS WILL BE SIGNED WITH SPEED LIMIT ASSEMBLIES UTILIZING FLASHING BEACONS OR SPEED LIMIT SIGNS WITH A CHANGEABLE MESSAGE DISPLAY.

BID ITEM UNIT TO BID  
TEMPORARY SIGNS SOFT

SUBMITTED *[Signature]* 04-10-2025  
DIVISION DIRECTOR DATE  
APPROVED \_\_\_\_\_  
STATE HIGHWAY ENGINEER DATE

**COMMONWEALTH OF KENTUCKY**  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE:  
SEPIA S-TTD-130 - SPEED ZONE SIGNING FOR WORK ZONES

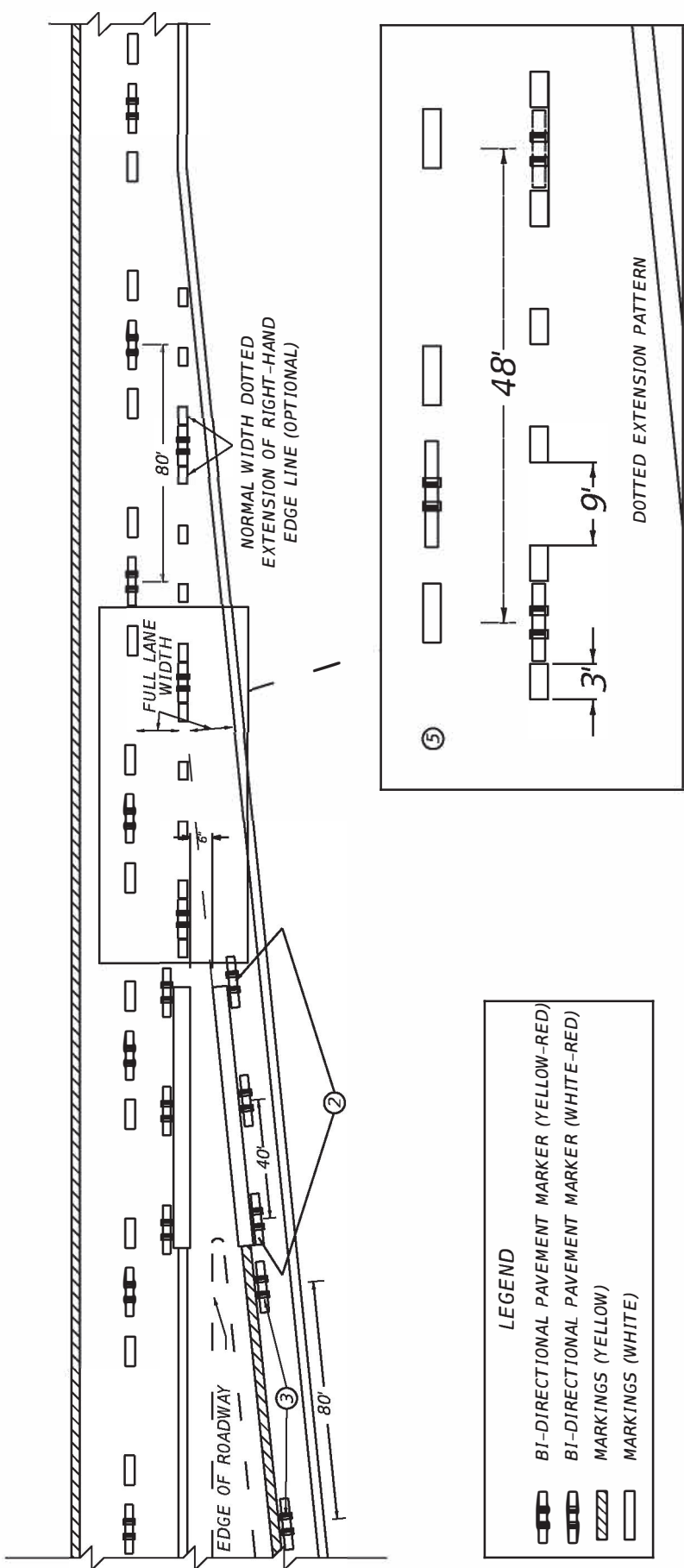
ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL

SHEET NO.  
R--

HORIZONTAL SCALE: N.T.S.





LEGEND

BI-DIRECTIONAL PAVEMENT MARKER (YELLOW-RED)

BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)

MARKINGS (YELLOW)

MARKINGS (WHITE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. BI-DIRECTIONAL (YELLOW-RED) MARKERS ARE TO BE PLACED ALONG THE ENTIRE LENGTH OF THE YELLOW EDGE LINE FROM THE INTERSECTION OF THE CROSS-STREET TO THE BEGINNING OF THE GORE AREA.
4. ON TWO-LANE, TWO-WAY HIGHWAYS, MARKERS INSTALLED ALONG GORE MARKINGS SHALL BE MONO-DIRECTIONAL (WHITE).
5. IF DOTTED EXTENSIONS ARE USED IN THE TAPERED ACCELERATION LANE, MARKERS SHALL BE MONO-DIRECTIONAL (WHITE).
6. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS  
06613 - INLAID PAVEMENT MARKER - B-W/R  
06614 - INLAID PAVEMENT MARKER - B-Y/R

UNIT TO BID  
EACH  
EACH

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWG.  
TPM-200

SUBMITTED *[Signature]* 06-09-21  
DIVISION DIRECTOR DATE

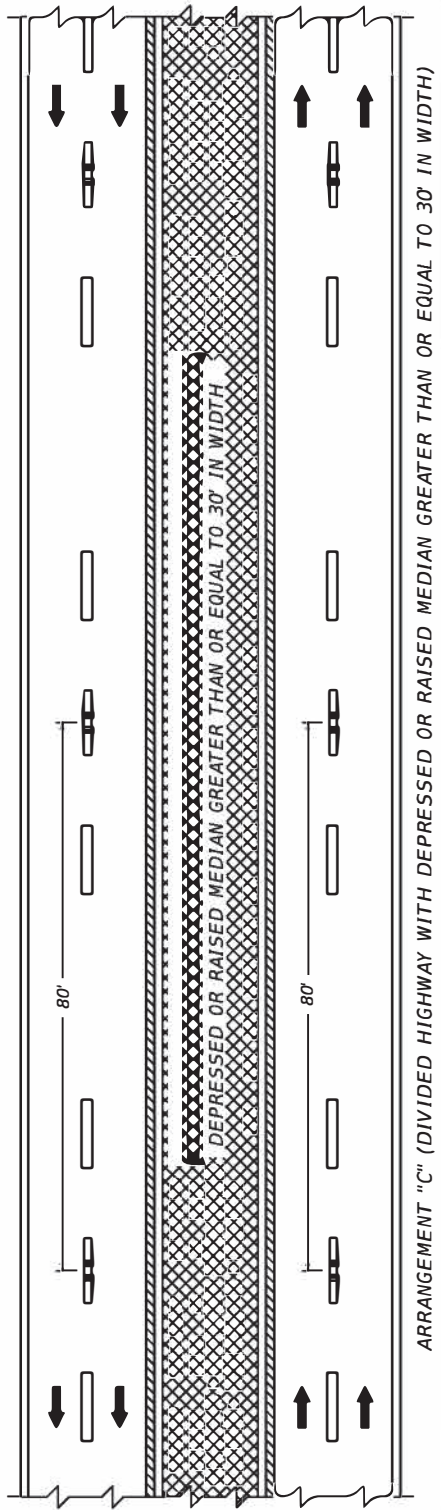
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE:  
SEPIA 013 - INLAID PAVEMENT MARKER ARRANGEMENT  
ON-RAMP WITH TAPERED ACCELERATION LANE

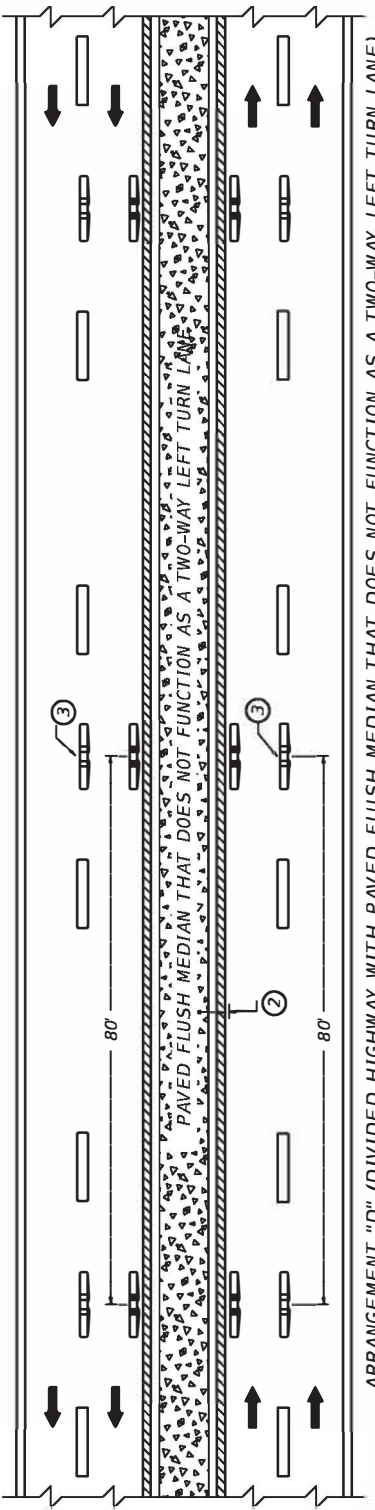
HORIZONTAL SCALE: N.T.S.

ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL



ARRANGEMENT "C" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN GREATER THAN OR EQUAL TO 30' IN WIDTH)



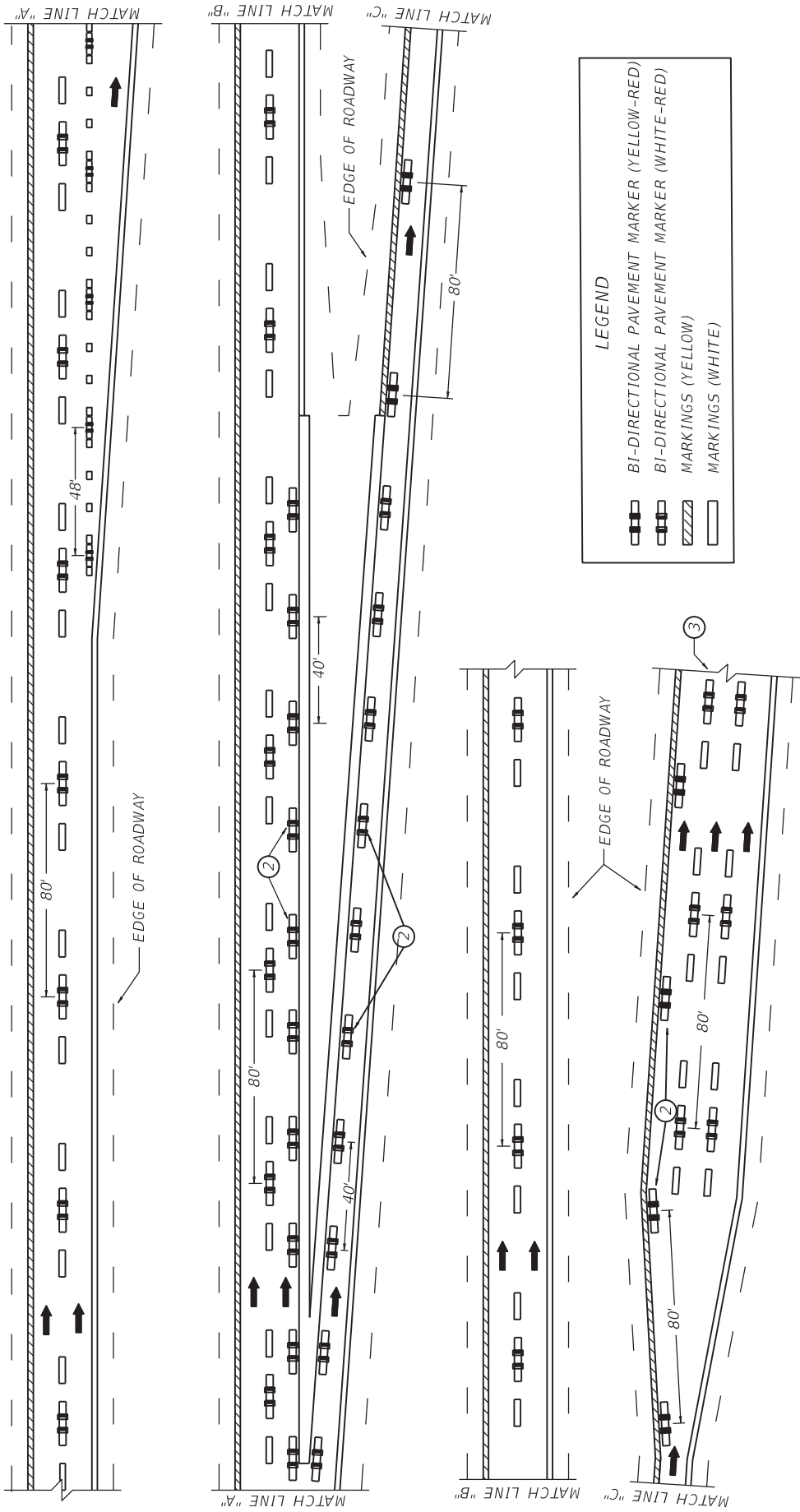
ARRANGEMENT "D" (DIVIDED HIGHWAY WITH PAVED FLUSH MEDIAN THAT DOES NOT FUNCTION AS A TWO-WAY LEFT TURN LANE)

- ~ NOTES ~
1. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  2. MARKERS INSTALLED ALONG EDGE LINES SHOULD BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
  3. IF WIDTH OF PAVED FLUSH MEDIAN IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.
  4. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
  5. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.
- BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY  
06613 - INLAID PAVEMENT MARKER - B W/R

LEGEND	
	BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
	BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)
	MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
	MARKINGS (YELLOW)
	MARKINGS (WHITE)
	FLUSH MEDIAN
	DEPRESSED OR RAISED MEDIAN

DRAWING NOT TO SCALE

SUBMITTED 06-09-21  
DAVID H. HINES DATE



LEGEND

BI-DIRECTIONAL PAVEMENT MARKER (YELLOW-RED)

BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)

MARKINGS (YELLOW)

MARKINGS (WHITE)

~ NOTES ~

- 1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
- 2. MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
- 3. MARKERS SHALL BE CONTINUED ALONG THE ENTIRE LENGTH OF THE RAMP UNTIL THE INTERSECTION WITH THE CROSS-STREET.
- 4. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS  
06613 - INLAID PAVEMENT MARKER - B-W/R  
06614 - INLAID PAVEMENT MARKER - B-Y/R

UNIT TO BID  
EACH  
EACH

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWG.  
TPM-201

SUBMITTED 06-09-21  
DIVISION DIRECTOR DATE

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE:  
SEPIA 011 - INLAID PAVEMENT MARKER  
ARRANGEMENT EXIT GORE AND OFF RAMP

USER: cwallier

ITEM NO.  
6-20014

COUNTY OF  
CAMPBELL

SHEET NO.  
R--

HORIZONTAL SCALE: N.T.S.

OpenRoads Designer v10.16.2.267  
FILE NAME: J:\12307-WASHINGTON COUNTY PAVEMENT REHAB\50 - PLAN SHEETS\10 - TYPICAL SECTIONS\TYPICALS.DGN



## **SPECIAL NOTE FOR BEFORE YOU DIG**

### **KY 1892 Pavement Rehabilitation Project**

#### **Campbell County**

#### **Item No. 6-20014**

Call 811 toll free a minimum of two and no more than ten business days prior to excavation for information on the location of existing under-ground utilities which subscribe to the before-u-dig (BUD) service. Coordinate excavation with all utility owners, including those who do not subscribe to BUD.

**SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS**

**KY 1892**

**Rehabilitation Project**

**Campbell County**

**Item No. 6-20014**

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

## **Special Note for Fixed Completion Date And Liquidated Damages**

### **KY 1892 Pavement Rehabilitation Project Campbell County Item No. 6-20014**

This project will have a fixed completion date of **August 1st, 2026** for completion of all work associated with this project.

Liquidated damages per the Standard Specifications will be charged for each calendar day for any work completed after **August 1st, 2026**.

Liquidated damages will be assessed in the amount of \$1,000 per every fifteen (15) minutes for the first hour and then \$2,500 for each additional hour, or fraction thereof, when a ramp closure remains in place during a prohibited period specified in the Traffic Control Notes of this Proposal.

Liquidated damages will be assessed in the amount of \$1,000 per every fifteen (15) minutes for the first hour and then \$2,500 for each additional hour, or fraction thereof, when traffic is left in two lanes bi-directionally during winter shutdown period of November 30th to April 1st. Farther specified Project Phasing & Construction Procedures in the Traffic Control Notes of this Proposal.

February 18, 2022

## **SPECIAL NOTE FOR GEOGRID PLACEMENT FOR SUBGRADE**

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

### **1.0 DESCRIPTION.**

Additional notes in addition to the Standard Specifications for the placement of Geogrid.

### **2.0 MATERIALS**

**2.1 Geogrid:** Furnish a punched and drawn Geogrid meeting the requirements of Section 304.

**2.2 Class 1 Geotextile Fabric:** Conform to Section 843.

### **3.0 CONSTRUCTION**

Place the Class 1 geotextile fabric first, and then place the geogrid on top of the geotextile fabric so that they are at the bottom of the aggregate layer. Maintain tension on the geogrid and ensure there are no buckles or folds. Geogrid should not be completely placed before placing aggregate, but should be placed down at the front of a "paving train" consisting of the geogrid laydown equipment followed no further than 50 feet by the aggregate placement equipment. In curves and intersections, cut and overlap the geogrid. Place the geogrid and aggregate according to Sections 304 and 302. Contrary to Section 302.03.03, if the total aggregate base thickness is less than 12 inches, the aggregate base will be placed in one lift. If greater than 12 inches, place the aggregate in 3 inch to 12 inch lifts with the first lift being a minimum of 10 inches. All other construction and density requirements of Section 302 will apply.

### **4.0 MEASUREMENT.**

The Department will measure the quantity of Geogrid in square yards and the quantity of Class 1 Fabric in square yards. The Department will not make payment for providing a geogrid manufacturer's representative and will consider it incidental to the bid item for Geogrid.

February 18, 2022

**5.0 PAYMENT.**

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
00005	GEOGRID REINFORCEMENT FOR SUBGRADE	Square Yard
02602	FABRIC-GEOTEXTILE CLASS 1	Square Yard

The Cabinet will consider payment as full compensation for all work required in this note.



## **Special Note for Install Radar Presence Detector Type A**

### **Ky 1892 Pavement Rehabilitation Project**

#### **Campbell County**

#### **Item No. 6-20014**

Install Radar Presence Detector Type A shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by contractor), and controller interface assembly.

Radar Presence Detector Type A bid item shall include all labor required to provide a functional detection system. Radar Presence Detector Type A shall be installed and wired in accordance with the manufacturer's instructions.

The contractor shall

After the detector is installed and before the detector is powered on, the contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work.

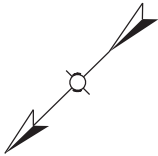
Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The contractor shall provide a bucket truck and operators at this time for final aiming of the sensors.

The contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others.

The following is an initial estimate of the equipment to be installed at each intersection. The list is included for information purposes only and final equipment and materials will be determined and ordered prior to installation:

- 1 no: WX-SS-BP-004 Four Smart Sensor
- 8 no: WX-CLK-112 2 Channel Card
- 4 no: Matrix Stop Bar Sensor
- 4 no: WX-SS-611 Heavy duty sensor. Mount 6" 2 axis alm brkt
- 4 no: WX-SS-710 Junction Box
- 1 no: WX-SS-705-1000 Bulk Cable
- 4 no: WX-SS-704-006 SS Power/Comm Cable w/Connector 6'

CAMPBELL CO. KY 1892 ~m.p. 1.49  
~LAT/LONG N 39.08113, W 84.46802  
STATION A67



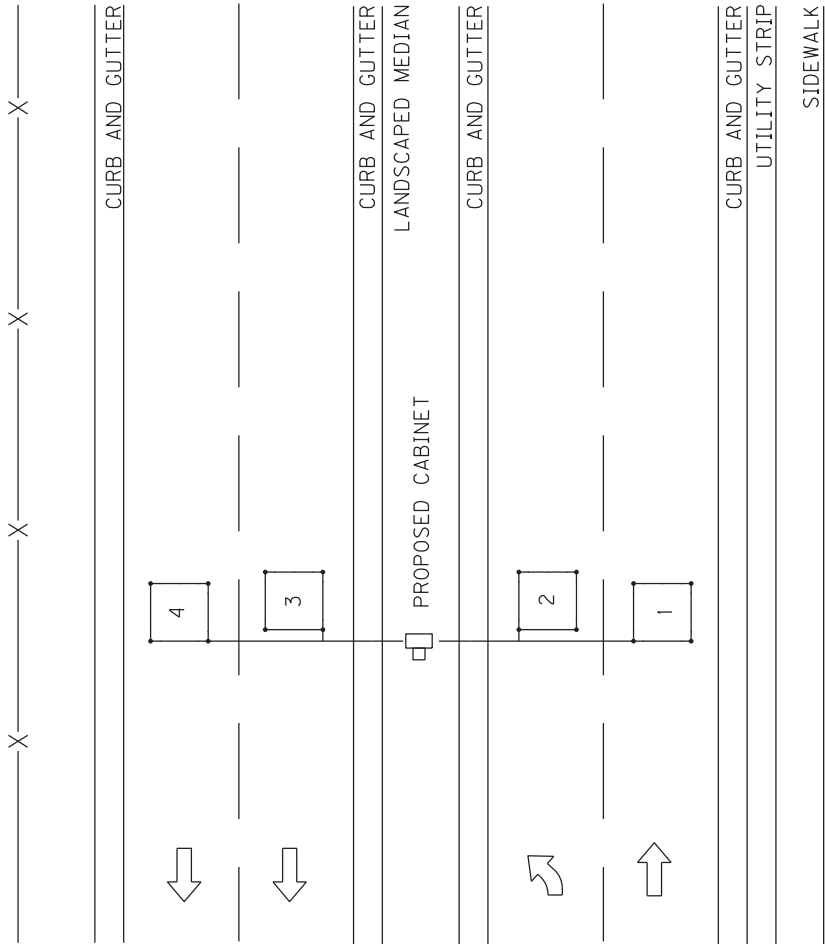
SITE LOCATION IS APPROXIMATE AND WILL BE DETERMINED IN THE FIELD AND APPROVED BY DIVISION OF PLANNING PERSONNEL PRIOR TO ANY CONSTRUCTION.

INSTALL ONE (1) 10"x8"x4" BOX ON ONE (1) WOOD POST IN THE MEDIAN.

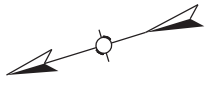
ALL LOOPS SHALL BE 6'x6' SQUARE AND SHALL BE INSTALLED SPLICE-FREE TO THE BOX. A MINIMUM OF 2' OF WIRE FOR EACH SENSOR SHALL BE COILED AND LABELED INSIDE THE BOX. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS INSIDE THE BOX.

INSTALL ONE (1) 1 1/4" CONDUIT FROM EACH SAW SLOT TO BOX.

REMOVE ANY AND ALL EXISTING CABINETS, POSTS, WIRE AND JUNCTION BOXES AND DISPOSE OF OFF THE PROJECT.



CAMPBELL CO. KY 1892 ~m.p. 2.07  
~LAT/LONG N 39.08579, W 84.47598  
STATION E67



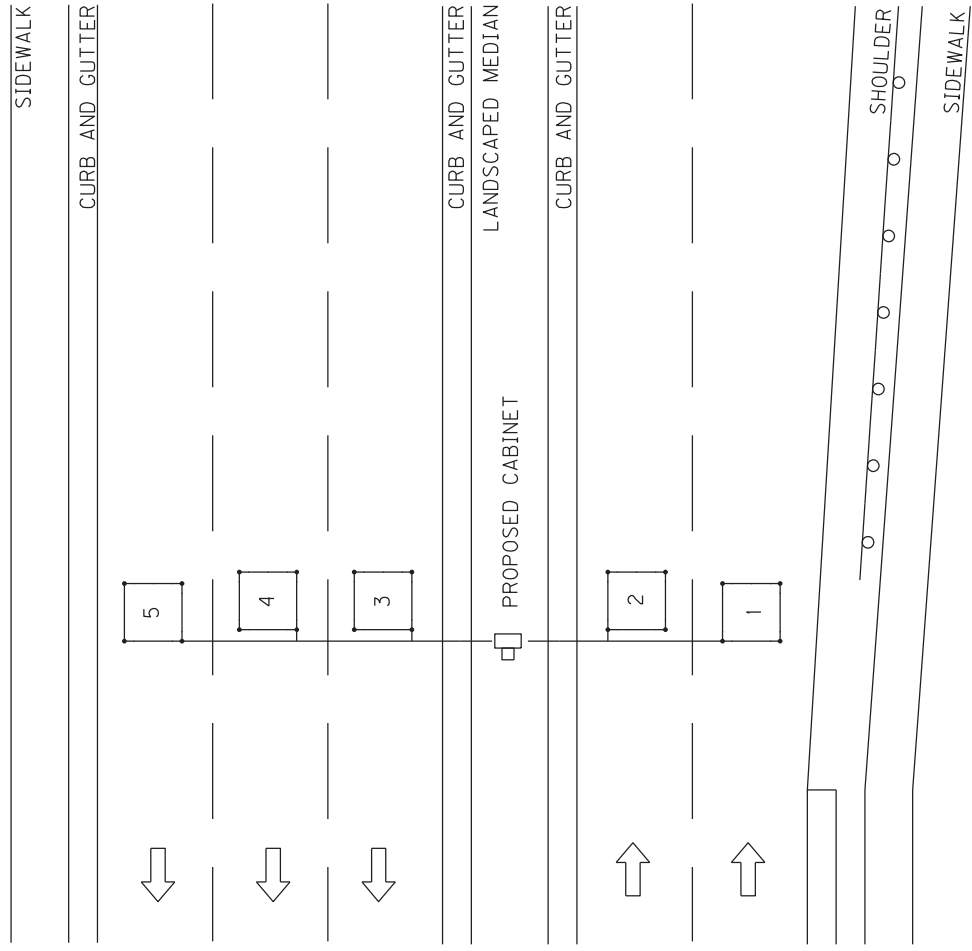
SITE LOCATION IS APPROXIMATE AND WILL BE DETERMINED IN THE FIELD AND APPROVED BY DIVISION OF PLANNING PERSONNEL PRIOR TO ANY CONSTRUCTION.

INSTALL ONE (1) 10"x8"x4" BOX ON ONE (1) WOOD POST IN THE MEDIAN.

ALL LOOPS SHALL BE 6'x6' SQUARE AND SHALL BE INSTALLED SPLICE-FREE TO THE BOX. A MINIMUM OF 2' OF WIRE FOR EACH SENSOR SHALL BE COILED AND LABELED INSIDE THE BOX. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS INSIDE THE BOX.

INSTALL ONE (1) 1 1/4" CONDUIT FROM EACH SAW SLOT TO BOX.

REMOVE ANY AND ALL EXISTING CABINETS, POSTS, WIRE AND JUNCTION BOXES AND DISPOSE OF OFF THE PROJECT.



Permanent Traffic Data Acquisition Station  
Estimate Of Quantities

Revised January 2023

PERMANENT TRAFFIC DATA ACQUISITION STATIONS  
ESTIMATE OF QUANTITIES

Bid Item Code	Description	Unit	Quantity
4793	CONDUIT 1 ¼ INCH	LIN FT	40
4795	CONDUIT 2 INCH	LIN FT	
4811	ELECTRICAL JUNCTION BOX TYPE B	EACH	
4820	TRENCHING AND BACKFILLING	LIN FT	32
4821	OPEN CUT ROADWAY	LIN FT	
4829	PIEZOELECTRIC SENSOR	EACH	
4830	LOOP WIRE	LIN FT	1490
4833	WIRE – NO. 8	LIN FT	
4834	WIRE – NO. 6	LIN FT	
4850	CABLE NO. 14/1 PAIR	LIN FT	
4871	POLE – 35’ WOODEN	EACH	
4895	LOOP SAW SLOT AND FILL	LIN FT	320
4899	ELECTRICAL SERVICE	EACH	
4960	REMOVE AND REPLACE SIDEWALK	SQYD	
20213EC	INSTALL PAD MOUNT ENCLOSURE	EACH	
20359NN	GALVANIZED STEEL CABINET	EACH	
20360ES818	WOOD POST	EACH	2
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	EACH	
20392NS835	ELECTRICAL JUNCTION BOX TYPE C	EACH	
20468EC	ELECTRICAL JUNCTION BOX 10x8x4	EACH	2
21543EN	BORE AND JACK CONDUIT – 2 INCH	LIN FT	
23206EC	INSTALL CONTROLLER CABINET	EACH	
24963ED	LOOP TEST	EACH	

## **MATERIAL, INSTALLATION, AND BID ITEM NOTES FOR PERMANENT TRAFFIC DATA ACQUISITION STATIONS**

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### **1. DESCRIPTION**

Except as specified in these notes, all work shall consist of furnishing and installing all materials necessary for permanent data acquisition station equipment installation(s) and shall be performed in accordance with the current editions of:

- The Contract
- Division of Planning Standard Detail Sheets
- Kentucky Transportation Cabinet, Department of Highways, *Standard Specifications for Road and Bridge Construction*
- Kentucky Transportation Cabinet, Department of Highways, Standard Drawings
- National Fire Protection Association (NFPA) 70: *National Electrical Code*
- Institute of Electrical and Electronic Engineers (IEEE), *National Electrical Safety Code*
- Federal Highway Administration, *Manual on Uniform Traffic Control Devices*
- American Association of State Highway and Transportation Officials (AASHTO), *Roadside Design Guide*.
- Standards of the utility company serving the installation, if applicable

The permanent traffic data acquisition station layout(s) indicate the extent and general arrangement of the proposed installation and are for general guidance. Any omission or commission shown or implied shall not be cause for deviation from the intent of the plans and specifications. Information shown on the plans and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department of Highways (Department) does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown. If any modifications of the plans or specifications are considered necessary by the Contractor, details of such modifications and the reasons, therefore, shall be submitted in writing to the Engineer for written approval prior to beginning such modified work.

The Contractor shall contact all utility companies and the district utility agent prior to beginning construction to insure proper clearance and shielding from existing and proposed utilities. The Contractor shall use all possible care in excavating on this project so as not to disturb any existing utilities whether shown on the plans or not shown on the plans. Any utilities disturbed or damaged by the Contractor during construction shall be replaced or repaired to original condition by the Contractor at no cost to the department. If necessary, to avoid existing utilities, the Contractor shall hand dig areas where poles or conduit cross utilities.



Material, Installation, and Bid Item Notes for  
Permanent Traffic Data Acquisition Stations

Revised January 2023

The Contractor shall be responsible for all damage to public and/or private property resulting from his work.

The Contractor shall inspect the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions. Submission of a bid will be considered an affirmation of this inspection having been completed. The Department will not honor any claims resulting from site conditions.

## **2. MATERIALS**

All proposed materials shall be approved prior to being utilized. The Contractor shall submit for material approval an electronic file of descriptive literature, drawings and any requested design data for the proposed materials. After approval, no substitutions of any approved materials may be made without the written approval of the Engineer.

Materials requiring sampling shall be made available a sufficient time in advance of their use to allow for necessary testing.

### **2.1. Anchoring**

#### **2.1.1. Anchor and Anchor Rod**

Anchor, except rock anchor, shall be expanding type, with a minimum area of 135 square inches.

Anchor rod shall be galvanized steel, double-eye, have a minimum diameter of 5/8 inches, and a minimum length of 84 inches. Minimum holding capacity shall be 15,400 lbs.

Rock anchor shall be galvanized steel, triple-eye, expanding type, with a minimum diameter of 3/4 inch, a minimum 53 inches long, and a minimum tensile strength of 23,000 lb.

#### **2.1.2. Guy Wire and Guy Guard**

Guy wire shall be Class A, Zinc-coated, 3/8 inch diameter, high strength grade steel (minimum 10,800 lb.) and galvanized per ASTM A475. Guy guard shall be 8' long, fully-rounded, yellow, and able to be securely attached to the guy wire.

#### **2.1.3. Strandwise for Guy Wire**

Strandwise for guy wire shall be 3/8 inch and rated to hold a minimum of 90% of the rated breaking strength (RBS) of the strand used.

### **2.2. Asphalt**

Asphalt shall be a minimum CL2 Asph Surf 0.38B PG64-22 and conform to the *Standard Specifications for Road and Bridge Construction*.

### **2.3. Backer Rod**

Backer rod shall be 1/2 inch diameter, closed cell polyethylene foam and shall meet or exceed the following physical properties:

- Density (average): 2.0 lbs/cu.ft. (minimum): ASTM D 1622 test method
- Tensile Strength: 50 PSI (minimum): ASTM D 1623 test method
- Compression Recovery: 90% (minimum): ASTM D 5249 test method
- Water Absorption: 0.03 gm/cc (maximum): ASTM C 1016 test method

2.4. Cabinets

2.4.1. Galvanized Steel Cabinet

Galvanized Steel Cabinet shall be constructed of 16 or 14 gauge galvanized steel and shall meet or exceed the industry standards set forth by UL 50 and NEMA 3R. The finish shall be an ANSI 61 gray polyester powder finish inside and out over the galvanized steel. Cabinet shall have minimum inside dimensions of 20 inches high by 20 inches wide by 8 inches deep.

The cabinet shall be equipped with the following:

- Drip shield top
- Seam-free sides, front, and back, to provide protection in outdoor installations against rain, sleet, and snow
- Hinged cover with 16 gauge galvanized steel continuous stainless steel pin.
- Cover fastened with captive plated steel screws, knob or latch
- Hasp and staple for padlocking
- No gaskets or knockouts
- Back panel for terminal block installation
- Post mounting hardware
- Terminal Blocks

2.4.2. Anchor Bolt for Pad Mounted Cabinet

Anchor bolt for pad mounted cabinet shall be galvanized steel with minimum dimensions of 3/8 inch by 6 inches.

2.5. Concrete

Concrete shall be Class A and conform to the *Standard Specifications for Road and Bridge Construction*.

2.6. Conduit and Conduit Fittings

Conduit and conduit fittings shall be rigid steel unless otherwise specified.

Conduit shall be zinc galvanized inside and out and conform to the NEC, UL Standard 6, and ANSI C-80.1.

Rigid Steel Conduit Fittings shall be galvanized inside and out and conform to the NEC, UL Standard 514B, and ANSI C-80.4. Intermediate Metal Conduit (IMC) will not be approved as an acceptable alternative to rigid steel conduit.

2.7. Conduit sealant

Conduit sealant shall be weather-, mold-, and mildew-resistant and chemically resistant to gasoline, oil, dilute acids and bases. Conduit sealant shall be closed cell type and shall meet or exceed the following properties:

- |                                    |                          |
|------------------------------------|--------------------------|
| • Cure Time                        | 20 minutes max.          |
| • Density                          | 64.4 kg/m3; 6 lbs/ft3    |
| • Compressive Strength (ASTM 1691) | 13.8 MPa; 330 or 300 psi |

- Tensile Strength (ASTM 1623) 15.9 MPa; 270 or 250 psi
- Flexural Strength (ASTM D790) 14.5 MPa; 460 or 450 psi
- Service Temperature -20 to 200 F

## **2.8. Electrical Service Meter Base**

Electrical service meter base shall meet or exceed all requirements of the National Electrical Code and the local utility providing the electrical service.

## **2.9. Electrical Service Disconnect**

Electrical service disconnect shall meet or exceed all requirements of the National Electrical Code and the local utility providing the electrical service.

## **2.10. Flashing Arrow**

Flashing Arrow shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.11. Ground Fault Circuit Interrupter (GFCI) Receptacle**

Ground Fault Circuit Interrupter Receptacle shall be 2-pole, 3-wire, 20 Amp, 125 Volt, 60 Hz, NEMA 5-20R configuration and meet or exceed the following standards and certifications:

- NEMA WD-1 and WD-6
- UL 498 and 943
- NOM 057
- ANSI C-73

This item shall include a UL listed, 4 inch x4 inch x 2<sup>1</sup>/<sub>8</sub> inch box with <sup>3</sup>/<sub>4</sub> inch side and end knockouts and a 1½ inches deep, single-receptacle cover to house the GFCI receptacle. Box and cover shall be hot rolled, galvanized steel with a minimum thickness of 0.62 inches.

## **2.12. Grounding**

### **2.12.1. Ground Rod**

Ground Rod shall be composite shaft consisting of a pure copper exterior (5 mil minimum) that has been inseparably molten welded to a steel core. Ground Rod shall have a minimum diameter of 5/8 inch, a minimum length of 8 feet and shall be manufactured for the sole purpose of providing electrical grounding.

### **2.12.2. Ground Rod Clamp**

Ground rod shall be equipped with a one piece cast copper or bronze body with a non-ferrous hexagonal head set screw and designed to accommodate a 10 AWG solid through 2 AWG stranded grounding conductor.

## **2.13. Grout**

### **2.13.1. Grout for Inductive Loop Installation**

Grout for inductive loop installation shall be non-shrink, shall meet the requirements of the *Standard Specifications for Road and Bridge Construction*,



and shall be included on the KYTC Division of Materials, *List of Approved Materials*.

### **2.13.2. Grout for Piezoelectric Sensor Installation**

Grout for piezoelectric sensor installation shall be per the piezoelectric sensor manufacturer's recommendation. Grout shall be suitable for installation in both asphalt and Portland cement pavements. Grout shall have a short curing time (tack free in ten minutes; open to traffic in forty minutes; and fully cured within sixty minutes) to prevent unnecessary lane closure time and should be of sufficient consistency to prevent running when applied on road surfaces with a drainage cross slope. Particulate matter within the grout shall not separate or settle and the grout shall not shrink during the curing process.

## **2.14. Hardware**

Except where specified otherwise, all hardware such as nuts, bolts, washers, threaded ends of fastening devices, etc. with a diameter less than 5/8 inch shall be passivated stainless steel, alloy type 316 or type 304. Stainless steel hardware shall meet ASTM F593 and F594 for corrosion resistance. All other nuts and bolts shall meet ASTM A307 and shall be galvanized.

### **2.14.1. Conduit Strap**

Conduit strap shall be double-hole, stainless steel, and sized to support specified conduit. Conduit strap shall attach to wood pole or post with two 2 1/4 inch wood screws.

### **2.14.2. Mounting Strap for Pole Mount Cabinet**

Mounting strap for pole mount cabinet shall be 3/4 inch x 0.03 inch stainless steel; equipped with clips or buckles to securely hold strap.

### **2.14.3. Metal Framing Channel and Fittings**

Metal framing channel shall be 1 5/8 inches wide galvanized steel that conforms to ASTM A1011 and ASTM A653. One side of the channel shall have a continuous slot with in-turned edges to accommodate toothed fittings.

Fittings shall be punch pressed from steel plates and conform to ASTM A575 and the physical requirements of ASTM A1011.

## **2.15. Junction Box**

### **2.15.1. Junction Box Type A, B, or C**

Junction Box Type A, B, or C shall meet or exceed ANSI/SCTE 77-2007, Tier 15. Box shall have an open bottom. A removable, non-slip cover marked "PLANNING" shall be equipped with a lifting slot and attached with a minimum of two 3/8 inch stainless steel hex bolts and washers. Type A Box shall have nominal inside dimensions of 13 inches wide by 24 inches long by 18 inches deep. Type B Box shall have nominal inside dimensions of 11 inches wide by 18 inches long by 12

inches deep. Type C Box shall have nominal inside dimensions of 24 inches wide by 36 inches long by 30 inches deep.

**2.15.2. Aggregate for Junction Box Type A, B, or C**

Aggregate for junction box type A, B, or C shall be gradation size no. 57 and conform to the *Standard Specifications for Road and Bridge Construction*.

**2.15.3. Junction Box 10x8x4**

Junction Box Type 10x8x4 shall be constructed of a UV-stabilized, nonmetallic material or non-rusting metal and be weatherproof in accordance with NEMA 4X. Box shall be equipped with an overhanging door with a continuous durable weatherproof gasket between the body and door. Door shall be hinged with screws, hinge(s) and pin(s) and shall be equipped with a padlockable latch on the side opposite the hinge(s). Junction Box 10x8x4 shall have minimum inside dimensions of 10 inches high by 8 inches wide by 4 inches deep.

**2.16. Maintain and Control Traffic**

Materials for the bid item Maintain and Control Traffic shall conform to the *Standard Specifications for Road and Bridge Construction*, and the KYTC Department of Highways *Standard Drawings*.

**2.17. Piezoelectric Sensor**

Piezoelectric sensor (piezo) shall provide a consistent level voltage output signal when a vehicle axle passes over it, shall have a shielded transmission cable attached, and shall meet the following requirements:

- Dimensions: such that sensor will fit in a  $\frac{3}{4}$  inch wide by 1 inch deep saw cut. Total length shall be 6 feet unless specified otherwise.
- Output uniformity:  $\pm 7\%$  (maximum)
- Typical output level range: 250mV (minimum) from a wheel load of 400 lbs.
- Working temperature range: -40° to 160° F.
- Sensor life: 30 million Equivalent Single Axle Loadings (minimum)

Shielded transmission cable shall be coaxial and shall meet the following requirements:

- RG 58C/U with a high density polyethylene outer jacket rated for direct burial
- Length shall be a minimum of 100 feet. Installations may exceed 100 feet so the piezo shall be supplied with a lead-in of appropriate length so that the cable can be installed splice-free from the piezo to the cabinet.
- Soldered, water resistant connection to the sensor.

One installation bracket for every 6 inches of sensor length shall also be supplied. Piezo shall be a RoadTrax BL Class I or approved equal.

**2.18. Saw Slot Sealant**

Saw Slot Sealant shall be non-shrink, non-stringing, moisture cure, polyurethane

encapsulant suitable for use in both asphalt and concrete pavements. It shall provide a void-free encapsulation for detector loop cables and adequate compressive yield strength and flexibility to withstand heavy vehicular traffic and normal pavement movement.

The cured encapsulant shall meet or exceed the following:

- Hardness (Indentation): 35-65 Shore A, ASTM D2240
- Tensile Strength: 150 psi minimum, ASTM D412
- Elongation: 125% minimum 2 inch/minute pull, ASTM D412
- Tack-free Drying Time: 24 hours maximum, ASTM C679
- Complete Drying Time: 30 hours maximum, KM 64-447
- Chemical Interactions (seven day cure at room temperature, 24-hour immersion, KM 64-446):
  - Motor Oil: No effect
  - Deicing Chemicals: No effect
  - Gasoline: Slight swell
  - Hydraulic Brake Fluid: No effect
  - Calcium Chloride (5%): No effect

## **2.19. Seeding and Protection**

Material for Seeding and Protection shall be Seed Mixture Type I and conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.20. Signs**

Materials for signs shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.21. Splicing Materials**

### **2.21.1. Electrical Tape**

Electrical tape shall be a premium grade, UL-listed, all-weather, vinyl-insulating tape with a minimum thickness of 7 mil. Tape shall be flame retardant and resistant to abrasion, moisture, alkalis, acids, corrosion, and weather (including ultraviolet exposure).

### **2.21.2. Splice Kit**

Splice kit shall be inline resin-type and rated for a minimum of 600V. Resin shall be electrical insulating-type and shall provide complete moisture and insulation resistance.

## **2.22. Steel Reinforcing Bar**

Steel reinforcing bar shall be #5 and shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.23. Terminal Block**

Terminal block shall be rated for a minimum of 300 V and have a minimum of six

terminal pairs with 9/16-inch nominal spacing (center to center) for connecting loop and piezoelectric sensor wires to cable assemblies. Terminal block shall have screw type terminal strips to accommodate wire with spade-tongue ends.

## **2.24. Warning Tape**

Warning tape shall be acid and alkali resistant formulated for direct burial. Tape shall be a minimum of 3 inches wide by 4.0 mils (nominal) thick, and shall be permanently imprinted with a minimum 1 inch black legend on a red background warning of an electric line. Tape shall meet or exceed the following industry specifications:

- American Gas Association (AGA) 72-D-56
- American Petroleum Institute (API) RP 1109
- American Public Works Association (APWA) Uniform Color Code
- Department of Transportation (DOT) Office of Pipeline Safety USAS B31.8
- Federal Gas Safety Regulations S 192-321 (e)
- General Services Administration (GSA) Public Buildings Service Guide: PBS 4-1501, Amendment 2
- National Transportation Safety Board (NTSB) PSS 73-1
- Occupational Safety and Health Administration (OSHA) 1926.956 (c) (1)

## **2.25. Wire and Cable**

All cable and wire shall be plainly marked in accordance with the National Electrical Code (NEC).

### **2.25.1. Loop Wire**

Loop wire shall be 14 AWG, stranded, copper, single conductor, and shall conform to the International Municipal Signal Association (IMSA) Specification No. 51-7.

### **2.25.2. Cable No. 14/1 Pair**

Cable No. 14/1 pair loop lead-in cable shall be 14 AWG, stranded, copper paired, electrically shielded conductors, and shall conform to IMSA 19-2.

### **2.25.3. Grounding conductor**

Grounding conductor and bonding jumper shall be solid or stranded, 4 AWG bare copper.

### **2.25.4. Service Entrance Conductor**

Service entrance conductor shall be stranded, copper, Type USE-2, sized as required to comply with the NEC.

### **2.25.5. Terminal for electrical wire or cable**

Terminal for electrical wires or cables shall be insulated, solderless, spade tongue terminals of correct wire and stud size. Terminal for electrical wires or cables shall be incidental to the wire or cable (including piezoelectric sensor transmission cable) to be connected to terminal strips.



**2.26. Wood Post**

Wood post shall be Southern Pine pretreated to conform to the American Wood Preservers' Association (AWPA) C-14 or UC4B and shall have minimum dimensions of 4 inches by 4 inches by 8 feet long (for Galvanized Steel Cabinet) or 4 feet long (for Junction Box 10x8x4), sawed on all four sides with both ends square.

**2.27. Wooden Pole**

Wooden pole shall be a Class IV wood pole of the length specified and shall conform to the *Standard Specifications for Road and Bridge Construction* except the pole shall be treated in accordance with AWPA P9 Type A.

### 3. CONSTRUCTION METHODS

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

After the project has been let and awarded, the Division of Construction shall notify the Division of Planning of the scheduled date for a Pre-Construction meeting so that prior arrangements can be made to attend. This will allow the Division of Planning an opportunity to address any concerns and answer any questions that the Contractor may have before beginning the work.

The Division of Planning Equipment Management Team (502-564-7183) shall be notified a minimum of seven days before any work pertaining to these specifications begins to allow their personnel the option to be present during installation.

Unless otherwise specified, installed materials shall be new.

Construction involving the installation of loops or piezoelectric sensors shall not be performed when the temperature of the pavement is less than 38°F.

A final inspection will be performed by a member of the Central Office Division of Planning equipment staff after the installation is complete to verify that the installation is in compliance with the plans and specifications.

Any required corrective work shall be performed per the *Standard Specifications for Road and Bridge Construction*.

#### 3.1. Anchoring

Furnish: Anchor, anchor rod, guy wire, strand vise, guy guard.

Anchor shall be installed in relatively dry and solid soil. Rock anchor shall be installed in solid rock. Excavate the hole at a 45° to 60° angle in line with the guy (hole size shall be slightly larger than the expanded anchor – see manufacturer's recommendation). Attach rod to anchor, install assembly into hole, and expand anchor. Backfill and tamp entire disturbed area. The effectiveness of the anchor is dependent upon the thoroughness of backfill tamping. Attach guy to strand vise on pole and anchor rod and tighten to required tension. Install guy guard on guy.

#### 3.2. Bore and Jack Pipe – 2"

Furnish: Steel Encasement Pipe, 2"

Bore and jack pipe – 2" shall conform to the Section 706 of the *Standard Specifications for Road and Bridge Construction*.

### **3.3. Cleanup and Restoration**

Furnish: Seed Mix Type 1 (as required); fertilizer (as required); agricultural limestone (as required); mulch or hydromulch (as required); tackifier (as required).

The Contractor shall be responsible for repairing any damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. This shall include filling any ruts and leveling ground appropriately. Contractor shall dispose of all waste and debris off the project. Sow all disturbed earthen areas with Seed Mix Type 1 per Section 212 of the *Standard Specifications for Road and Bridge Construction*. All materials and labor necessary for cleanup and restoration shall be considered incidental to other bid items.

### **3.4. Conduit**

Furnish: Conduit; conduit fittings; bushings (grounding where required); LB condulets (as required); weatherheads (as required); conduit straps; hardware; conduit sealant.

Conduit that may be subject to regular pressure from traffic shall be laid to a minimum depth of 24 inches below grade. Conduit that will not be subject to regular pressure from traffic shall be laid to a minimum depth of 18 inches below grade.

Conduit ends shall be reamed to remove burrs and sharp edges. Cuts shall be square and true so that the ends will butt together for the full circumference of the conduit. Tighten couplings until the ends of the conduit are brought together. Do not leave exposed threads. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted with an Engineer-approved, rust inhibitive paint. Conduit bends shall have a radius of no less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans.

Contractor shall install a bushing (grounding bushing where required) on both ends of all conduits. Cap spare conduits on both ends with caps or conduit sealant.

Conduit openings in junction boxes and cabinets shall be waterproofed with a flexible, removable conduit sealant, working it around the wires, and extending it a minimum 1 inch into the end of the conduit.

After the conduit has been installed and prior to backfilling, the conduit installation shall be inspected and approved by the Engineer.

### **3.5. Electrical Service**

Furnish: Meter base, service disconnect, wire, GFCI AC duplex receptacle with box and cover; conduit, conduit fittings, bushings (grounding where required); LB condulets (as required); weatherhead; conduit straps; hardware; conduit sealant; ground rod with clamp; grounding conductor.

Prior to any construction, the Contractor shall initiate a work order with the local power

company for the installation of electrical service to the site. A representative from the Division of Planning and the local power company shall be consulted prior to choosing an exact location for the pole. The Contractor shall clear the right-of-way for the electrical service drop.

Contractor shall obtain electrical inspections, memberships, meter base, service disconnect and any other requirements by the utility serving the installation and pay all fees as required.

Install meter-base and disconnect panel with a 30-ampere, fused, circuit breaker inside. Install a manufactured weatherproof hub connector to connect the conduit to the top of the meter base and service disconnect.

Install a rigid  $\frac{3}{4}$  inch conduit with three 8 AWG service conductors from the cabinet, through the service disconnect to the meter base and a  $1\frac{1}{4}$ " conduit with three 8 AWG service conductors from the meter base to a weatherhead two feet from the top of the electrical service pole. Install conduit straps 30 inches on center and provide a drip loop where the wire enters the weatherhead. Splice electric drop with service entrance conductors at the top of the pole.

The limit of conduit incidental to "Install Electrical Service" for a pad mounted cabinet is 24 inches beyond face of service pole.

Install a 120-volt, 20-amp GFCI AC duplex receptacle with box and cover in the automatic data recorder (ADR) cabinet.

Install a ground rod with clamp. Install a grounding conductor wire from the meter base, through the disconnect panel, to the ground rod clamp. Install grounding conductor in  $1\frac{3}{4}$ " conduit from service disconnect to ground rod.

After completing the installation and before the electrical service is connected, obtain a certificate of compliance from the Kentucky Department of Housing, Buildings and Construction, Electrical Inspection Division.

### **3.6. Flashing Arrow**

Furnish: Arrow Panel

Construction of Flashing Arrow shall conform to the *Standard Specifications for Road and Bridge Construction*.

### **3.7. Galvanized Steel Cabinet**

Furnish: Cabinet; wood posts; concrete; conduit fittings; metal framing channel; pipe clamp; terminal block(s); spade tongue wire terminals; wire labels; hardware.

Where right-of-way allows, locate the cabinet such that it is outside the clear zone in accordance with the *Roadside Design Guide*. Install Cabinet such that the door of the



cabinet faces the roadway.

Excavate as required and install wood posts to a depth of 36 inches and place concrete around posts as shown on the standard detail sheets. Install metal framing channel with pipe clamp between posts.

Install Cabinet on wood posts 38 inches above the finished grade as shown on the standard detail sheets. Install a unistrut between posts when two posts are specified.

Install the required number of terminal blocks on the cabinet back plate. Install a spade tongue terminal on each loop and piezo sensor wire entering the cabinet and connect wires to terminal block(s). Wiring shall be neat and orderly. Label all wires and cables inside cabinet.

Install conduit from ground to cabinet and attach to pipe clamp. Install locknuts to attach conduit to cabinet and install a conduit bushing as shown on the standard detail sheets.

### **3.8. Grounding**

Furnish: Ground rod with clamp; grounding conductor.

At sites with electrical or solar service, all conduits, poles, and cabinets shall be bonded to ground rods and the electrical system ground to form a complete grounded system.

Install such that top of ground rod is a minimum of 3 inches below finished grade.

Grounding systems shall have a maximum 25 ohms resistance to ground. If the resistance to ground is greater than 25 ohms, two or more ground rods connected in parallel shall be installed. Adjacent ground rods shall be separated by a minimum of 6 feet.

### **3.9. Install Pad Mount Enclosure**

Furnish: Concrete; anchor bolts with washers and nuts; conduit; conduit fittings; conduit grounding bushings; ground rod with clamp; grounding conductor; conduit sealant; wooden stakes (where required); wire labels; hardware.

The Contractor shall be responsible for securing the enclosure from the Central Office Division of Planning Warehouse in Frankfort and transporting it to the installation site.

Where right-of-way allows, locate the enclosure such that it is outside the clear zone in accordance with the *Roadside Design Guide*.

Excavate as required, and place concrete to construct the enclosure foundation as specified on the standard detail sheets. Install enclosure on the concrete base such that the door(s) of the enclosure opens away from traffic (hinges away from traffic). Install anchor bolts, washers, and nuts to secure the enclosure to the foundation.

Install ground rod with clamp and install one  $\frac{3}{4}$  inch rigid conduit from enclosure base to

ground rod. Install a grounding conductor from ground rod to enclosure base and bond to each conduit bushing in the base.

Install one  $\frac{3}{4}$  inch rigid steel conduit for electrical service from the base of the enclosure to 24 inches beyond the concrete base. Make all field wiring connections to the electrical service, as applicable.

If electrical service is not provided as a bid item in the contract, plug conduit on both ends with a cap, conduit sealant, or electrical tape. Mark the location of the buried conduit end with a wooden stake labeled “ $\frac{3}{4}$  in. conduit.”

Install specified rigid steel conduit(s) into the base of the enclosure for sensor wire entry. Install one spare 2-inch conduit from the enclosure base to 2 feet beyond the concrete base. Plug spare conduit on both ends with a cap, conduit sealant or electrical tape.

The limit of all conduits incidental to “Install Pad Mount Enclosure” is 24 inches beyond the edge of the concrete base.

Wiring in enclosure shall be neat and orderly. Label all wires and cables inside enclosure. KYTC personnel will furnish and install terminal blocks and connect sensors to terminal blocks.

### **3.10. Install Controller Cabinet**

Furnish: Mounting brackets; mounting straps; conduit; LB condulets; conduit fittings; conduit grounding bushings; ground rod with clamp; grounding conductor; cable staples; conduit sealant; wooden stakes (where required); wire labels; hardware.

The Contractor shall be responsible for securing the cabinet from the Central Office Division of Planning Warehouse in Frankfort and transporting it to the installation site. Any existing holes in the cabinet not to be reused shall be covered or plugged to meet NEC requirements.

Install mounting brackets and secure cabinet to pole with mounting straps.

Install a ground rod with clamp. Install grounding conductor in 1- $\frac{3}{4}$ ” conduit from cabinet to ground rod.

Install one  $\frac{3}{4}$  inch rigid steel conduit with two lb. condulets from cabinet to electrical service disconnect box. Make all field wiring connections to the electrical service, as applicable.

If electrical service is not provided as a bid item in the contract, plug conduit on both ends with cap, plumbers putty, conduit sealant, or electrical tape. Mark the location of the buried conduit end with a wooden stake labeled “ $\frac{3}{4}$  in. conduit”.

Install specified rigid steel conduit(s) and type LB conduit(s) into the bottom of the

cabinet for sensor wire entry. The limit of conduits incidental to “Install Controller Cabinet” is 24 inches beyond the face of the pole.

Wiring in cabinet shall be neat and orderly. Label all wires and cables inside cabinet. KYTC personnel will furnish and install terminal blocks and connect sensors to terminal blocks.

### **3.11. Junction Box Type 10x8x4**

Furnish: Junction box; wood post; conduit fittings; wire labels; hardware.

Where right-of-way allows, locate the junction box such that it is outside the clear zone in accordance with the Roadside Design Guide.

Excavate as required and install wood post(s) to a depth of 18 inches. Install junction box on wood post such that the bottom of the box is 18 inches above the finished grade as shown on the standard detail sheets. Box shall be installed with four (4) 2½ inch wood screws and washers.

Install locknuts to attach conduit to junction box and install a conduit bushing as shown on the standard detail sheets.

Wiring inside box shall be neat and orderly. Label all wires and cables inside box.

### **3.12. Junction Box Type A, B, or C**

Furnish: Junction box, No. 57 aggregate; grounding conductor

Excavate as required and place approximately 12 inches of No. 57 aggregate beneath the proposed junction box to allow for drainage. Install specified junction box type A, B, or C near the edge of pavement, flush with finished grade per the detail sheets. Where required, orient the box so that the dimensions comply with the National Electrical Code. Stub conduits with grounding bushings into junction box at its base to accommodate wires and connect grounding conductor to all grounding bushings. Backfill to existing grade, and restore disturbed area to the satisfaction of the Engineer.

Wiring inside box shall be neat and orderly. Label all wires and cables inside box.

### **3.13. Loops - Proposed**

Furnish: Wire; saw slot sealant; backer rod; grout; conduit sealant.

The plans and notes specify the approximate location for loop installations. Prior to sawing slots or drilling cores, the Contractor shall meet with a representative of the Division of Planning to verify the precise layout locations on site. Avoid expansion joints and pavement sections where potholes, cracks, or other roadway flaws exist.

Upon completion of this meeting, the Contractor shall measure out and mark the proposed loop locations with spray paint or chalk such that the saw slots will be parallel

and perpendicular to the direction of traffic. Marked lines shall be straight and exact to the locations determined and sized as shown on the plans. Unless indicated otherwise, loops shall be 6 feet by 6 feet square and loops in the same lane shall be spaced 16 feet from leading edge to leading edge.

On resurfacing, rehabilitation, and new construction projects that include new asphalt pavement, the Contractor shall install loops prior to laying the final surface course. On projects with milling and texturing, the Contractor may install the loops prior to or after the milling operation; however, if installed prior to milling, the Contractor shall be responsible for ensuring that the loops are installed at a depth such that the milling operation will not disturb the newly installed loops. The Contractor shall correct damage caused by the milling operations to newly installed loops prior to placement of the final surface course at no additional cost to the Cabinet.

For projects that include the installation of new asphalt and piezoelectric sensors, the Contractor shall mark or otherwise reference all loops installed prior to the final surface course such that the loops can be accurately located when the piezoelectric sensors are installed after placement of the final surface course.

For projects that do not have asphalt surfacing, the Contractor shall install the loops in the surface of the pavement.

The Prime Contractor shall coordinate the installation of loops with the electrical sub-Contractor and the Engineer to ensure correct operation of the completed installation.

The following is a typical step by step procedure for the installation of a loop.

- Carefully mark the slot to be cut, perpendicular to the flow of traffic and centered in the lane.
- Make each saw-cut 3/8-inch wide and at a depth such that the top of the backer rod is a minimum of 2 inches below the surface of rigid (PCC/Concrete) pavement or 4 inches below the surface of asphalt pavement.
- Drill a 1½ inch core hole at each corner and use a chisel to smooth corners to prevent sharp bends in the wire.
- Clean ALL foreign and loose matter out of the slots and drilled cores and within 1 foot on all sides of the slots using a high-pressure washer.
- Completely dry the slots and drilled cores and within 1 foot on all sides of the slots using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
- Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a 1½ inch hole on a 45° angle to the conduit adjacent to the roadway.
- Closely inspect all cuts, cores, and slots for jagged edges or protrusions prior to the placement of the wire. All jagged edges and protrusions shall be ground or re-cut and cleaned again.



- Place the loop wire splice-free from the termination point (cabinet or junction box) to the loop, continue around the loop for four turns, and return to the termination point.
- Push the wire into the saw slot with a blunt object such as a wooden stick. Make sure that the loop wire is pushed fully to the bottom of the saw slot.
- Install conduit sealant to a minimum of 1" deep into the cored 1½ inch hole.
- Apply loop sealant from the bottom up and fully encapsulate the loop wires in the saw slot. The wire should not be able to move when the sealant has set.
- Cover the encapsulated loop wire with a continuous layer of backer rod along the entire loop and home run saw slots such that no voids are present between the loop sealant and backer rod.
- Finish filling the saw cut with non-shrinkable grout per manufacturer's instructions. Alleviate all air pockets and refill low spaces. There shall be no concave portion to the grout in the saw slot. Any excess grout shall be cleaned from the roadway to alleviate tracking.
- Clean up the site and dispose of all waste off the project.
- Ensure that the grout has completely cured prior to subjecting the loop to traffic. Curing time varies with temperature and humidity.

Exceptions to installing loop wire splice-free to the junction box or cabinet may be considered on a case-by-case basis and must be pre-approved by the Engineer. If splices are allowed, they shall be located in a junction box and shall conform to the construction note for Splicing.

If loop lead-in cable (Cable No. 14/1 Pair) is specified, cable shall be installed splice free to the cabinet ensuring that extra cable is left in each junction box or cabinet. All wires and cables shall be labeled in each junction box and cabinet.

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

### **3.14. Loop Test**

When noted on a data collection station layout sheet that there are existing inductive loops within the limits of the project, notify the Engineer in writing, a minimum of 14 calendar days prior to beginning milling operations. After milling and prior to placing asphalt inlay, conduct an operating test on the existing inductance loops at the control cabinet in the presence of the Engineer to determine if the inductance loop conductors have an insulating resistance of a minimum of 100 megohms when tested with a 500-volt direct current potential in a reasonably dry atmosphere between conductors and ground. The Department may also conduct its own tests with its own equipment.

If the tests indicate the loop resistances are above the specified limit and the Engineer determines the system is operable, proceed with the asphalt inlay. If the test indicates the loop resistance is not within the specified limits or if the Engineer determines the system is otherwise not operable, prior to placing the asphalt inlay install and test new loop detectors according to the station layout, notes, and Detail Drawings.

The Engineer will contact and maintain liaison with the District Planning Engineer and the Division of Planning in order to coordinate any necessary work.

### **3.15. Maintain and Control Traffic**

Furnish (all as required): Drums, traffic cones, barricades used for channelization purposes, delineators, and object markers.

Maintain and Control Traffic shall conform to the plans, the Standard Specifications for Road and Bridge Construction, and the KYTC Department of Highways Standard Drawings.

### **3.16. Open Cut Roadway**

Furnish: Concrete, reinforcing bars.

Excavate trench by sawing and chipping away roadway to dimensions as indicated on the detail sheets. After placing conduit, install concrete and steel reinforcing bars per the *Standard Specifications for Road and Bridge Construction*. Restore any disturbed sidewalk to its original condition.

### **3.17. Piezoelectric Sensor**

Furnish: Piezoelectric sensor and cable; sensor support brackets; saw slot sealant; backer rod; grout; conduit sealant.

The plans and notes specify the approximate location for piezoelectric sensor (piezo) installations. Prior to sawing slots or drilling cores, the Contractor shall meet with a representative of the Division of Planning to verify the final layout on site. Avoid expansion joints and pavement sections where potholes, cracks, or other roadway flaws exist. Roadway ruts at the proposed piezo location shall not be in excess of ½ inch under a 4-foot straight edge.

Install the piezo perpendicular to traffic in the final surface course of the pavement. Locate the sensor in the lane as shown on the site layout drawing. Eleven-foot length sensors shall be centered in the lane.

The following is a typical step by step procedure for the installation of a piezo. Refer specifically to the manufacturer's instructions provided with the sensor prior to installation.

- Carefully mark the slot to be cut, perpendicular to the flow of traffic and properly positioned in the lane.

Material, Installation, and Bid Item Notes for  
Permanent Traffic Data Acquisition Stations

Revised January 2023

- It is strongly recommended that a  $\frac{3}{4}$  inch wide diamond blade be used for cutting the slot, or that blades be ganged together to provide a single  $\frac{3}{4}$  inch wide cut. The slot shall be wet cut to minimize damage to the pavement.
- Cut a slot  $\frac{3}{4}$  inch wide ( $\pm 1/16$  inch) by 1 inch minimum deep. The slot should be a minimum of 2 inches longer than the sensor (including the lead attachment). Drop the saw blade an extra  $\frac{1}{2}$  inch down on both ends of the sensor. The lead out of the passive cable should be centered on the slot.
- Cut the slot for the passive cable  $\frac{1}{4}$  inch wide and at a depth so that the top of the backer rod is a minimum of 2 inches below the road surface.
- Clean ALL foreign and loose matter out of the slot and within 1 foot on all sides of the slot using a high-pressure washer.
- Completely dry the slot and within 1 foot on all sides of the slot using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
- Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a  $1\frac{1}{2}$  inch hole on a  $45^\circ$  angle to the conduit adjacent to the roadway.
- Place strips of 2-4-inch-wide tape strips on the pavement along the lengths of both sides of the sensor slot,  $1/8$  inch away from the slot.
- Wear clean, protective latex (or equivalent) gloves at all times when handling sensors. Visually inspect sensor to ensure it is straight. Check lead attachment and passive cable for cuts, gaps, cracks and/or bare wire. Verify that the correct sensor type and length is being installed by checking the data sheet. Verify there is sufficient cable to reach the cabinet. Piezo lead-in cable shall not be spliced.
- Test the sensor for capacitance, dissipation factor and resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within  $\pm 20\%$  of the piezo data sheet. Resistance (using the 20M setting) should be infinite. Record the sensor serial number and the test results and label "pre-installation." This information should be stored in the counter cabinet and/or returned to Department Planning personnel.
- Lay the sensor next to the slot and ensure that it is straight and flat.
- Clean the sensor with steel wool or an emery pad and wipe with alcohol and a clean, lint-free cloth.
- Place the installation bracket clips every 6 inches along the length of the sensor.
- Bend the tip of the sensor downward at a  $30^\circ$  angle. Bend the lead attachment end down at a  $15^\circ$  angle and then  $15^\circ$  back up until level (forming a lazy Z).
- Place the sensor in the slot, with the brass element  $3/8$  inch below the road surface along the entire length. The tip of the sensor should be a minimum of 2 inches from the end of the slot and should not touch the bottom of the slot. The top of the plastic installation bracket clips should be  $1/8$  inch below the surface of the road. The lead attachment should not touch the bottom or sides of the slot. Ensure the sensor ends are pushed down per the manufacturer's instructions.
- Visually inspect the length of the sensor to ensure it is at uniform depth along its length and it is level (not twisted, canted or bent).

- On the passive cable end, block the end of the slot approximately 3-5 inches beyond the end of the lead attachment area creating an adequate “dam” so that the sensor grout does not flow out.
- Use one bucket of sensor grout per piezo installation. Overfill the slot with sensor grout and allow to cure for a minimum of 10 minutes before continuing with the installation. Ensure that sensor grout fills around and beneath the sensor completely and that there is not a trough on top.
- Remove the tape along the sides of the saw slot when the adhesive starts to cure.
- Carefully remove the dam from the end of the sensor.
- Route the lead-in cable through the saw slot
- Install conduit sealant to a minimum of 1” deep into the cored 1½ inch hole.
- Cover the lead-in cable with encapsulant, backer rod, and grout.
- If necessary, after the grout has hardened, grind with an angle grinder until the profile is a 1/16-inch mound. There shall be no concave portion to the mound.
- Clean up the site and dispose of all waste off the project.
- Ensure that the sensor grout has completely cured prior to subjecting the sensor to traffic. Curing time will vary with temperature and humidity.

Upon installation, test the sensor for capacitance, dissipation factor and resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within  $\pm 20\%$  of the piezo data sheet. Resistance (using the 20M setting) should be infinite. Perform a functional test of the piezo with an oscilloscope to ensure that the sensor is generating a proper response to the passage of vehicles.

Record the sensor serial number and the test results and label “post-installation.” This information should be stored in the counter cabinet and/or returned to Department Planning personnel.

### **3.18. Pole – Wooden**

Furnish: Pole; anchoring equipment (as required); hardware (as required).

Excavate and install wood pole to a minimum depth of one-sixth the total pole height. Place backfill material in hole and compact until flush with existing grade. Install guy wire, guy guard, anchor, anchor rod, and strand vise, if necessary. Anchor shall be a minimum of one-third the pole height from the face of the pole. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer.

### **3.19. Removal of Existing Equipment**

The Contractor shall remove existing materials (including but not limited to: poles, anchors, cabinets, junction boxes, conduit and wire) not to be reused. Contractor shall dispose of all removed materials off the project. All materials and labor necessary for the removal of existing equipment shall be considered incidental to other bid items.



### **3.20. Signs**

Furnish: Signs; sign standards; hardware.

Construction of signs shall conform to the *Standard Specifications for Road and Bridge Construction*.

### **3.21. Splicing**

Furnish: Splice kit; solder.

These notes describe the splicing process (if permitted) and are not intended to grant permission to splice. Permission to splice shall be determined by the Division of Planning and the locations shall be shown on the layout sheet. If splicing is needed but not shown on the layout sheet, the Contractor shall receive prior written approval from the Division of Planning.

All splices shall conform to the provisions of the NEC.

Splices for loop and loop lead-in wire shall be twisted and soldered. Abrade the outer jacket of both wires to promote good adhesion and prevent capillary leak paths. Seal the splice with an electrical sealing resin. Spliced loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megohms when tested with a 500-volt direct current potential in a reasonably dry atmosphere between conductors and ground.

For piezos, the same type coax cable, supplied by the manufacturer, shall be used to splice to the sensor's lead-in cable. Cables shall be soldered. Abrade the outer jacket of both cables to promote good adhesion and prevent capillary leak paths. Seal the splice with an electrical sealing resin. Spliced piezo cables shall be tested and have a minimum resistance of 20 megohms, a maximum dissipation factor of 0.03, a capacitance within the manufacturer's recommended range based upon the length of additional cable. A functional test of the piezo shall be performed to ensure that the sensor is generating a proper response to the passage of vehicles.

### **3.22. Trenching and Backfilling**

Furnish: Warning tape; seed mix type I; cereal rye or German foxtail-millet; mulch; concrete (as required); asphalt (as required).

Excavate trench and provide required cover as shown on the standard detail sheets. After placing conduit, backfill material shall be placed and compacted in lifts of 9 inches or less. Install warning tape as shown on the detail sheet. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer.

### **3.23. Wiring**

Furnish: Wire; wire labels; spade tongue wire terminals (as required).

Installation of all wiring shall conform to the NEC. Permanent identification numbers

shall be affixed to all wires in all junction boxes and cabinets (see Layout(s) for loop and piezo numbers).

Additional lengths of each loop and piezo sensor wire shall be neatly coiled in all cabinets and junction boxes as follows:

Enclosure Type	Additional length of each wire
Galvanized Steel Cabinet	2' – 3'
Pad Mount Cabinet (332)	6' - 8'
Pole Mount Cabinet (336)	3' - 4'
Junction Box Type 10x8x4	2' – 3'
Junction Box Type A, B, or C	2' – 3'

**3.24. Wood Post**

Furnish: Wood post; concrete (as required); seed mix type I; cereal rye or German foxtail-millet; mulch.

Excavate hole to specified depth and place concrete, if required. Install post, backfill to existing grade, and tamp backfill. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer.

**3.25. Remove and Replace Sidewalk**

Furnish: Lumber, stakes, nails or screws, and concrete.

Remove existing sidewalk to install rigid conduit from edge of roadway to nearest junction box or cabinet. Form, pour and finish concrete in place of old existing sidewalk making sure to replace the expansion joints in their respective locations. Concrete shall conform to the *Kentucky Standard Specifications for Road and Bridge Construction* for sidewalks.

#### **4. BID ITEM NOTES AND METHOD OF MEASUREMENT FOR PAYMENT**

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

##### **4.1. Bore and Jack Pipe – 2”**

Bore and jack pipe – 2” shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

##### **4.2. Conduit**

Conduit shall include furnishing and installing specified conduit in accordance with the specifications. This item shall include conduit fittings, bodies, boxes, weatherheads, expansion joints, couplings, caps, conduit sealant, electrical tape, clamps, bonding straps and any other necessary hardware. Conduit will be measured in linear feet.

##### **4.3. Electrical Service**

Electrical Service shall include furnishing and installing all necessary materials and payment of all fees toward the complete installation of an electrical service which has passed all required inspections. Incidental to this item shall be furnishing and installing:

- Meter-base per utility company’s specifications
- Service disconnect panel per utility company’s specifications
- Meter base and service disconnect entrance hubs, waterproof
- Service entrance conductors
- Rigid steel conduit
- Rigid steel conduit fittings
- Conduit straps
- Weatherhead
- Duplex GFCI receptacle, 120-volt, 20-amp
- Ground rod with clamp
- Grounding conductor

Also incidental to this item shall be any necessary clearing of right of way for the electrical service drop.

Electrical service will be measured in individual units each.

##### **4.4. Flashing Arrow**

Flashing Arrow shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

##### **4.5. Galvanized Steel Cabinet**

Galvanized Steel Cabinet shall include furnishing and installing galvanized steel cabinet on post as specified. Incidental to this item shall be furnishing and installing grounding hardware, and any necessary post/pole mounting hardware. Also incidental to this item shall be furnishing and installing the required number of terminal blocks and connection of all

sensors to the terminal blocks. Galvanized Steel Cabinet will be measured in individual units each.

#### **4.6. Install Pad Mount Enclosure**

Install Pad Mount Enclosure shall include installing a Department-furnished enclosure as specified on the detail sheets.

This item shall include obtaining the enclosure from KYTC and transporting it to the installation site and furnishing and installing the following:

- Concrete foundation (including any excavation necessary)
- Anchor bolts, lock washers, and nuts
- Conduit
- Conduit fittings (including grounding bushings)
- Weatherhead
- Terminal Strip(s)
- Ground rod with clamp
- Grounding conductor

Install Pad Mount Enclosure will be measured in individual units each.

#### **4.7. Install Controller Cabinet**

Install Controller Cabinet shall include installing a Department-furnished cabinet as specified on the detail sheets.

This item shall include obtaining the cabinet from KYTC and transporting it to the installation site and furnishing and installing the following:

- Conduit
- Conduit Fittings
- Terminal Strip(s)
- Ground rod with clamp
- Grounding conductor

Install Controller Cabinet will be measured in individual units each.

#### **4.8. Junction Box Type 10" x 8" x 4"**

Junction Box Type 10"x8"x4" shall include furnishing and installing specified junction box in accordance with the specifications. This item shall include connectors, splice sleeves, conduit fittings, mounting materials and any other items required to complete the installation. Incidental to this item shall be furnishing and installing specified post (wood, channel, metal, etc.) as required for the installation. Junction Box Type 10"x8"x4" will be measured in individual units each.

#### **4.9. Junction Box Type A, B, or C**

Junction Box Type A, B, or C shall include furnishing and installing specified junction box in accordance with the specifications. This item shall include excavation, furnishing and installing #57 aggregate, backfilling around the box, and restoration of disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be furnishing and installing a



grounding conductor bonding all conduit grounding bushings in the box. Junction Box Type A, B, or C will be measured in individual units each.

#### **4.10. Loop Saw Slot and Fill**

Loop Saw Slot and Fill shall include sawing and cleaning saw slots and furnishing and installing conduit sealant, loop sealant, backer rod, grout, or other specified material. Loop Saw Slot and Fill will be measured in linear feet of sawed slot.

#### **4.11. Maintain and Control Traffic**

Maintain and Control Traffic shall be measured for payment per the *Standard Specifications for Road and Bridge Construction*.

#### **4.12. Open Cut Roadway**

Open Cut Roadway shall include excavating trench (sawing and chipping roadway) to dimensions as indicated on the detail sheets and furnishing and placing concrete, steel reinforcing bars, and asphalt. This item also includes restoring any disturbed sidewalk to its original condition. Open Cut Roadway will be measured in linear feet.

#### **4.13. Piezoelectric Sensor**

Piezoelectric sensor (piezo) shall include sawing and cleaning saw slots and furnishing and installing piezo in accordance with the specifications. This item shall include furnishing and installing lead-in wire, conduit sealant, encapsulation material, backer rod, grout, testing, and accessories. Piezo will be measured in individual units each.

#### **4.14. Pole – 35' Wooden**

Pole – 35' Wooden shall include excavation, furnishing and installing specified wood pole, backfilling and restoring disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be furnishing and installing guy wire, anchor and anchor rod, strand vise, and guy guard, if specified.

Pole – 35' Wooden will be measured in individual units each.

#### **4.15. Signs**

Signs shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

#### **4.16. Trenching and Backfilling**

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

#### **4.17. Wire or Cable**

Wire or cable shall include furnishing and installing specified wire or cable within saw slot, conduit, junction box, cabinet, or overhead as indicated on the detail sheets. Incidental to this item shall be the labeling of all wires and cables in each junction box, cabinet and splice

box, and furnishing and installing other hardware required for installing cable. Wire or Cable will be measured in linear feet.

**4.18. Wood Post**

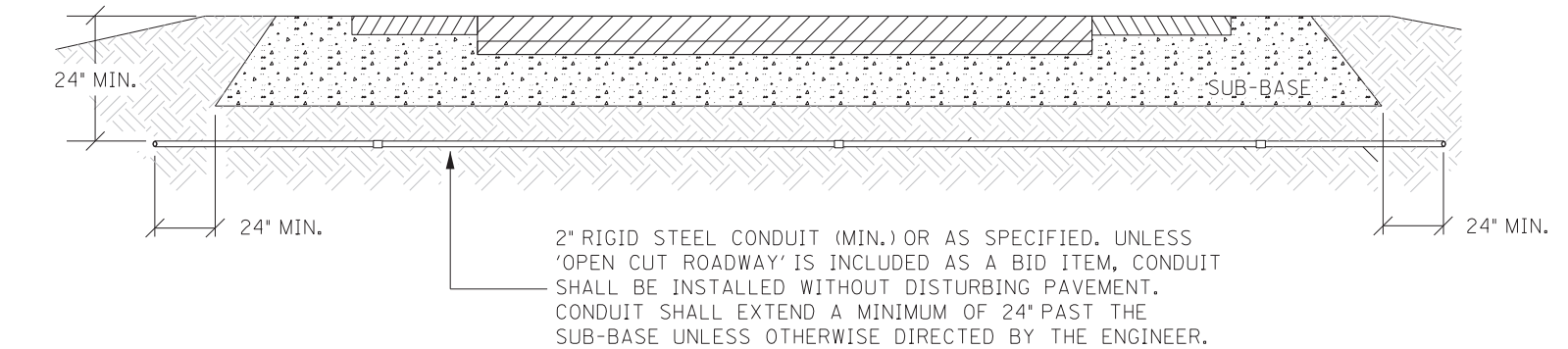
Wood Post shall include furnishing and installing wood post as specified. This item shall include excavation, furnishing and placing concrete (if required), backfilling around the post, and restoration of disturbed areas to the satisfaction of the engineer. Wood Post will be measured in individual units each.

**4.19. Remove and Replace Sidewalk**

Remove and Replace Sidewalk shall include removing existing sidewalk to install conduit and/or junction box (if required) and replacing old existing sidewalk with new sidewalk after installation of required items. This item includes removing old sidewalk and disposing of off the project and forming, pouring and finishing the new sidewalk after installation of required items.

**4.20. Loop Test**

Loop Test includes conducting an operating test on the existing inductance loops at the control cabinet in the presence of the Engineer to determine if the inductance loop conductors have an insulating resistance of a minimum of 100 megohms when tested with a 500-volt direct current potential in a reasonably dry atmosphere between conductors and ground.

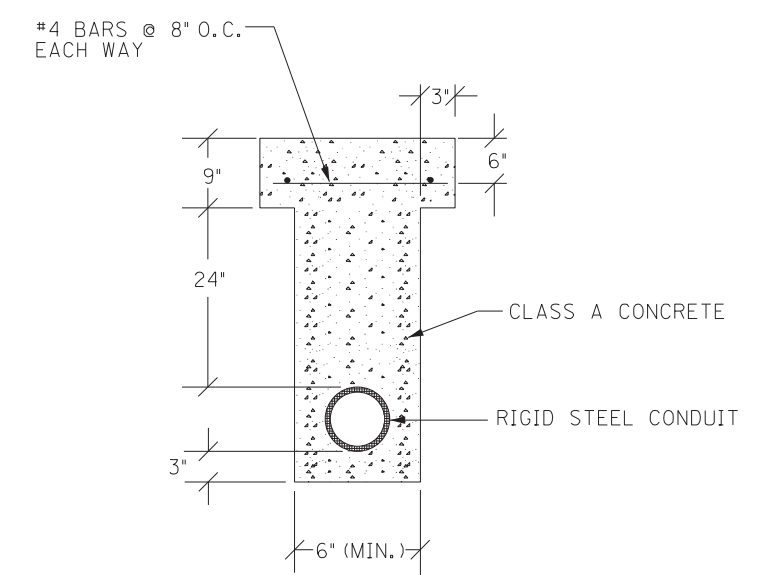
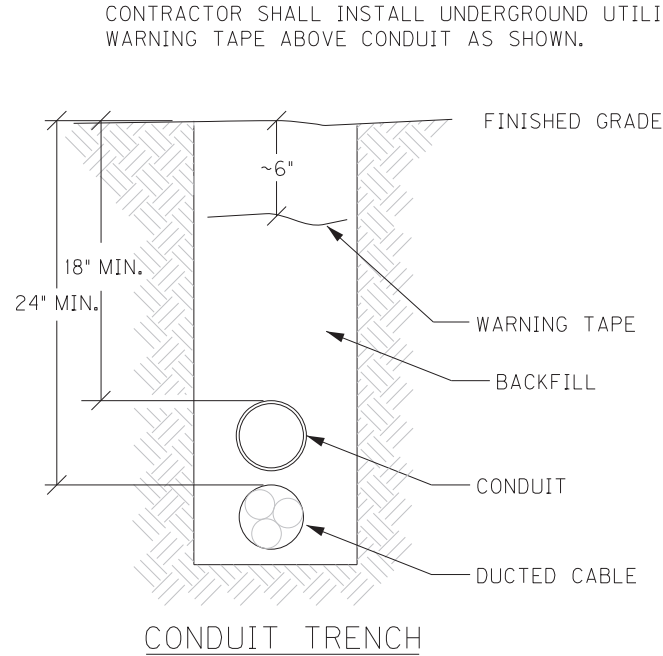


CONDUIT UNDER PAVEMENT

TOTAL TRENCH WIDTH SHALL BE 3" (NOM.) WIDER THAN THE SUM OF THE OUTSIDE DIAMETER(S) OF THE CONDUIT(S) INSTALLED. CONDUIT(S) SHALL BE CENTERED IN TRENCH.

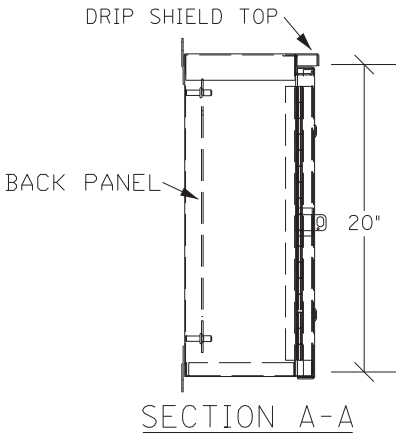
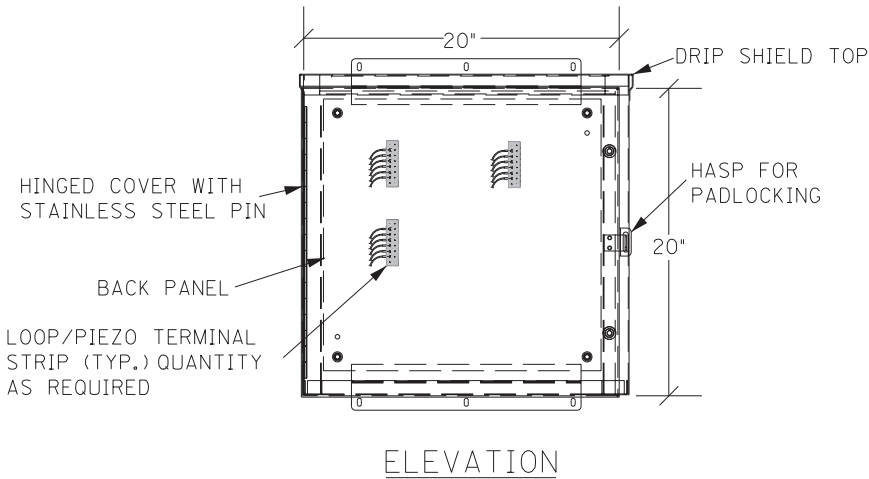
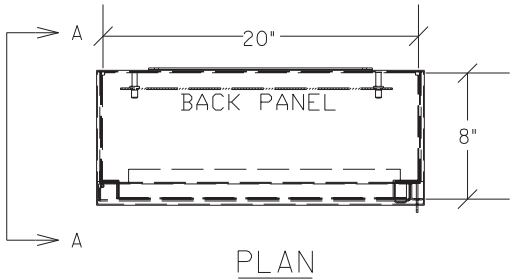
CONTRACTOR SHALL PLACE BACKFILL IN LIFTS (9" MAX.) COMPACT BACKFILL, AND RESTORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER

CONTRACTOR SHALL INSTALL UNDERGROUND UTILITY WARNING TAPE ABOVE CONDUIT AS SHOWN.

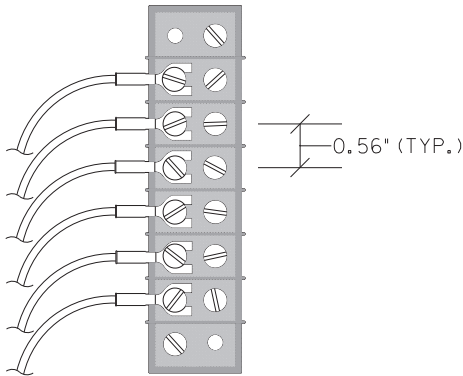
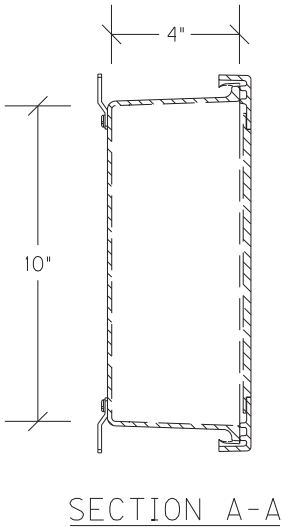
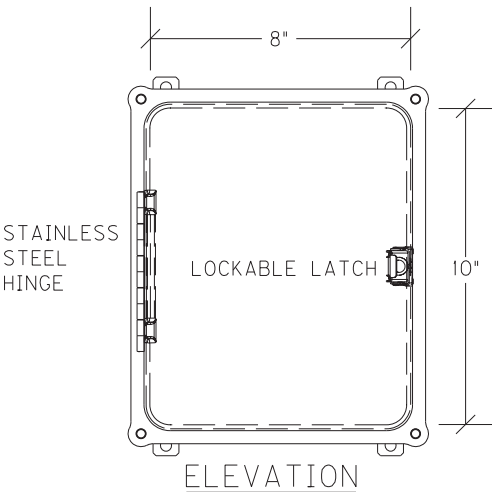
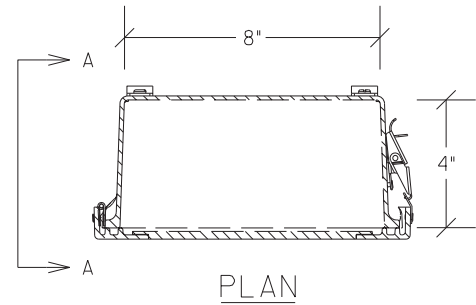


OPEN CUT PAVEMENT DETAIL

CONDUIT INSTALLATION



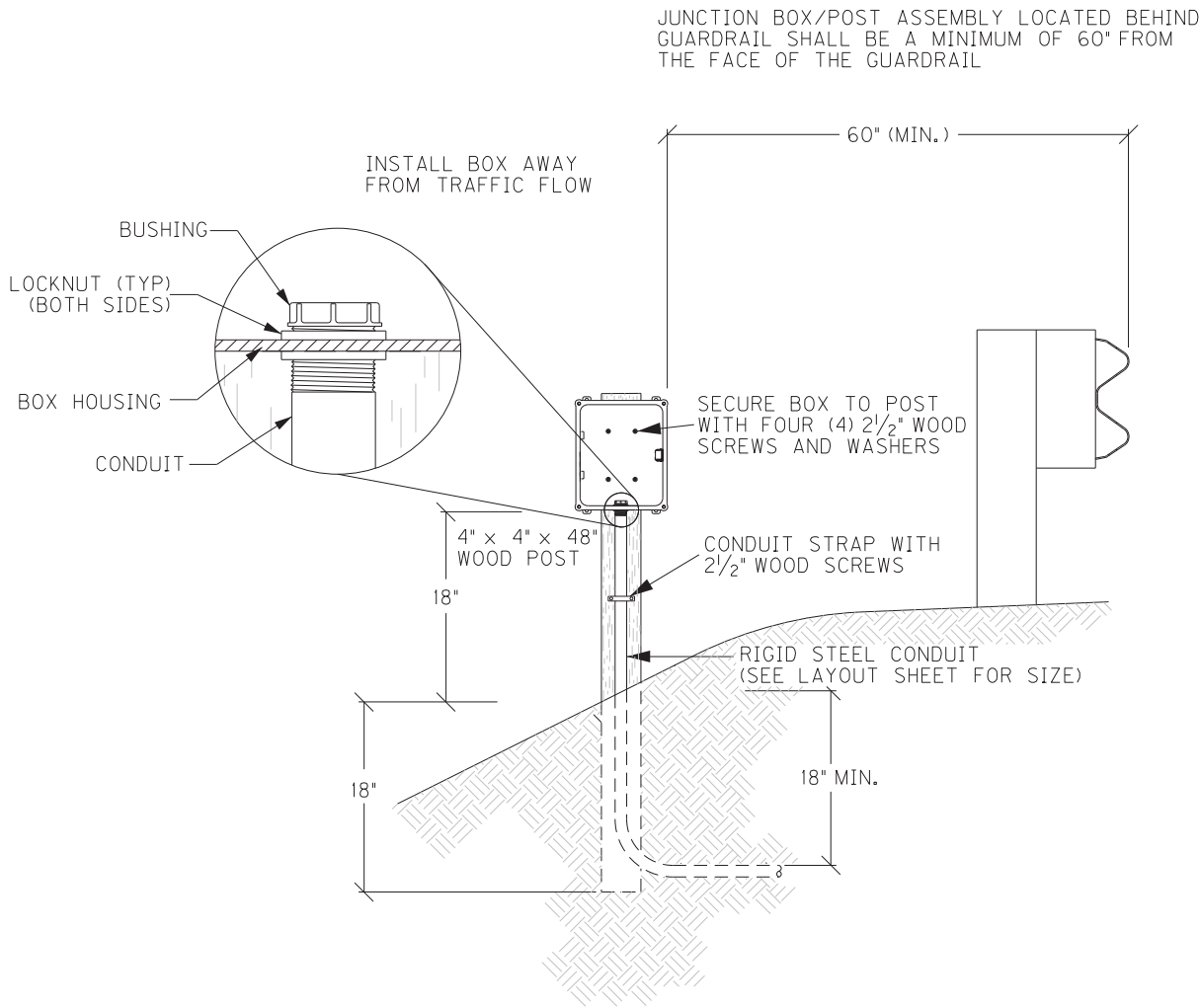
GALVANIZED STEEL CABINET



TERMINAL STRIP (TYP.)

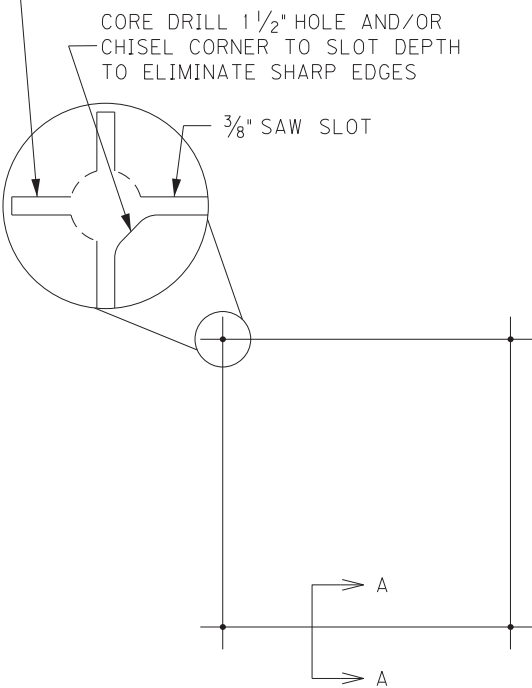
JUNCTION BOX 10"X8"X4"





JUNCTION BOX 10"x8"x4"  
AND POST ASSEMBLY

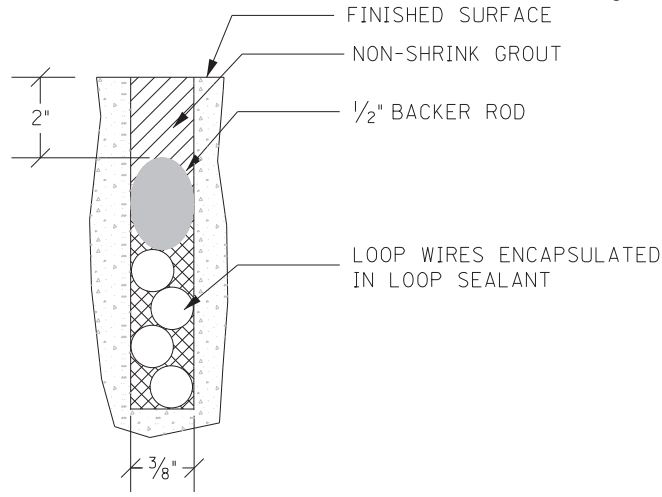
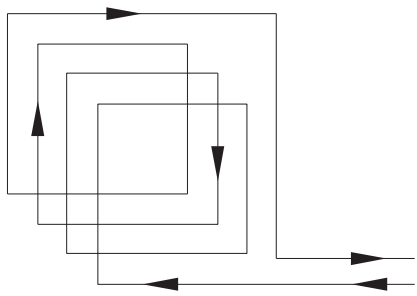
CAMPBELL COUNTY  
STP 8177(004)



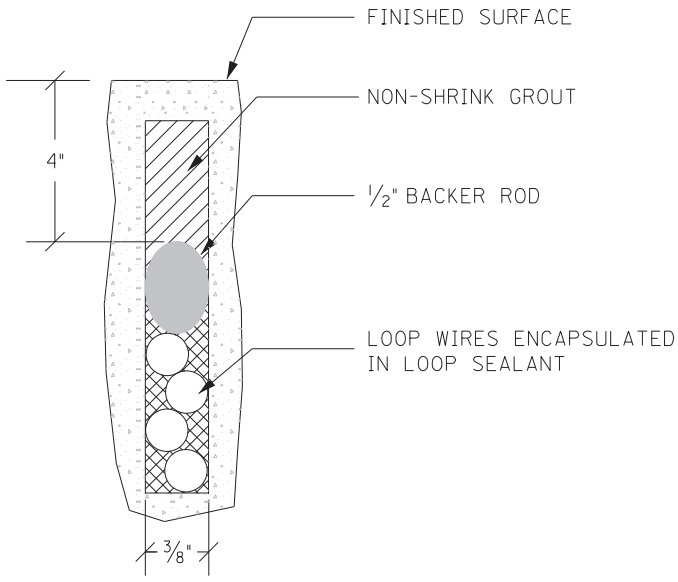
SAW CUT PLAN

UNLESS SPECIFIED OTHERWISE, ALL LOOPS SHALL BE 6' x 6' SQUARE, CENTERED IN EACH LANE, WITH FOUR TURNS OF 14 AWG LOOP WIRE.

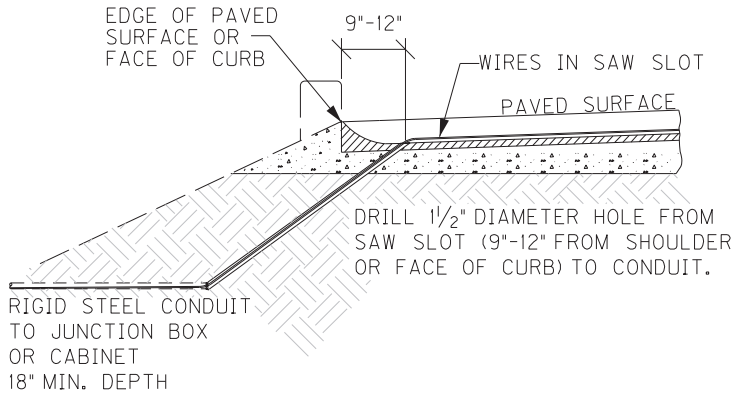
ADJACENT SAW SLOTS SHALL BE A MINIMUM OF 12" APART.



SECTION A-A (CONCRETE)



SECTION A-A (ASPHALT)



SAW SLOT EDGE OF PAVEMENT TRANSITION

INDUCTIVE LOOP DETECTOR

### **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.

### **CSB / DGA BASE**

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

### **CSB / DGA BASE FOR SHOULDERS**

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

### **INCIDENTAL SURFACING**

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

### **FUEL AND ASPHALT PAY ADJUSTMENT**

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

### **ASPHALT PAVEMENT RIDE QUALITY CATEGORY A**

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category B.

### **OPTION A**

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.

## **SPECIAL NOTE FOR STAKING**

### **KY 1892 Pavement Rehabilitation Project Campbell County Item No. 6-20014**

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

1. Contrary to Section 201.03.01, perform items 1 & 2 usually performed by the Engineer.
2. If necessary, and with the approval of the Engineer, the Contractor may be allowed to make adjustments to the roadside grading so the proposed roadside re-grading will remain within the existing Right- of-Way and/or not impact a sensitive obstruction. Ensure positive drainage upon completion of the work.
3. Verify flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
4. 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.
5. Using paint marks on the pavement, and/or any other means approved by the



Engineer, the Contractor shall layout and pre-mark the proposed 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.

6. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
7. Perform any and all other staking operations required to control and construct the work.
8. The intent of this project is to reconstruct the pavement to its existing grade and cross-slope. The Contractor is to use extreme care to ensure that cross slopes of pavements are not altered from the original cross slope of driving lanes. The Engineer reserves the right to direct the Contractor to monitor cross slopes to restore crown in tangent sections, and/or restore original design cross slope in curves. Grade at shoulder in Curb and Gutter areas may be adjusted to match Existing Surface Elevation. The contractor shall survey the gutter line at existing and constructed to ensure preservation of elevations. The survey should take shots at a minimum 50-foot interval at both gutter lines in each direction of travel and where the cross slope changes at turn lanes. The Contractor shall provide the survey information to KYTC District 6 a minimum of 2 (two) weeks prior to beginning construction.

## Special Note for Connected Arrow Panels

### 1. DESCRIPTION

Furnish, install, operate, and maintain connected arrow panels at the locations shown on the plans or designated by the Engineer. Remove and retain possession of arrow panels when they are no longer needed on the project. The connected arrows panels shall be capable of reporting real-time lane closure and location information to the Kentucky Transportation Operations Center as well as for third party GPS vendors (Mapping, Navigation, Connected Vehicles, etc).

### 2. MATERIALS & EQUIPMENT

#### 2.1. General

Conform to the current requirements of the Standard Drawings and the MUTCD. Mount on traffic-worthy carriages that meet all applicable safety standards. Devices shall be compliant with current MASH standards. Use either diesel powered, electric, or solar powered. A portable dynamic message sign may be used to simulate an arrow panel if it meets the requirements in this section. The use of retrofit kits to modify older arrow panel equipment to become “connected” will be allowed as long as they are in compliance with this special note, meet the manufacturer's specifications and recommendations, and are approved by the Engineer.

Materials installed on the project shall be provided by the Contractor in new or like-new condition, shall be corrosion resistant, and in strict accordance with all the details shown within Contractor's Plans approved by KYTC. The Contractor shall maintain an adequate inventory of parts and replacement units to support maintenance and repair of the arrow panels. Pre-deployment is a condition of the system's acceptance and is based on the successful performance demonstration for a (5) day continuous period in accordance with this specification and as set forth in the plans.

#### 2.2. Capabilities and Performance Requirements

**2.2.1. Power System:** The arrow panels power source shall be capable of maintaining power as well as ability to broadcast location and operations data for year-round deployment in a stand-alone state and without intervention.

**2.2.2. Display:** Type C Arrow panels as defined in Part 6 of the MUTCD are required for all applications. The following display requirement shall apply to Connected Arrow Panels:

- Minimum display size shall be 96 inches wide by 48 inches tall.
- Minimum legibility distance is 1 mile.
- Minimum number of elements (or pixels) is 15.
- Elements shall be capable of at least 50% dimming from full brightness. Use dimmed mode for nighttime operation.
- Color presented by elements shall be yellow.

**2.2.3. Operating Modes:** Connected Arrow Panel shall be switched between the following modes in accordance with the contract or as directed by the Engineer:

- Blank – The unit is turned ON, but the display shall be blank and the connected arrow panel shall make transmissions to the data feed.
- Flashing Left/Right Arrow
- Flashing Double Arrow
- Alternating Diamond/Flashing Caution

**2.2.4. GPS and Remote Communications:** The connected arrow panels shall be connected to the cloud and provide a data feed compliant with latest specification of the U.S Department of Transportation Work Zone Data Exchange (WZDx) Device Feed. Furthermore, the real time data program shall be in compliance with “Title 23 of the Code of Federal Regulations (CFR) Chapter 1 Subchapter F Part 511.305-315 (<https://www.ecfr.gov/current/title-23/part-511/subpart-C>).” Arrow panels shall have the ability to receive and transmit the GPS coordinates (latitude and longitude) within a 30-foot diameter of its true location. Arrow panels shall transmit status and location as follows: a). Mode change within 2 minutes. b). Location (if moved more than 500 feet) within 2 minutes. c). Health check every 30 minutes.

Data shall be accessible through a website and the Contractor shall provide a username and password for protection. The website shall be accessible seven (7) days a week and twenty - four (24) hours a day. The website shall provide historical & real-time data in graphical and numerical formats and shall have the capability of being integrated within the Department's Traffic Operations Center (if requested). The website should be compatible to most handheld devices. Data shall be saved on the manufacturer's network for up to (5) years from the deployment date of system and shall be provided at the request of the Department at any time within the (5) year window. The use of the website shall be included within the price of connected arrow panels.

### 3. CONSTRUCTION

The Contractor will be required to perform a trial run with the arrow panels to be utilized for a project at least 1 week prior to being deployed in the presence of the Engineer. The trial run shall go through a series of steps and meet all the following requirements to the satisfaction of the Engineer to ensure the devices are communicating and responding in the provided WZDx Device Feed:

- Make sure device is turned on, with a blank display, and at the start location – Make sure it is blank and the data feed accurately represents this.
- Right Arrow – Turn the arrow panel to right and wait at least 5 minutes, so the data is archived.
- Left Arrow – Turn the arrow panel to left and wait at least 5 minutes, so the data is archived.
- Move 500' – Blank the display. Move the arrow panel at least 500' (try to minimize as much as possible).

- Wait 5 minutes after 1st move – Turn on Right Arrow Display. Wait 5 minutes to see if the location is refined.
- Move 500' again – Blank the display. Move the arrow panel again at least 500' (try to minimize as much as possible).
- Wait 5 minutes after 2nd move – Turn on Left Arrow Display. Wait 5 minutes to see if the location is refined.
- Right Arrow again – Change to right arrow to make sure the device location and information is updated.
- Wait 1 hour (if on roadway wait as long as possible) – Wait 1 hour to see how much the check-in occurs.
- Turn Device Off – Turn the device off and record information.

Once the arrow panels are approved by the Engineer, install them at the beginning of the lane closure taper per plan or as the Engineer directs and ensure the panels operate continuously when deployed on the project. The Contractor shall have available one portable flashing arrow that has been approved in reserve. Place the reserve arrow panel in operation if one is damaged or if there is mechanical or electrical failure. A qualified technician will be responsible to correct any deficiencies in accordance with Section 112.03.15 deemed necessary by the Engineer.

When the connected arrow panel is not displaying the flashing left or right arrow, the display shall be blank and the connected arrow panel shall make transmissions to the data feed. When a connected arrow panel is switched to Flashing Left Arrow mode or Flashing Right Arrow mode, the display shall flash accordingly, and the connected arrow panel shall transmit its location and its current operating mode to the data feed. The Connected Arrow Panels central server shall provide real-time status change alerts to a list of designated personnel via text and/or email. An alert shall be sent each time a device is switched between operating modes (i.e., switched between ON mode and OFF mode; each time a connected arrow panel is switched between blank, flashing left arrow mode, flashing right arrow mode, flashing caution mode), each alert shall include the current operating mode, the previous operating mode, the date and time of the mode switch, and the location (latitude and longitude) of the device at the time of the mode switch.

#### 4. MEASUREMENT

The Department will measure each item below in Months. For partial months the Department will pay in 0.25 increments based on the number of calendar days in the below table.

##### Partial Month Payment Schedule

<u>Days</u>	<u>Increment</u>
0-7 days	0.25
8-14 days	0.50
15-21 days	0.75
22-31 days	1.00



The Department will not measure any costs associated with the required cellular communications (SAT communications will be required, if cellular is not available), all supporting field equipment, website access, and unlimited data reports accessible by the Engineer, but will consider them incidental to this item of work. The Department will not measure the reserved flashing arrows for payment and will consider them incidental to this item of work. The Department will not measure installation, maintenance, or removal for payment and will consider them incidental to this item of work. Always maintain system components in good working condition. Repair or replace damaged or malfunctioning components, at no cost to the Department, as soon as possible and within (12) hours of notification by the Engineer. The quantity to be paid for arrow panels will be the maximum number of arrow panels in use at any one time on the project.

5. PAYMENT

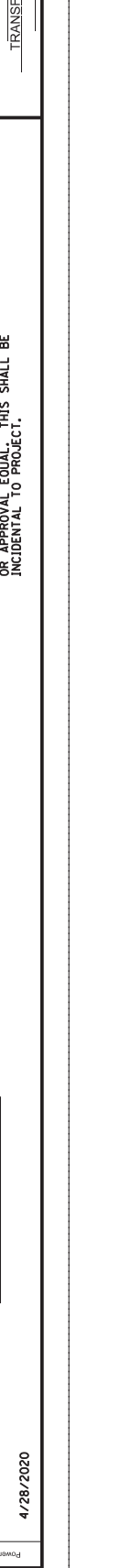
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
26237EC	Connected Arrow Panels	MONTH

STUB OF TRANSFORMER BASE

7/8" SCHEDULE 80 PVC CONDUIT  
(WITH BUSHING) FOR GROUND  
WIRE (EACH BASE) AND SHALL BE

GROUNDING LUG

GROUNDING DETAIL



FOOTINGS & 11.9.007

3. E-SHEET MAINT

FOOTING DETAIL

The diagram shows a cross-section of a foundation. A central circular pole is surrounded by a concrete footing. The footing has a diameter of 6'-0" and a height of 5'-0". The pole has a diameter of 3'-0" and a height of 8'-0". The footing is reinforced with 6-NO. 5 BARS. The pole is reinforced with 3-ANCHOR BOLTS. The footing is also reinforced with 4-ANCHOR BOLTS. The pole is surrounded by 3'-0" SCHEDULE 80 (WITH BUSHINGS) WIRE (EACH BAR A MINIMUM OF 3'-0").

3'-0" SCHEDULE 80 (WITH BUSHINGS) WIRE (EACH BAR A MINIMUM OF 3'-0")

6'-0" 5'-0"

3'-0"

6-NO. 5 BARS

3-ANCHOR BOLTS

4-ANCHOR BOLTS

NO. 3 BARS

ALL POLE BASES SHALL HAVE A MINIMUM OF TWO CONDUITS (NOT INCLUDING GROUND CONDUIT). THE SPARE CONDUIT SHALL BE 180 DEGREE FROM THE CONDUIT FOR THE CONDUCTORS.

## **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 CONCRETE SLURRY**

If diamond grinding, grooving or any other process which produces slurry is required on roadways or bridges, the contractor shall ensure that all concrete slurry associated with these processes is collected, managed, and disposed of appropriately. The waste material shall be disposed of at a permitted disposal facility, in accordance with the Kentucky Standard Specifications for Road and Bridge Construction and the Environmental Performance Standards outlined in 401 KAR 47:030, or managed as a material for beneficial reuse. Any fines or remediation related to improper disposal shall be the sole responsibility of the contractor.

Disposal of concrete slurry will not be paid separately and shall be considered incidental to other bid items.

8/20/2019



Rev 9/2021

**SPECIAL NOTE FOR PAVER MOUNTED TEMPERATURE PROFILES**

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

- 1.0     **DESCRIPTION.** Provide a paver mounted infrared temperature equipment to continually monitor the temperature of the asphalt mat immediately behind all paver(s) during the placement operations for all mainline pavements (including ramps for Interstates and Parkways) within the project limits. Provide thermal profiles that include material temperature and measurement locations.
- 2.0     **MATERIALS AND EQUIPMENT.** In addition to the equipment specified in Subsection 403.02 Utilize a thermal equipment supplier that can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verification, and data management and processing as needed during the Project to maintain equipment within specifications and requirements.

Provide operator settings, user manuals, required viewing/export software for analysis. Ensure the temperature equipment will meet the following:

- (A) A device with one or more infrared sensors that is capable of measuring in at least 1 foot intervals across the paving width, with a minimum width of 12 feet, or extending to the recording limits of the equipment, whichever is greater. A **Maximum of two (2)** brackets are allowed in the influence area under the sensors. A temperature profile must be made on at least 1 foot intervals longitudinally down the road:
- (B) Infrared sensor(s):

(1) Measuring from 32°F to 400°F with an accuracy of ± 2.0% of the sensor reading.
- (C) Ability to measure the following:

(1) The placement distance using a Global Positioning System (GPS) or a Distance Measuring Instrument (DMI) and a Global Positioning System (GPS).

(2) Stationing
- (D) GPS: Accuracy ± 4 feet in the X and Y Direction
- (E) Latest version of software to collect, display, retain and analyze the mat temperature readings during placement. The software must have the ability to create and analyze:

(1) Full collected width of the thermal profiles,

(2) Paver speed and

(3) Paver stops and duration for the entire Project.
- (F) Ability to export data automatically to a remote data server (“the cloud”).

At the preconstruction meeting, provide the Cabinet with rights to allow for web access to the data file location. Access to the data is not to be hindered in any way. The Contractor will provide the Cabinet with any vendor specific software, user id, passwords, etc. needed to access the data through this service, cost of this access is incidental to the thermal profile bid item. The Cabinet is to have access to all data as it is being collected. If a third party is used for collecting and distributing the data the Cabinet is to have the same access rights and time as the Contractor.

This web-based software must also provide the Department with the ability to download the raw files and software and to convert them into the correct format.

- (G) The thermal profile data files must provide the following data in a neat easy to read table format.

(1) Project information including Road Name and Number, PCN, Beginning and Ending MPs.

(2) IR Bar Manufacturer and Model number

(3) Number of Temperature Sensors (N)

(4) Spacing between sensors and height of sensors above the asphalt mat

(5) Total number of individual records taken each day (DATA BLOCK)

- (a) Date and Time reading taken
- (b) Latitude and Longitude
- (c) Distance paver has moved from last test location
- (d) Direction and speed of the paver
- (e) Surface temperature of each of the sensors

**3.0 CONSTRUCTION.** Provide the Engineer with all required documentation at the pre-construction conference.

- (A) Install and operate equipment in accordance with the manufacturer’s specifications.
- (B) Verify that the temperature sensors are within ± 2.0% using an independent temperature device on a material of known temperature. Collect and compare the GPS coordinates from the equipment with an independent measuring device.
  - (1) Ensure the independent survey grade GPS measurement device is calibrated to the correct coordinate system (using a control point), prior to using these coordinates to validate the equipment GPS.
  - (2) The comparison is considered acceptable if the coordinates are within 4 feet of each other in the X and Y direction.
- (C) Collect thermal profiles on all Driving Lanes during the paving operation and transfer the data to the “cloud” network or if automatic data transmission is not available, transfer the data to the Engineer at the end of daily paving.
- (D) Contact the Department immediately when System Failure occurs. Daily Percent Coverage will be considered zero when the repairs are not completed within two (2) working days of System Failure. The start of this two (2) working day period begins the next working day after System Failure.
- (E) Evaluate thermal profile segments, every 150 feet, and summarize the segregation of temperature results. Results are to be labeled as Minimal 0°-25°F, Moderate 25.1°-50°F and Severe >50°. Severe readings over 3 consecutive segments or over 4 or more segments in a day warrant investigation on the cause of the differential temperature distribution.

**4.0 MEASUREMENT.** The Department will measure the total area of the pavement lanes mapped by the infrared scanners. Full payment will be provided for all lanes with greater than 85% coverage. Partial payment will be made for all areas covered from 50% coverage to 85% coverage at the following rate Coverage area percentage X Total bid amount. And area with less than 50% coverage will not be measured for payment.

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

- 1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
- 2. Delays due to GPS satellite reception of signals or equipment breakdowns will not be considered justification for contract modifications or contract extensions.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT

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

Code  
24970EC

Pay Item  
Asphalt Material for Tack Non-Tracking

Pay Unit  
Ton

Revised: May 23, 2022

## **SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) ASPHALT**

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

**1.0 DESCRIPTION.** Incorporate an e-Ticketing Delivery Software for weighed asphalt material delivered to the project to report loads and provide daily running totals of weighed asphalt material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

**2.0 MATERIALS AND EQUIPMENT.** Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor's Load Read-Out scale system at the material source location.
2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.
3. Transmit any updates to the ticket data within 5 minutes of a change.

**3.0 CONSTRUCTION.** Provide the Engineer with the manufacturer's specifications and all required documentation for data access at the pre-construction conference.

### **A. Construction Requirements**

1. Install and operate software in accordance with the manufacturer's specifications.
2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

### **B. Data Deliverables**

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

#### **1. Asphalt Material**

##### **a. Real-time Continuous Data Items**

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC's e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
  - Supplier Name
  - Supplier Address
  - Supplier Phone
  - Plant location
  - Date
  - Time at source
  - Project Location

- Contract ID#
- Carrier Name
- Unique Truck ID
- Description of Material
- Mix Design Number
- Gross, Tare and Net Weight
- Weighmaster

**4.0 MEASUREMENT.** The Department will not measure the electronic delivery management system.

**5.0 PAYMENT.** The Department will not measure this work for payment and will consider all items contained in this note to be incidental to the asphalt mixtures on the project, as applicable.

May 5, 2025

**SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) AGGREGATE**

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

**1.0 DESCRIPTION.** Incorporate an e-Ticketing Delivery Software for weighed aggregate material delivered to the project to report loads and provide daily running totals of weighed aggregate material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

**2.0 MATERIALS AND EQUIPMENT.** Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

- 1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor’s Load Read-Out scale system at the material source location.
- 2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.
- 3. Transmit any updates to the ticket data within 5 minutes of a change.

**3.0 CONSTRUCTION.** Provide the Engineer with the manufacturer’s specifications and all required documentation for data access at the pre-construction conference.

**A. Construction Requirements**

- 1. Install and operate software in accordance with the manufacturer’s specifications.
- 2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

**B. Data Deliverables**

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

**1. Aggregate Material**

**a. Real-time Continuous Data Items**

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC’s e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
  - Supplier Name
  - Supplier Address
  - Supplier Phone
  - Plant location
  - Date
  - Time at source
  - Project Location



- Contract ID#
- Carrier Name
- Unique Truck ID
- Description of Material
- Load Number
- Gross, Tare and Net Weight
- Weighmaster

**4.0 MEASUREMENT.** The Department will measure the electronic delivery management system as a lump sum item.

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

1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
2. Payment will be full compensation for costs related to providing the e-Ticketing Delivery Software, including integration with plant load-out systems, and report viewing/exporting process. All quality control procedures including the software representative’s technical support and on-site training shall be included in the Contract lump sum price.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
26248EC	ELECTRONIC DELIVERY MGMT SYSTEM-AGG	LS

May 5, 2025

## SPECIAL NOTE FOR EXPERIMENTAL KYCT AND FIELD RUT TESTING

June 2025 Update

### 1.0 General

**1.1 Description.** The KYCT (Kentucky Method for Cracking Test) and the IDEAL-RT/IDT-HT test results will help determine if the mixture is susceptible to cracking and rutting. During the experimental phase, data will be gathered and analyzed by the Department to determine the durability and stability of the bituminous mixes. Additionally, the data will help the Department to create future performance-based specifications which will include the KYCT and field rutting test methods.

### 2.0 Equipment

**2.1 KYCT Testing Equipment.** The Department will require a Marshall Test Press with digital recording capabilities. Other CT testing equipment may be used for testing with prior approval by the Department.

**2.2 Water Baths.** One or more water baths will be required that can maintain a temperature of 77° +/- 1.8° F with a digital thermometer showing the water bath temperature. Also, one water bath shall have the ability to suspend gyratory specimen fully submerged in water in accordance with AASHTO T-166, current edition.

**2.3 Field Rutting Tests.** If the contractor elects to perform the IDEAL-RT test, in conformance with ASTM D8360-22, the acquisition of the "Option A" or "Option B" test fixture is required. If the IDT-HT is desired, the test press utilized for the KYTC is sufficient. The Department shall approve all test configurations at their discretion.

**2.4 Gyratory Molds.** Gyratory molds will be required to assist in the production of gyratory specimens in accordance with AASHTO T-312, current edition.

**2.5 Ovens.** Adequate (minimum of two ovens) will be required to accommodate the additional molds and asphalt mixture necessary to perform the acceptance testing as outlined in Section 402 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

**2.6 Department Equipment.** The Department will provide gyratory molds, PINE 850 Test Press with digital recordation, and CT testing equipment to assist during this experimental phase so data can be gathered.

### 3.0 Testing Requirements

**3.1 Acceptance Testing.** Perform all acceptance testing and aggregate gradation as according with Section 402 and Section 403 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

**3.2 KYCT Testing.** Perform crack resistance analysis (KYCT) in accordance with the current Kentucky Method for KYCT Index Testing during the plant production of all surface mixtures. Conform to KYTC Specifications for Mix Design approvals. All production testing is currently informational.

**3.2.1 KYCT Frequency.** Obtain an adequate sample of hot mix asphalt to ensure the acceptance testing, gradation, and KYCT gyratory samples can be fabricated and is representative of the bituminous mixture. Acceptance specimens shall be fabricated first, then after the specified amount of oven conditioning, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens will be required one per subplot produced from the same asphalt material and at the same time as the acceptance specimen is sampled and tested.

**3.2.2 Number of Specimens and Conditioning.** Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, for field specimens, fabricate three replicates for cracking resistance analyses and three replicates for rutting resistance analyses. The specimens shall be compacted at the temperature in accordance with KM 64-411.

Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with KM 64-411.

While the fabricated specimens are allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes, find the bulk specific gravity of each specimen according to AASHTO T166. Next, condition the replicates in a 77 °F water bath for 30 minutes +/- 5 minutes. To ensure confidence and reliability of the test results provided by KYCT testing and Field Rut testing, reheating of the asphalt mixture is prohibited.

**3.2.3 Long Term Aging CT's.** For long-term aging and cracking resistance considerations in mix design, mix and condition 3 specimens uncovered for 20 hours at compaction temperature in accordance with KM 64-411. Perform KYCT testing in accordance with KM 64-450 and record the results on the Long-Term KYCT tab of the latest version of the MixPack.

**3.2.4 Record Times.** For each subplot, record the time required between drying aggregates in the plant to KYCT specimen fabrication. The production time may vary due to the time that the bituminous material is held in the silo. Record the preconditioning time when the time exceeds the one-hour specimen cool down time as required in accordance with The Kentucky Method for KYCT Index Testing. The preconditioning time may exceed an hour if the technician is unable to complete the test on the same day or within the specified times as outlined in The Kentucky Method for KYCT Index Testing. The production time and the preconditioning time shall be recorded on the AMAW.

**3.2.5 File Name.** As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format: "CID\_Approved Mix Number\_Lot Number\_Sublot Number\_Date"

**3.3 Field Rut Testing.** Perform the rut resistance analysis (IDEAL-RT or IDT-HT) in accordance with ASTM D8360-22 or ALDOT458, respectively. Contrary to ASTM D8360 & ALDOT458, precondition the test specimens in a water bath or forced draft oven at 50 °C +/- 1 °C for 60 +/- 5 min before completing the test.

**3.3.1 Field Rut Testing Frequency.** Perform one test per lot of mixture produced. The plant produced bituminous material sampled for the field rut test does not have to be obtained at the same time as the acceptance and KYCT sample. If the field rut test sample is not obtained at the same time as the KYCT sample, determine the Maximum Specific Gravity of the KYCT sample in accordance with AASHTO T-209 coinciding with the test specimens.

**3.3.2 Number of Specimens and Conditioning.** Fabricate in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, for field specimens, fabricate three

replicates for rutting resistance analyses. The specimens shall be compacted at the temperature in accordance with KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with KM 64-411.

**3.3.3 Record Times.** Record the production time as according to section 3.2.3 in this special note. Also record the time that the specimens were fabricated. All times shall be recorded on the AMAW.

**3.3.4 File Name.** Record all field rut data in the latest version of the AMAW.

#### **4.0 Data**

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and field rut testing within five working days once all testing has been completed for a lot to Central Materials Lab and the District Materials Engineer. Also, any data and or comments that the asphalt contractor or district personnel deem informational during this experimental phase, shall also be submitted to the Central Materials Lab and the District Materials Engineer. Any questions or comments regarding any item in this Special Note can be directed to the Central Office, Division of Materials, Asphalt Branch.

#### **5.0 Payment**

Any additional labor and testing equipment that is required to fabricate and test the KYCT and field rut specimens shall be considered incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and field rut specimens if a producer does not possess the proper equipment.

June 12<sup>th</sup>, 2025



## **SPECIAL NOTE FOR RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT**

### **I. GENERAL**

The use of reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) shall be subject to stockpile management and handling of material as described in this section.

The Department approves RAP on a stockpile basis, following the process set forth in this method. The contractor's responsibilities in the process are as follows:

- To obtain the Department's approval of all RAP prior to its use on a Department project and to deliver test data and samples as required
- To monitor and preserve the quality and uniformity of the approved material during storage and handling, adding no unapproved material to the existing stockpile
- To comply with the Department's requirements regarding replenishment of approved stockpiles

The Department will approve RAP based on its composition and variability in gradation and asphalt content, and on visual inspections of the stockpile, which the Department may conduct at its discretion. The Department may withdraw approval of a stockpile if the requirements of this specification are not followed in good faith.

The Maximum Percentage Allowed in a mix design will be based on these criteria and on the category of RAP source, as defined in this document.

### **II. APPROVAL PROCESS**

Qualified asphalt producers (listed in List of Approved Materials-Asphalt Mixing Plants) may submit requests for RAP stockpile approval to the Asphalt Branch, Division of Materials, in the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment. The requester shall provide test results as prescribed in Part IID. The Division of Materials may, at their discretion, collect samples or inspect a RAP stockpile consistent with Section IIE.

Upon completion of the review of testing results and, if applicable, visual inspection, the Division of Materials, Asphalt Branch will approve or disapprove the material by letter and will assign a Stockpile Identification Number for each approved RAP stockpile. Note: The contractor's average gradation and asphalt content, as listed in the approval letter, shall be the gradation used in subsequent mix designs. The approval letter will state the applicable limits on the use of the material in mix designs and will summarize the Department's findings, listing the average gradation and asphalt content from the contractor's tests and the corresponding values found by the Department. Where the Maximum Percentage Allowed is low due to variability, the contractor may elect to improve the uniformity of the material by further processing and may again sample, test, and request approval for the material.

No material shall be added to a stockpile after it has been approved, except as provided in Parts V, VI, and VII below.

#### **IIA. RAP Quality Management Plan**

For a contractor to receive approval to use RAP on any department project, a RAP Quality Management Plan must first be approved by the department. The RAP Quality Management Plan shall be submitted to the

Division of Materials annually for approval as part of the Contractor's Quality Control Plan/Checklist. The Quality Management Plan is required to demonstrate how the Contractor will provide consistency and quality of material utilized in all asphalt mixes produced for use on Department projects. The Quality Management Plan shall include:

- Unprocessed RAP Stockpiles
  - Designation of stockpile(s) as single or multiple source
  - Designation of stockpile(s) as classified or unclassified
  - Designation of stockpile(s) as captive or continuously replenishing
  - Plan for how stockpile(s) is built (layers, slope, etc.)
  - Plan to minimize stockpile(s) contamination
- Processing and Crushing
  - Equipment used to feed screener or crusher
  - Excavation process based on equipment type
- Processing Millings
  - Single Project or Source
    - Screening, Fractionation, or Crushing plan
  - Multiple Source
    - Process to achieve uniform material from stockpile
    - Screening, Fractionation, or Crushing plan
- Processed RAP Stockpiles
  - Minimization of segregation
  - Minimization of moisture

## **IIB. RAP Stockpile Placement**

All processed RAP stockpiles shall be placed on a sloped, paved surface. The requirement for a paved surface may be waived by the Cabinet if the Contractor's RAP Quality Management Plan demonstrates effective material handling that will minimize deleterious material from beneath the processed stockpile entering the plant. *No processed stockpile will be placed directly on grass or dirt.*

## **IIC. Stockpile Identification Signs**

RAP stockpiles shall be identified with posted signs displaying the gradation of material in the stockpile (course, intermediate, or fine). These signs shall be made of weatherproof material and shall be highly visible. Numerals shall be easily readable from outside the stockpile area. If a stockpile exists in two or more parts, each part must have its own sign.

## **IID. Standard Approval Procedure**

The Contractor shall obtain random samples representative of the entire stockpile and shall have each sample tested for gradation and asphalt content according to KM 64-426, KM 64-427, and AASHTO T308. The material samples must be in its final condition after all crushing and screening. At least one sample shall be obtained for each 1,000 tons of processed RAP, with a minimum of five samples per stockpile. Sampling shall be performed according to the method prescribed for asphalt mix aggregates in the Department's Materials Field Testing and Sampling Manual and KM 64-601. The minimum sampling size (after quartering) for tests of RAP samples is 1,500 g. except for samples containing particles more than one inch in diameter, for which the minimum is 2,000 g.

To request approval of a RAP stockpile, submit the following documents to the Division of Materials. It is the requester's responsibility to correctly address, label, and deliver these submittals:

- Submit request for approval at beginning of the paving season as part of the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment.
- If requesting approval after paving season begins, submit memo, including stockpile portion of the inspection list for Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment, to Division of Materials.
- Reports of the tests prescribed above using the Stockpile <INSERT NAME> document.
- A drawing of the plant site showing the location of the stockpile to be approved *and all other stockpiles on the premises*

**Mail, deliver or email the request form**, with test reports and site drawing, to:

Kentucky Transportation Cabinet  
Division of Materials  
ATTN: Asphalt Branch Manager  
1227 Wilkinson Boulevard  
Frankfort, Kentucky 40601  
  
Robert.Semones@ky.gov

**III.E. Tests and inspections by the Department**

The Department shall have the right to observe the collection of samples, or to perform the sampling and testing as a verification of contractor submittal. As a condition of approval, the Department may at any time inspect and sample RAP stockpiles for which approval has been requested and may perform additional quality control tests to determine the consistency and quality of the material.

The approval letter issued by the Department will include any results of verification testing performed by the Cabinet. The approved contractor results should be used by mix design technicians in the design calculations.

**III. RAP STOCKPILE TIERED MANAGEMENT AND EFFECTIVE BINDER CONTENT**

The stockpile management and approval requirements will be tiered based on the maximum cold feed percentages as defined in this section and Table 1. below.

Table 1. Tiered Testing Requirements

Mix Type	0-≤12%	12-≤20%	20-≤35%
Surface	Tier 1	Tier 2	Tier 3
Base	Tier 1	Tier 2	Tier 3

**NOTE: All asphalt mixes and binder selection will be subject to Section 409 of the current Standard Specifications.**

The following requirements will apply based on the percentage of RAP in the mix.

Tier 1

Tier 1 mixes (less than or equal to 12% RAP) will be subject to the requirements of sections IIA, IIB, and IIC.

Tier 2

Tier 2 mixes (12% to less than 20% RAP) will be subject to the requirements of Section II in its entirety and Table 2 requirements.

Tier 3

Tier 3 Asphalt Base mixes with 20% to less than 35% RAP, Tier 3 Asphalt Surface mixes with 20% to less than 30% RAP will be subject to Section II in its entirety and Table 2 requirements.

**IV. MAXIMUM PERCENTAGE OF RAP ALLOWED**

The Maximum Percent of RAP allowed in mix designs shall be the lowest percentage determined by the gradation and asphalt content of the RAP, as established under the criteria below, and requirements listed in Section III.

Limits according to range in gradation and bitumen content

The Maximum Percent of RAP Allowed, based on gradation and asphalt content, shall be determined by the Department using the standard deviation of these values. This standard deviation will be calculated using data provided by the contractor from at least five samples. While the contractor is required to provide the data from these tested samples, the Department retains the discretion to perform its own sampling and testing to support or verify its findings. An apparent outlier shall not be considered in determining these ranges. Where one result appears to be unrepresentative of the whole, two or more additional samples shall be tested. The outlying value of all tests shall then be excluded from the range. The maximum percentage of RAP allowable shall be the lowest percentage determined according to Table 2 below.

**Table 2. Maximum Percent RAP According to Variability in Test Results**

	Standard Deviation as calculated above:		
Surface			
% asphalt content	< 0.4	< 0.5	
% passing No. 200 sieve	< 1.25	< 1.5	
% passing Median Sieve	< 4.0	< 5.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-30%	Tier 2 - 12%-20%	Tier 1 - 0%-12%
Base			
% asphalt content	< 0.5	< 0.75	
% passing No. 200 sieve	< 1.5	< 2.25	
% passing Median sieve	< 5.0	< 7.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-35%	Tier 2 - 12%-20%	Tier 1 - 0%-12%

**NOTE: These allowances notwithstanding, the Contractor is required to maintain the mixture within the Mixture Control Tolerances of Kentucky Method 443.**

The percentage allowable in mix designs shall be limited to meet the design criteria for viscosity established in the Standard Specifications.

## **V. GENERAL STOCKPILE REQUIREMENTS AND REPLENISHMENT**

### **V.A. Single Pavement Source**

**Early approval of material from a single pavement source.** When a new stockpile is to consist entirely of millings removed from a single existing pavement, the stockpile may be approved based on samples taken during the milling and processing operations, prior to completion of milling. The initial stockpile may be approved as either a new stockpile or a new stockpile in continual replenishment status.

For continual replenishment status, samples shall be taken from the processed stockpile after it reaches 1,000 tons. A total of five initial samples, plus one additional sample for every 1,000 tons, is required. As prescribed in Part II above, the contractor shall test all samples and deliver the test results, together with a letter request for approval in Continual Replenishment status, to the address indicated. The stockpile shall be subject to initial approval as prescribed above in Part II. Once approved, it may be replenished without further approvals as provided in Part VII below.

### **V.B. Heterogeneous or contaminated material**

Asphalt pavement millings containing traffic detection loops, raised pavement markers, or other debris must be separated and excluded before stockpiling RAP for approval for use in KYTC asphaltic concrete mixtures.

No material other than RAP from an approved stockpile shall be included in mixtures for State projects. The following materials are specifically excluded:

- Material contaminated with foreign matter such as liquids, soil, concrete, or debris
- Plant waste, especially waste containing abnormal concentrations of bitumen, drum build-up, or material from spills or plant clean-up operations

The following materials shall not be added to or placed in proximity to an approved stockpile but may be accumulated in a separate stockpile and submitted for approval according to Part III:

- Production mixtures returned to the plant for any reason.
- Mis-proportioned mixtures, especially those generated at start-up.

## **VI. REPLENISHMENT OF STOCKPILES**

An approved RAP stockpile may be replenished with Department approval, provided the replenishment material meets all necessary requirements for approval and maintains uniformity in gradation and asphalt content as outlined in this document.

### **VI.A. Procedure and approval criteria**

The procedure for requesting approval of a stockpile replenishment, that is not in continual replenishment status, shall be the same as for approval of an original stockpile, and the material for the replenishment shall meet all criteria for approval as a new stockpile. RAP proposed for replenishment shall be sampled and tested by the Contractor for gradation and asphalt cement as prescribed in Section II above. The Laboratory shall



review these results and provide approval for use in Department asphalt mix designs, according to Table 2 above.

#### **VI.B. Effect of replenishment on existing approved mix designs**

Replenishment of a stockpile may render certain mix designs invalid, depending on the percent RAP allowed in the design and on the difference in average properties between the old and new stockpiles. A replenished stockpile may be used as the RAP ingredient in an existing approved design provided that:

1. The Maximum Percent Allowed for the replenishment stockpile equals or exceeds the percent RAP called for in the mix design. In no case may the Maximum Percent Allowed be exceeded.

However, if a mix design calls for up to 5.0 percent more than the Maximum Percent Allowed for the replenishment, the *design* may be adjusted, with approval, to use the lower percent allowed, provided that the production mixture continues to meet all acceptance criteria. For example, a design which calls for 20 percent RAP may be adjusted and produced with 15 percent if it continues to meet for acceptance.

#### **VII. CONTINUAL REPLENISHMENT WITHOUT RE-APPROVAL**

At the request of the contractor, a previously approved stockpile may be placed in Continual Replenishment Status and may be replenished any number of times without re-approval provided that:

1. Replenishment is within six months of the last stockpile addition.
2. The contractor shall continue to monitor and test the materials added to the stockpile and shall forward these results to the Division of Materials for every 1,000 tons of RAP added to the stockpile.
3. The contractor must certify that replenishment materials are free of contaminants.
4. The Department shall be notified by letter to the Director of the Division of Materials that the stockpile is being replenished on a continual basis.
5. The RAP Maximum Percent Allowed for continual replenishment shall be limited by Sections III and IV.

**Note: Upon request, one 20-pound sample bag of RAP for each Continual Replenishment Stockpile shall be submitted to the Division of Materials for petrographic analysis every 12 months.**

The Department may inspect, sample, and test such stockpiles at its discretion and may, upon determining that the stockpile is unsuitable, withdraw approval of the material and all mix designs which include it. Approval of the stockpile may be withdrawn at any time based upon extreme or erratic ingredient proportions, unsuitable ingredients, or poor performance, as determined by the Division of Materials, Asphalt Branch. The Department will conduct periodic comparison testing on the opposite quarters of samples submitted by the Contractor for special replenishment approval category. The approval of the stockpile may be withdrawn if

erroneous information was found on the contractor's testing and/or improper sampling procedures were involved after a thorough investigation.

### **VIII. DEPLETION OF STOCKPILE AND EXPIRATION OF APPROVAL**

When a stockpile has been fully depleted, the Contractor may replenish it within 24 months after the date of depletion; a depleted stockpile not replenished after 24 months will be removed from the approved list and may not be replenished.

Approval of a stockpile may be withdrawn if, in the finding of the Division of Materials, Asphalt Branch, the total amount of material used in new mixtures equals the total tonnage of the original stockpile plus all approved replenishments. Six years from the original approval of a stockpile or from its most recent replenishment, a stockpile shall be presumed to be depleted, and its approval shall expire. This shall apply to all stockpiles, regardless of status or history of use.

### **IX. RECORDS**

The Contractor shall maintain records at the plant site on all RAP stockpiles. These records shall be available for inspection by representatives of the Department and shall include the following:

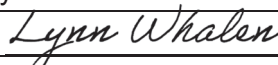

- All test results.
- The Department's approval letter for each stockpile and replenishment, together with the Contractor's requests for approval and all data submitted therewith.
- A current drawing of all stockpile locations at the plant site, including unapproved stockpiles, showing stockpile numbers of all stockpiles approved for State work.

### **X. RELOCATION OF STOCKPILE**

If material from an approved RAP stockpile is to be moved to another location, the contractor shall seek approval from the Department prior to its further use on State projects. A letter request shall be submitted to the Division of Materials indicating the current stockpile location, the total quantity of material to be moved, and the amount, if any, to remain in the current location. The Division of Materials will issue an approval letter applicable to the new location.

June 18, 2025

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

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
6-20014	Campbell	FD52 019 1892 001-003	STP 8177(004)
PROJECT DESCRIPTION			
Remove Concrete Pavement and Replace with Asphalt, bridge web walls, concrete curb and some sidewalk replacements KY-1892 MP 1.429-2.125			
<input checked="" type="checkbox"/> 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.			
<input type="checkbox"/> 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.			
<input type="checkbox"/> 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			
<input type="checkbox"/> 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
Number of Parcels That Have Been Acquired			
Signed Deed			
Condemnation			
Signed ROE			
Notes/ Comments (Text is limited. Use additional sheet if necessary.)			
LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Lynn Whalen
Signature		Signature	
Date		Date	3-26-2025
Right of Way Director		FHWA	
Printed Name		Printed Name	
Signature		Signature	
Date	Digitally signed by Kelly Divine Date: 2025.03.26 15:45:52 -05'00'	Date	

## UTILITIES AND RAIL CERTIFICATION NOTE

**Campbell County**  
**FD52 019 1892 001-003**  
**STP 8177(004)**  
**Mile point: 1.429 TO 2.125**  
**ADDRESS CONDITION OF KY-1892 FROM MILEPOINT 1.429 TO MILEPOINT 2.125**  
**ITEM NUMBER: 06-20014.00**

### PROJECT NOTES ON UTILITIES

For all projects under 2000 Linear feet which require a normal excavation locate request pursuant to KRS 367.4901-4917, the awarded contractor shall field mark the proposed excavation or construction boundaries of the project (also called white lining) using the procedure set forth in KRS 367.4909(9)(k). For all projects over 2000 linear feet, which are defined as a "Large Project" in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

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

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

## UTILITIES AND RAIL CERTIFICATION NOTE

**Campbell County**  
**FD52 019 1892 001-003**  
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**ITEM NUMBER: 06-20014.00**

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.

**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.**

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.



UTILITIES AND RAIL CERTIFICATION NOTE

<div>Campbell County FD52 019 1892 001-003 STP 8177(004)  Mile point: 1.429 TO 2.125 ADDRESS CONDITION OF KY-1892 FROM MILEPOINT 1.429 TO MILEPOINT 2.125 ITEM NUMBER: 06-20014.00</div>
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NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT  
DISTURB LIMITS

- Altafiber – Communications
- Charter Communications Holdings, LLC DBA Spectrum – Communications
- Duke Energy Kentucky (Electric) – Electric
- Duke Energy Kentucky (Gas) – Natural Gas
- Northern Kentucky Water District – Water
- Sanitation District No. 1 – Sewer

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

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES  
WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED  
BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE  
ROAD CONTRACT

Not Applicable

**UTILITIES AND RAIL CERTIFICATION NOTE**

<p><b>Campbell County</b> <b>FD52 019 1892 001-003</b> <b>STP 8177(004)</b></p> <p><b>Mile point: 1.429 TO 2.125</b> <b>ADDRESS CONDITION OF KY-1892 FROM MILEPOINT 1.429 TO MILEPOINT 2.125</b> <b>ITEM NUMBER: 06-20014.00</b></p>
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**THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED  
BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT**

Not Applicable

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

☒ **No Rail Involvement**    ☐ **Rail Involved**    ☐ **Rail Adjacent**

UTILITIES AND RAIL CERTIFICATION NOTE

Campbell County  
FD52 019 1892 001-003  
STP 8177(004)

Mile point: 1.429 TO 2.125

ADDRESS CONDITION OF KY-1892 FROM MILEPOINT 1.429 TO MILEPOINT 2.125

ITEM NUMBER: 06-20014.00

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
Altafiber	221 E. Fourth Street, Cincinnati, OH 45202	Jodi Geiman	(513) 240-6600	jodi.geiman@altafiber.com
Charter Communications Holdings, LLC DBA Spectrum	10920 Kenwood Rd, Blue Ash, OH 45242	Chris Gapinski	(513) 384-1541	chris.gapinski@charter.com
Duke Energy Kentucky (Electric)	2010 Dana Avenue, Cincinnati, OH 45207	Craig Hutchison	(513) 458-3847	Craig.Hutchison@duke-energy.com
Duke Energy Kentucky (Gas)	1262 Cox Avenue, Erlanger, KY 41018	Scott Pfefferman	(513) 315-4593	scott.pfefferman@duke-energy.com
Northern Kentucky Water District	PO Box 18640, Erlanger, KY 41018	Kyle Ryan	(859) 426-2713	kryan@nkywater.org

UTILITIES AND RAIL CERTIFICATION NOTE

<p>Campbell County FD52 019 1892 001-003 STP 8177(004)  Mile point: 1.429 TO 2.125 ADDRESS CONDITION OF KY-1892 FROM MILEPOINT 1.429 TO MILEPOINT 2.125 ITEM NUMBER: 06-20014.00</p>
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Sanitation District No. 1	1045 Eaton Drive, Fort Wright, KY 41017	Coleman Needles	(859) 578-6763	cneedles@sd1.org
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**PART II**

**SPECIFICATIONS AND STANDARD DRAWINGS**



### **STANDARD SPECIFICATIONS**

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 PORTABLE CHANGEABLE MESSAGE SIGNS**

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

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

**2.0 MATERIALS.**

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

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

**2.2 Sign and Controls.** All signs must:

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

- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

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

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

2.3 Power.

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

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

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

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

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

**4.0 MEASUREMENT.** The final quantity of Variable Message Sign will be

11  
the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012

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

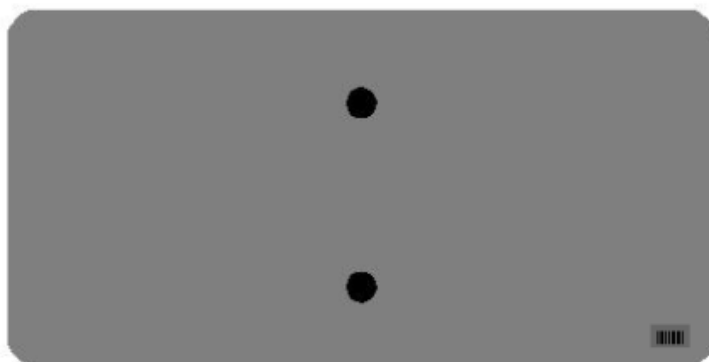
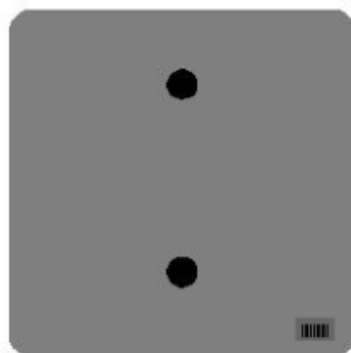
The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment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



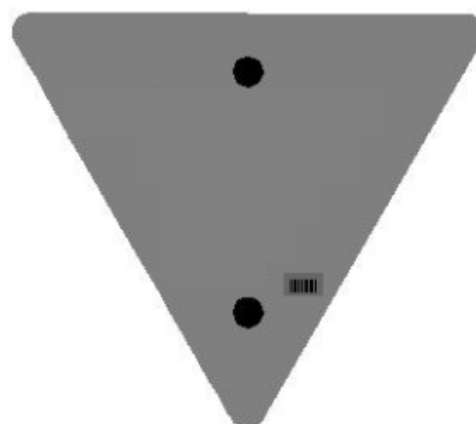
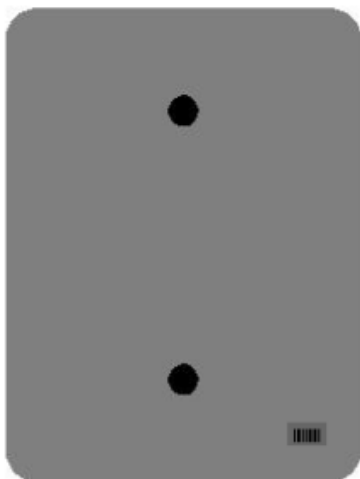
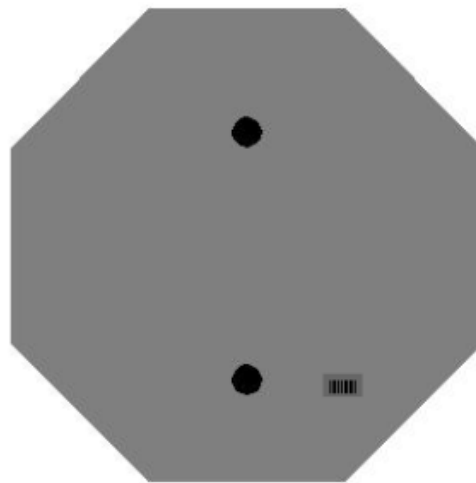
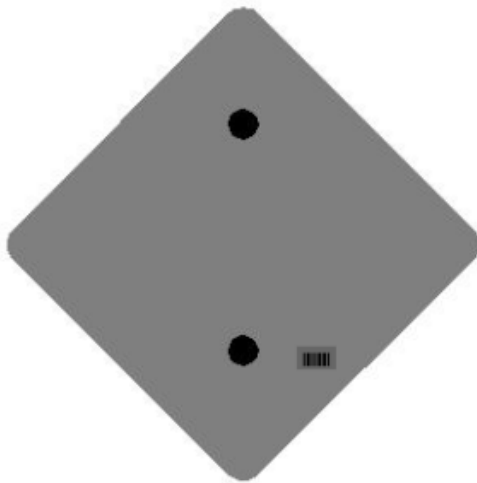
## One Sign Post



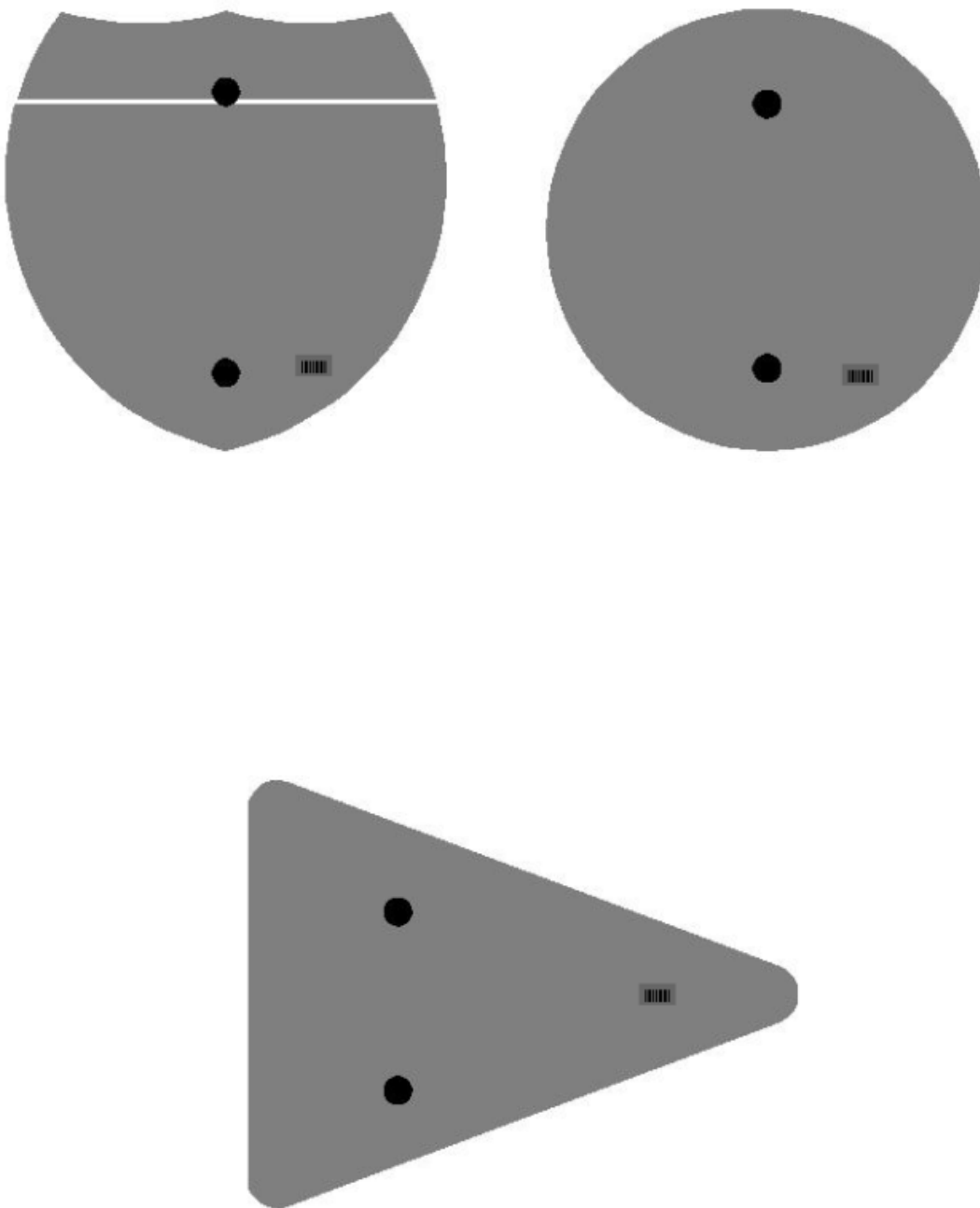
↑  
2" Wide Post



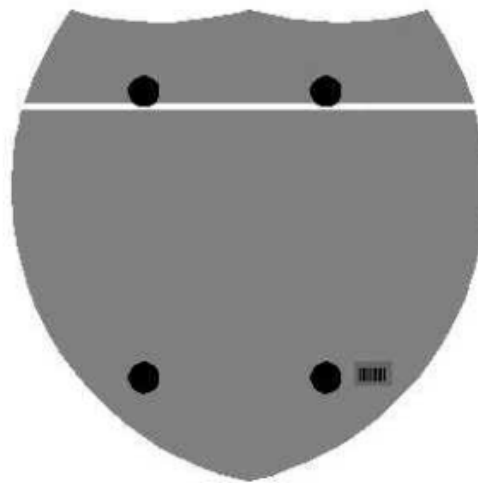
### One Sign Post



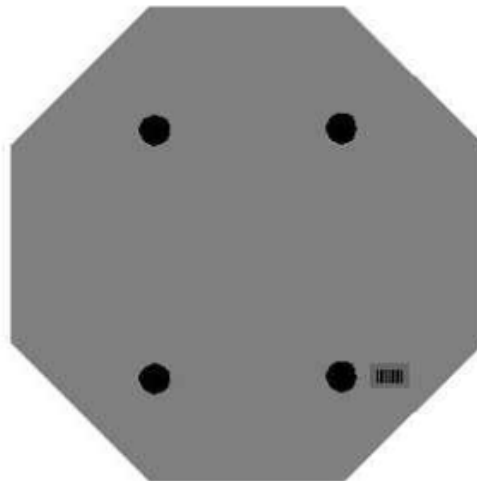
### One Sign Post



## Double Sign Post

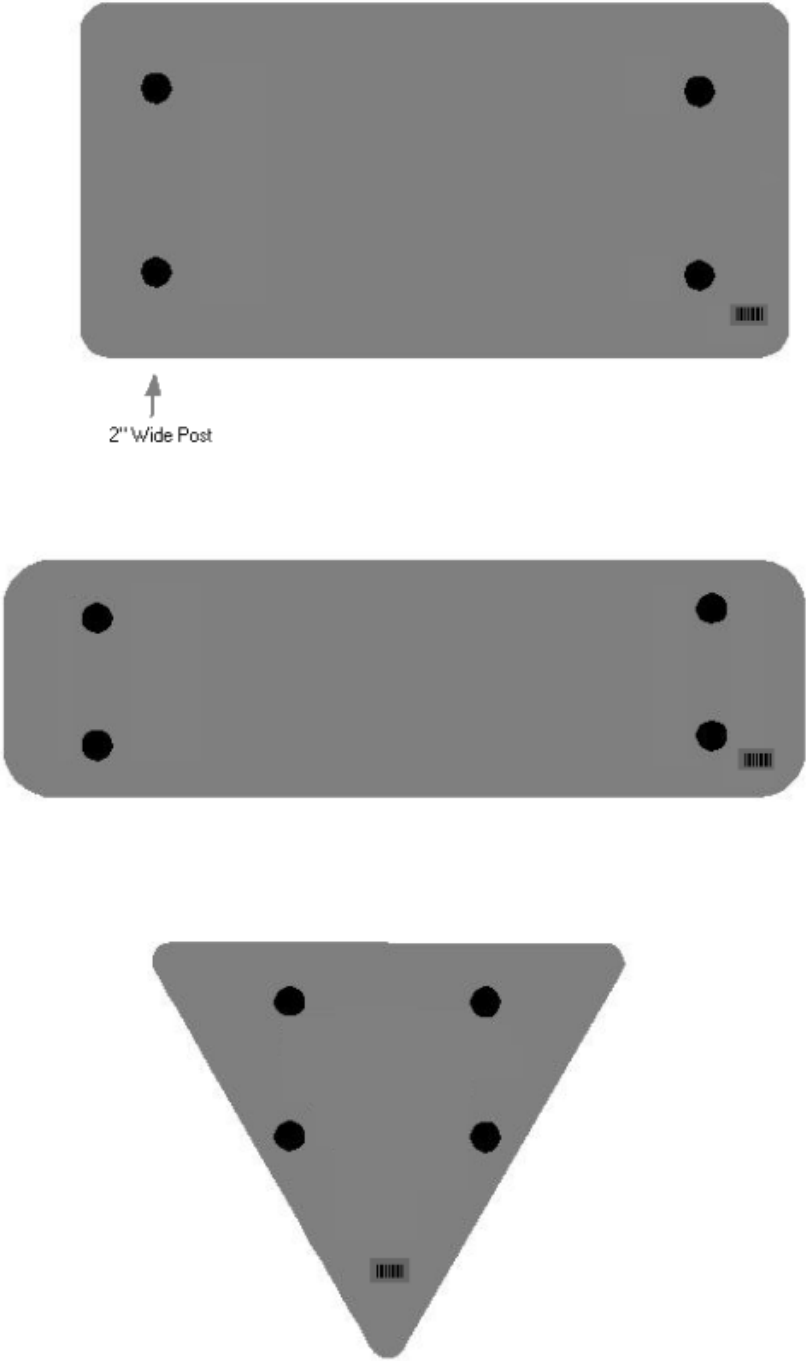


Interstate  
Shield



48" Stop

2 Post Signs





**SPECIAL NOTE FOR LONGITUDINAL PAVEMENT JOINT ADHESIVE**

1. DESCRIPTION. This specification covers the requirements and practices for applying an asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement. Apply the adhesive to the face of longitudinal joint between driving lanes for the first lane paved. Then, place and compact the adjacent lane against the treated face to produce a strong, durable, waterproof longitudinal joint.
2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Joint Adhesive. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide an adhesive conforming to the following requirements:

Property	Specification	Test Procedure
Viscosity, 400 ° F (Pa·s)	4.0 – 10.0	ASTM D 4402
Cone Penetration, 77 ° F	60 – 100	ASTM D 5329
Flow, 140 ° F (mm)	5.0 max.	ASTM D 5329
Resilience, 77 ° F (%)	30 min.	ASTM D 5329
Ductility, 77 ° F (cm)	30.0 min.	ASTM D 113
Ductility, 39 ° F (cm)	30.0 min.	ASTM D 113
Tensile Adhesion, 77 ° F (%)	500 min.	ASTM D 5329, Type II
Softening Point, ° F	171 min.	AASHTO T 53
Asphalt Compatibility	Pass	ASTM D 5329

Ensure the temperature of the pavement joint adhesive is between 380 and 410 °F when the material is extruded in a 0.125-inch-thick band over the entire face of the longitudinal joint.

2.2. Equipment.

2.2.1 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with any needed agitation and recirculating systems.

2.2.2 Applicator System. Provide a pressure-feed-wand applicator system with an applicator shoe attached.

2.3 Personnel. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air.

11N

Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face.

3.2 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40 ° F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the cold joint. Apply the adhesive in a continuous band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Ensure the edge of the extruded adhesive material is flush with the surface of the pavement. Then, place and compact the adjacent lane against the joint face. Remove any excessive material extruded from the joint after compaction (a small line of material may remain).

3.3 Pavement Joint Adhesive Certification. Furnish the joint adhesive's 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 random sample of pavement joint adhesive from each manufacturer's lot of material. Extrude two 5 lb. samples of the heated material and forward the sample to the Division of Materials for testing. Reynolds oven bags, turkey size, placed inside small cardboard boxes or cement cylinder molds have been found suitable. Ensure the product temperature is 400°F or below at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of Pavement Joint Adhesive in linear feet. 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 Pavement Joint Adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the Pavement Joint Adhesive.
5. PAYMENT. The Department will pay for the Pavement Joint Adhesive 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. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

11N

Pavement Joint Adhesive Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Joint Adhesive Referenced in Subsection 2.1.1						
Viscosity, 400 ° F (Pa•s)			3.0-3.4	2.5-2.9	2.0-2.4	≤1.9
ASTM D 3236	4.0-10.0	3.5-10.5	10.6-11.0	11.1-11.5	11.6-12.0	≥ 12.1
Cone Penetration, 77 ° F			54-56	51-53	48-50	≤ 47
ASTM D 5329	60-100	57-103	104-106	107-109	110-112	≥ 113
Flow, 140 ° F (mm) ASTM D 5329	≤ 5.0	≤ 5.5	5.6-6.0	6.1-6.5	6.6-7.0	≥ 7.1
Resilience, 77 ° F (%) ASTM D 5329	≥ 30	≥ 28	26-27	24-25	22-23	≤ 21
Tensile Adhesion, 77 ° F (%) ASTM D 5329	≥ 500	≥ 490	480-489	470-479	460-469	≤ 459
Softening Point, ° F AASHTO T 53	≥ 171	≥ 169	166-168	163-165	160-162	≤ 159
Ductility, 77 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9
Ductility, 39 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9

Code  
20071EC

Pay Item  
Joint Adhesive

Pay Unit  
Linear Foot

May 7, 2014

## **PART III**

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

REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated 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. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

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

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

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) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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.

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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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



**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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).

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, sexual orientation, gender identity, 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 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 or other knowledgeable company official.

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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:**

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient 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 recipient deems appropriate, which may include, but is not limited to:
  - (1) Withholding monthly progress payments;
  - (2) Assessing sanctions;
  - (3) Liquidated damages; and/or
  - (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**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 more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

- (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). 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.

(4) 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 will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

### 3. Records and certified payrolls (29 CFR 5.5)

*a. Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

*(2) Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

*(3) Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must 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.

*(4) Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

*b. Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

*(2) Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker ( e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

*(3) Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 [29 CFR part 3](#); and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

*(4) Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.



(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

**4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 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 [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

**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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* 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.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

**3. Withholding for unpaid wages and liquidated damages**

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

**VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)

- (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. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

**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 Part 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. 23 CFR 635.108.
- 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 Part 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). 29 CFR 1926.10.

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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

**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. 2 CFR 180.220 and 1200.220.

**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. 2 CFR 180.320.
- 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. 2 CFR 180.325.
- 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. 2 CFR 180.345 and 180.350.

- 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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.
- 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. 2 CFR 180.220 and 180.300.
- 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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.
- 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. 2 CFR 180.325.

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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 CFR 180.335;.
  - (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, 2 CFR 180.800;
  - (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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).
  - (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
  - (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

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**3. 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). 2 CFR 180.220 and 1200.220.
- a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.
- 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, Subpart I, 180.900 – 180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.
- 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. 2 CFR 180.220 and 1200.220.
- 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 System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- 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. 2 CFR 180.325.

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**4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

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

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**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 Part 20, App. A.

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.

**XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. 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. 46 CFR 381.7.

2. 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 (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS** (23 CFR 633, Subpart B, Appendix B)  
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

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her 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 one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her 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 to obtain private benefits.

If you have worked for the executive branch of state government within the past year, 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 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

"General Decision Number: KY20250039 04/04/2025

Superseded General Decision Number: KY20240039

State: Kentucky

Construction Type: Highway

Counties: Boone, Campbell, Kenton and Pendleton 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)(1).

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:	<div><div>. Executive Order 14026 generally applies to the contract.</div><div>. The contractor must pay all covered workers at least \$17.75 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 2025.</div></div>
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:	<div><div>. Executive Order 13658 generally applies to the contract.</div><div>. The contractor must pay all covered workers at least \$13.30 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 2025.</div></div>

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 <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	03/07/2025
2	04/04/2025

BRKY0002-005 06/01/2024

	Rates	Fringes
BRICKLAYER.....	\$ 35.00	17.13

BROH0001-005 06/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 29.57	14.75

CARP0698-001 05/01/2023

BOONE, CAMPBELL, KENTON & PENDLETON COUNTIES:

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 33.28	20.56
Diver.....	\$ 49.92	20.56

ELEC0212-007 06/05/2024

	Rates	Fringes
ELECTRICIAN.....	\$ 35.43	22.05

ELEC0212-013 11/27/2023

	Rates	Fringes
Sound & Communication Technician.....	\$ 27.20	14.54

ENGI0018-013 05/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 44.14	16.41
GROUP 2.....	\$ 44.02	16.41
GROUP 3.....	\$ 42.98	16.41
GROUP 4.....	\$ 41.80	16.41
GROUP 5.....	\$ 36.34	16.41
GROUP 6.....	\$ 45.14	16.41
GROUP 7.....	\$ 45.14	16.41

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating

Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; & Wheel Excavator

GROUP 2 - Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Hydro Milling Machine; Horizontal Directional Drill (over 500,000 ft. lbs. thrust); Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications); Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); & Vermeer type Concrete Saw

GROUP 3 - A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); & Welding Machines

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

GROUP 5 - Compressor (Portable, Sewer, Heavy & Highway); Drum Fireperson (Asphalt); Generator; Masonry Fork Lift; Inboard-Outboard Motor Boat Launch; Masonry Fork Lift; Oil Heater (asphalt plant); Oiler; Power Driven Heater; Power Sweeper & Scrubber; Pump (under 4" discharge); Signalperson; Tire Repairperson; & VAC/ALLS



GROUP 6 - Master Mechanic & Boom from 150 to 180

GROUP 7 - Boom from 180 and over

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\* IRON0044-008 06/01/2024

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 33.60	23.60
Structural.....	\$ 35.37	23.60

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\* IRON0044-018 06/01/2024

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 35.37	23.60

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LAB00189-004 07/01/2024

PENDLETON COUNTY:

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 23.96	18.58
GROUP 2.....	\$ 24.21	18.58
GROUP 3.....	\$ 24.26	18.58
GROUP 4.....	\$ 24.86	18.58

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 Driller (All Types); Powderman & Blaster;  
Troxler & Concrete Tester if Laborer is Utilized

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LAB00265-009 05/01/2024

BOONE, CAMPBELL & KENTON COUNTIES:

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 35.52	14.45
GROUP 2.....	\$ 35.69	14.45
GROUP 3.....	\$ 36.02	14.45
GROUP 4.....	\$ 36.47	14.45

LABORER CLASSIFICATIONS

GROUP 1 - Asphalt Laborer; Carpenter Tender; Concrete Curing  
Applicator; Dump Man (Batch Truck); Guardrail and Fence  
Installer; Joint Setter; Laborer (Construction); Landscape  
Laborer; Highway Lighting Worker; Signalization Worker;  
Mesh Handlers & Placer; Right-of-way Laborer; Riprap  
Laborer & Grouter; Scaffold Erector; Seal Coating; Surface  
Treatment or Road Mix Laborer; Sign Installer; Slurry Seal;  
Utility Man; Bridge Man; Handyman; Waterproofing Laborer;  
Flagperson; Hazardous Waste (level D); Diver Tender; Zone  
Person & Traffic Control

GROUP 2 - Skid Steer; Asphalt Raker; Concrete Puddler; Kettle  
Man (Pipeline); Machine Driven Tools (Gas, Electric, Air);  
Mason Tender; Brick Paver; Mortar Mixer; Power Buggy or  
Power Wheelbarrow; Sheeting & Shoring Man; Surface Grinder  
Man; Plastic Fusing Machine Operator; Pug Mill Operator; &  
Vacuum Devices (wet or dry); Rodding Machine Operator;  
Diver; Screwman or Paver; Screed Person; Water Blast, Hand  
Held Wand; Pumps 4" & Under (Gas, Air or Electric) &  
Hazardous Waste (level C); Air Track and Wagon Drill;  
Bottom Person; Cofferdam (below 25 ft. deep); Concrete Saw  
Person; Cutting with Burning Torch; Form Setter; Hand  
Spiker (Railroad); Pipelayer; Tunnel Laborer (without air)  
& Caisson; Underground Person (working in Sewer and  
Waterline, Cleaning, Repairing & Reconditioning);  
Sandblaster Nozzle Person; & Hazardous Waste (level B)

GROUP 3 - Blaster; Mucker; Powder Person; Top Lander;  
Wrencher (Mechanical Joints & Utility Pipeline); Yarnier;  
Hazardous Waste (level A); Concrete Specialist; Concrete  
Crew in Tunnels (With Air-pressurized - \$1.00 premium);  
Curb Setter & Cutter; Grade Checker; Utility Pipeline  
Tapper; Waterline; and Caulker

GROUP 4 - Miner; & Gunitite Nozzle Person

TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE

SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID  
THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS  
SIGNALING.

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PAIN0012-016 05/01/2015

	Rates	Fringes
PAINTER		
Bridge.....	\$ 24.39	9.06
Bridge Equipment Tender and Containment Builder.....	\$ 20.73	9.06
Brush & Roller.....	\$ 23.39	9.06
Sandblasting & Water Blasting.....	\$ 24.14	9.06
Spray.....	\$ 23.89	9.06
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PLUM0392-008 06/01/2024		

	Rates	Fringes
PLUMBER.....	\$ 40.70	26.75
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* SUKY2010-161 02/05/1996		

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 15.85 **	4.60
GROUP 2.....	\$ 16.29 **	4.60

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Driver

GROUP 2 - Euclid Wagon; End Dump; Lowboy; Heavy Duty  
Equipment; Tractor-Trailer Combination; & Drag

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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\*\* Workers in this classification may be entitled to a higher  
minimum wage under Executive Order 14026 (\$17.75) or 13658  
(\$13.30). Please see the Note at the top of the wage  
determination for more information. Please also note that the  
minimum wage requirements of Executive Order 14026 are not  
currently being enforced as to any contract or subcontract to  
which the states of Texas, Louisiana, or Mississippi, including  
their agencies, are a party.

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) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007

6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to [BCWD-Office@dol.gov](mailto:BCWD-Office@dol.gov) or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail 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 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.

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END OF GENERAL DECISION"

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

**PART IV**

**BID ITEMS**

251017

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	10,257.00	TON		\$	
0020	00005		GEOGRID REINFORCEMENT FOR SUBGRADE	25,484.00	SQYD		\$	
0030	00190		LEVELING & WEDGING PG64-22	10.00	TON		\$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	5,692.00	TON		\$	
0050	00216		CL3 ASPH BASE 1.00D PG76-22	5,612.00	TON		\$	
0060	00387		CL3 ASPH SURF 0.38B PG76-22	2,127.00	TON		\$	
0070	02091		REMOVE PAVEMENT	26,843.00	SQYD		\$	
0080	02602		FABRIC-GEOTEXTILE CLASS 1	25,484.00	SQYD		\$	
0090	20071EC		JOINT ADHESIVE	9,476.00	LF		\$	
0100	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	651,339.00	SF		\$	
0110	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	17.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0120	00078		CRUSHED AGGREGATE SIZE NO 2	1,000.00	TON		\$	
0130	01791		ADJUST MANHOLE FRAME TO GRADE	5.00	EACH		\$	
0140	01792		ADJUST MANHOLE	1.00	EACH		\$	
0150	01811		STANDARD CURB AND GUTTER MOD	10,198.00	LF		\$	
0160	01923		STANDARD BARRIER MEDIAN TYPE 5	323.00	SQYD		\$	
0170	02014		BARRICADE-TYPE III	9.00	EACH		\$	
0180	02159		TEMP DITCH	300.00	LF		\$	
0190	02160		CLEAN TEMP DITCH	150.00	LF		\$	
0200	02200		ROADWAY EXCAVATION	6,315.00	CUYD		\$	
0210	02237		DITCHING	272.00	LF		\$	
0220	02242		WATER	139.00	MGAL		\$	
0230	02562		TEMPORARY SIGNS	750.00	SQFT		\$	
0240	02585		EDGE KEY	226.00	LF		\$	
0250	02604		FABRIC-GEOTEXTILE CLASS 1A	1,449.00	SQYD		\$	
0260	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0270	02671		PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH		\$	
0280	02701		TEMP SILT FENCE	300.00	LF		\$	
0290	02704		SILT TRAP TYPE B	1.00	EACH		\$	
0300	02705		SILT TRAP TYPE C	17.00	EACH		\$	
0310	02707		CLEAN SILT TRAP TYPE B	1.00	EACH		\$	
0320	02708		CLEAN SILT TRAP TYPE C	17.00	EACH		\$	
0330	02720		SIDEWALK-4 IN CONCRETE	512.00	SQYD		\$	
0340	02721		REMOVE CONCRETE SIDEWALK	235.00	SQYD		\$	
0350	02726		STAKING	1.00	LS		\$	
0360	03225		TUBULAR MARKERS	99.00	EACH		\$	
0370	05950		EROSION CONTROL BLANKET	242.00	SQYD		\$	
0380	05952		TEMP MULCH	1,557.00	SQYD		\$	

Report Date 7/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0390	05953		TEMP SEEDING AND PROTECTION	1,162.00	SQYD		\$	
0400	05963		INITIAL FERTILIZER	0.10	TON		\$	
0410	05964		MAINTENANCE FERTILIZER	1.40	TON		\$	
0420	05985		SEEDING AND PROTECTION	2,323.00	SQYD		\$	
0430	05992		AGRICULTURAL LIMESTONE	1.40	TON		\$	
0440	05997		TOPSOIL FURNISHED AND PLACED	378.00	CUYD		\$	
0450	06510		PAVE STRIPING-TEMP PAINT-4 IN	16,106.00	LF		\$	
0460	06511		PAVE STRIPING-TEMP PAINT-6 IN	224.00	LF		\$	
0470	06542		PAVE STRIPING-THERMO-6 IN W	9,061.00	LF		\$	
0480	06543		PAVE STRIPING-THERMO-6 IN Y	7,045.00	LF		\$	
0490	06546		PAVE STRIPING-THERMO-12 IN W	224.00	LF		\$	
0500	06550		PAVE STRIPING-TEMP REM TAPE-W	6,753.00	LF		\$	
0510	06551		PAVE STRIPING-TEMP REM TAPE-Y	11,471.00	LF		\$	
0520	06568		PAVE MARKING-THERMO STOP BAR-24IN	242.00	LF		\$	
0530	06574		PAVE MARKING-THERMO CURV ARROW	9.00	EACH		\$	
0540	06613		INLAID PAVEMENT MARKER-B W/R	92.00	EACH		\$	
0550	06614		INLAID PAVEMENT MARKER-B Y/R	85.00	EACH		\$	
0560	10020NS		FUEL ADJUSTMENT	24,956.00	DOLL	\$1.00	\$	\$24,956.00
0570	10030NS		ASPHALT ADJUSTMENT	52,510.00	DOLL	\$1.00	\$	\$52,510.00
0580	20099ES842		PAVE MARK TEMP PAINT STOP BAR	242.00	LF		\$	
0590	20100ES842		PAVE MARK TEMP PAINT LINE ARROW	9.00	EACH		\$	
0600	20512NS724		RED MAPLE	3.00	EACH		\$	
0610	20550ND		SAWCUT PAVEMENT	180.00	LF		\$	
0620	21289ED		LONGITUDINAL EDGE KEY	1,554.00	LF		\$	
0630	21659NN		RELOCATE SIGNAL HEAD	20.00	EACH		\$	
0640	23158ES505		DETECTABLE WARNINGS	90.00	SQFT		\$	
0650	23319EC		HARDWOOD MULCH	720.00	SQYD		\$	
0660	23835EC		STANDARD BARRIER MEDIAN TY 5-MOD	402.00	SQYD		\$	
0670	23839EC		REMOVE CONCRETE MEDIAN	423.00	SQYD		\$	
0680	24631EC		BARCODE SIGN INVENTORY	1.00	EACH		\$	
0690	26119EC		INSTALL RADAR PRESENCE DETECTOR TYPE A	11.00	EACH		\$	
0700	26237EC		CONNECTED ARROW PANEL	3.00	MONT		\$	
0710	26248EC		ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0720	01000		PERFORATED PIPE-4 IN	5,550.00	LF		\$	
0730	01001		PERFORATED PIPE-6 IN	2,159.00	LF		\$	
0740	01010		NON-PERFORATED PIPE-4 IN	160.00	LF		\$	
0750	01011		NON-PERFORATED PIPE-6 IN	30.00	LF		\$	
0760	01456		CURB BOX INLET TYPE A	4.00	EACH		\$	
0770	01740		CORED HOLE DRAINAGE BOX CON-4 IN	16.00	EACH		\$	
0780	01741		CORED HOLE DRAINAGE BOX CON-6 IN	3.00	EACH		\$	

Section: 0004 BRIDGE WEB WALLS



Report Date 7/1/25

Section: 0004 - BRIDGE- WEB WALLS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0790	08100		CONCRETE-CLASS A	179.40	CUYD		\$	
0800	08150		STEEL REINFORCEMENT	7,896.00	LB		\$	
0810	23378EC		CONCRETE SEALING	3,088.00	SQFT		\$	

Section: 0005 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0820	06407		SBM ALUM SHEET SIGNS .125 IN	20.00	SQFT		\$	
0830	06410		STEEL POST TYPE 1	17.00	LF		\$	

Section: 0006 - TRAFFIC LOOPS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0840	04793		CONDUIT-1 1/4 IN	40.00	LF		\$	
0850	04820		TRENCHING AND BACKFILLING	32.00	LF		\$	
0860	04830		LOOP WIRE	1,490.00	LF		\$	
0870	04895		LOOP SAW SLOT AND FILL	320.00	LF		\$	
0880	20360ES818		WOOD POST	2.00	EACH		\$	
0890	20468EC		ELECTRICAL JUNCTION BOX-10 X 8 X 4	2.00	EACH		\$	

Section: 0007 - MOBILIZATION AND/OR DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0900	02568		MOBILIZATION	1.00	LS		\$	
0910	02569		DEMOBILIZATION	1.00	LS		\$	