CALL NO. 201

CONTRACT ID. 234100

PIKE COUNTY

FED/STATE PROJECT NUMBER 098GR23T001 HSIP & FD05

DESCRIPTION VARIOUS PROJECTS IN DISTRICT 12

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 10/31/2023

LETTING DATE: January 26,2023

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME January 26,2023. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 16%

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

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SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 12

CONTRACT ID - 234100

098GR23T001 HSIP & FD05

COUNTY - PIKE

PCN - 120981972301
HSIP 5344 (009)

ELKHORN CREEK ROAD (KY 197) (MP 6.729) FROM THE INTERSECTION OF KY 197 AND BARTLEYTOWN ROAD EXTENDING EAST TO THE INTERSECTION OF KY 197 AND POND BRANCH ROAD (MP 15.237), A DISTANCE OF 08.51 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 12-09008.00.

GEOGRAPHIC COORDINATES LATITUDE 37:15:58.10 LONGITUDE 82:26:02.10

ADT 1,968

PCN - MP09801972201
FD05 098 0197 004-011

ELKHORN CREEK ROAD (KY 197) (MP 4.210) BEGINNING AT UPPER PIGEON BRANCH EXTENDING EAST TO HURRICANE CREEK. (MP 10.454), A DISTANCE OF 06.24 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 37:15:09.00 LONGITUDE 82:28:56.00

ADT 1,180

COMPLETION DATE(S):

COMPLETED BY 10/31/2023 APPLIES TO ENTIRE PROJECT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

BUILD AMERICA, BUY AMERICA ACT (BABA)

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117-58, includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§70901-52. The Act strengthens the Buy America preference to include "construction materials." The current temporary waiver for **"construction materials"** will expire on November 10, 2022.

The Act will apply to construction materials as outlined in the guidance issued in OMB M-22-11.

Construction Materials – Includes an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives – that is or consists primarily of:

- Non-ferrous metals
- Plastic/polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Lumber; or
- Drywall.

Construction Materials only applies to items, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project.

Construction Materials does not apply to tools, equipment or supplies brought to the jobsite and removed before completion.

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
102.13 Irregular Bid Proposals
102.09 Proposal Guaranty
102.08 Preparation and Delivery of Proposals
102.14 Disqualification of Bidders

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 2nd tier subcontract with a Non-DBE Subcontractor. However, in this instance, none of the work subcontracted to the Non-DBE Contractor will count toward fulfilling the established Disadvantaged Goal for the project.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

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

The DBE Participation Plan shall include the following:

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

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

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

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

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

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

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

1. Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
2. Whether the bidder provided solicitations through all reasonable and available means;
3. Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
4. Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the 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
6th Floor West 200 Mero Street
Frankfort, KY 40622

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

SURFACING AREAS

The Department estimates the mainline surfacing width to be 24 feet.

The Department estimates the total mainline area to be surfaced to be 96,707 square yards.

The Department estimates the shoulder width to be 1 foot on each side.

The Department estimates the total shoulder area to be surfaced to be 7,326 square yards.

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.

OPTION B

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

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

Except as specified herein, perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, applicable Special Notes and Special Provisions, and applicable Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications.

CAUTION – PROPOSAL INFORMATION IS APPROXIMATE – PERFORM AN ON-SITE INSPECTION

Potential bidders are cautioned that the information within this proposal is approximate only and is not to be taken as an exact evaluation of the bid quantities, nor the materials and conditions that may be encountered during construction. As such, before submitting a bid, potential bidders shall make a thorough inspection of the site to examine the conditions to be encountered per Section 104.07. Furthermore, during the execution of the work, the Engineer reserves the right to make changes to the bid item quantities and/or alterations in the work when necessary to complete the project satisfactorily per Section 104.02.

NOTE: The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

STATIONING

The contractor is advised that the planned locations of work were established from a beginning station number which is STA 355+29.12 at the intersection of KY 197 and Bartleytown Road. Milepoints were established from a beginning Milepoint which is MP 6.729 near the intersection of KY 197 and Bartleytown Road. The existing mile marker signs may not correspond to the proposed work locations.

LIDAR

All survey information was obtained from the Kentucky Transportation Center (KTC) mobile LIDAR and should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

ON-SITE INSPECTION

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

RIGHT OF WAY LIMITS

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

A proposed Permanent Easement for Utilities is being acquired by the Department for the Waterline Relocation around the culvert at Sta. 576+08 near Jackson Branch Road, refer to the Waterline Relocation Detail Sheet for more information.

CONTROL

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

DESCRIPTION OF WORK

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

Pavement Resurfacing. The existing roadway is to be resurfaced in areas designated in the Pavement Repair Summary and the Superelevation Improvement Summary. The existing roadway is also to be resurfaced from Station 222+28.80 to Station 551+970.12 using FD05 funds, which will also include the construction of edge keys and installation of rumble strips. Refer to the rumble strip Standard Drawings for recommended placement of rumble strips. Other items that may be associated with the pavement resurfacing but are included in this contract are: removal of existing pavement by milling and texturing and application of pavement markings.

Superelevation Improvements. There are multiple curves where superelevation improvements are being proposed. The intent of this work is to provide a consistent pavement cross slope through the identified curves. Refer to the Superelevation Improvement Summary for locations and approximate quantities. The Superelevation Improvements are set up and quantified for the Contractor to utilize asphalt base and surface material to achieve the desired superelevation improvements at the identified location(s). The Superelevation Improvement Summary lists the estimated quantities of asphalt material for each curve; however, the Engineer will make the final determination as to which bid items will be required at each superelevation improvement area, as well as the appropriate lift thicknesses and number of lifts based on the existing conditions encountered at the time of construction. After the superelevation improvements have been constructed, the full width of the identified curves will be overlaid with a surface course. As a result of the superelevation improvements and surfacing operations, the roadside shoulders, fill slopes, and/or ditches will have to be modified to match the final pavement elevations and tie in with the existing ground lines. A quantity of Roadside Regrading has been estimated for regrading the roadside within the identified curves. The bid item 'Roadside Regrading' has been included for these roadside modifications. Refer to the detail sheet titled: ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS for more information.

NOTE: Some field adjustments of the proposed shoulder width, fill slope, ditch, and/or superelevation improvement may be required. The proposed shoulder and roadside grading is intended to occur within

existing Right-of-Way and NOT disturb any sensitive obstructions (i.e. fences, buildings, utility poles, etc.). Superelevation improvements with sensitive obstructions along the roadside shall still require regrading the roadside, but the slopes may have to be constructed steeper than shown on the representative cross section. The desire of the Department is to construct the new fill slopes at 3:1 or flatter. When a fill slope needs to be constructed steeper than 3:1 to remain within existing Right-of-Way or not impact a sensitive obstruction, and the existing fill slope is steeper than 3:1, then the new fill slope can be constructed steeper than 3:1, but the new fill slope shall not be constructed steeper than the existing fill slope. If a desired superelevation improvement will result in the new fill slope having to be graded steeper than the existing fill slope in order to remain within existing Right-of-Way or not impact a sensitive obstruction, then the superelevation rate should be modified (reduced) in order to reduce the final change in pavement edge elevation, thereby reducing the height of the new fill slope grading, and allowing for a flatter new fill slope that will not be steeper than the existing fill slope. Prior to making modifications to the proposed superelevation rate, shoulder width, and/or fill slope, coordinate with and obtain approval from the Engineer.

Roadside Regrading. Areas have been identified along the route for Roadside Regrading. The overall intent of the Roadside Regrading work operation is to improve the existing roadside by constructing a proposed width of earth shoulder and regrading the roadside fill slopes, ditch foreslopes, and/or ditch backslopes as flat as possible within the Right-of-Way (or any work areas the Department has obtained through Consent & Release), while NOT disturb any sensitive obstructions (i.e. fences, buildings, utilities, etc.). A variety of information is included in the proposal to communicate the proposed Roadside Regrading.

- The Special Note for Roadside Regrading provides information on:
  - The required materials and construction methods.
  - How roadside regrading is measured and paid.
- The ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS includes:
  - 11 different Figures that show the common conditions and situations that may be encountered when performing Roadside Regrading.
  - Notes that provide guidance on how to adjust the proposed shoulder and/or roadside dimensions so that Roadside Regrading work operations will remain within the Right-of-Way (or Consent & Release work area) and/or not impact a sensitive obstruction.
- The Typical Section(s) show:
  - The desired dimensions of the proposed shoulder, ditch, and/or roadside slopes.
  - NOTE: There may situations where the desired shoulder, ditch, and/or roadside dimensions must be modified based on existing site conditions. When situations arise where the desired roadside dimensions need to be adjusted, the Contractor and Engineer should work together to determine the final dimensions for the proposed shoulder, ditch, and/or roadside slopes. The notes within the ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS provide guidance on ways to adjust the Roadside Regrading when common site conditions and constraints are encountered.
- The Roadside Regrading Summary:
  - Lists the locations where Roadside Regrading is to be performed. While the Department anticipates the limits of Roadside Regrading shown on the Roadside Regrading Summary are accurate, it is always possible the existing conditions of the shoulders and ditches can change between the Design phase and Construction phase

of the project. Therefore, the Contractor and the Engineer are to work together to review the limits of Roadside Regrading and make adjustments, as needed.

- Lists estimated volumes of excavation and embankment for each Roadside Regrading location to help indicate the approximate level of effort of each Roadside Regrading location. NOTE: the estimated volumes of excavation and embankment are provided for informational purposes only and final payment for Roadside Regrading will be made based on the actual LF of Roadside Regrading performed.
- Indicates which Figure reference within the ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS is the closest representation of each proposed Roadside Regrading location.
- Lists the Targeted Fill Slope (or ditch foreslope) and, if applicable, the Targeted Backslope for each Roadside Regrading location.
- Indicates if there is a need for Embankment Benching, a DGA Wedge, and Channel Lining for each Roadside Regrading location.
- If applicable, lists the estimated quantities of DGA, Asphalt Seal Coat, Asphalt Seal Aggregate, Channel Lining, and Geotextile Fabric for each Roadside Regrading location.
- Summarizes the quantities of the bid items associated with the Roadside Regrading work operation.

Pipe Replacements & Extensions. There are locations throughout the project where culvert pipes are being replaced and/or extended. Locations are noted on the Culvert Pipe Replacement & Extension Summary. Other items that may be associated with the pipe replacements and/or extensions include: Headwalls, Sloped & Mitered Concrete Headwalls, Safety Box inlets, Intermediate Anchor/Collar, Roadside Regrading, Channel Lining. Refer to the Special Note for Pipe Replacements / Extensions for more information on this item of work.

RCBC Extensions. There are 5 locations throughout the project where box culverts are being extended. Locations are noted on the RCBC Extension Summary. Other items that are included with extensions are: Remove Headwall, Foundation Preparation, Concrete Class A, Steel Reinforcement, and Clean Culvert. Refer to the RCBC Detail Sheets for more information.

Waterline Relocation. There is a waterline relocation around the culvert at Sta. 576+11 near Jackson Branch Road. Refer to the Waterline Relocation Detail Sheet for more information. Refer to the General Utility Notes and Instructions Applicable to All Utility Work Made a Part of the Road Construction Contract for more details.

Sloped & Mitered Concrete Headwalls. Sloped & Mitered Concrete Headwalls shall be constructed as shown on the detail sheets titled: SLOPED & MITERED CONCRETE HEADWALL DETAILS. This headwall is intended to combine the benefits of a pipe headwall with the advantages of safety and adaptability by allowing the headwall to be custom fit to the surrounding embankment. The Pipe Replacement & Extension Summary identifies which pipe ends are to receive the Sloped & Mitered Concrete Headwalls. The identified pipe ends shall have the headwall installed and the pipe mitered at a slope that matches the final embankment slopes at each location. <u>If the pipe is on a skew, install the headwall and miter the pipe so that the concrete slope paving of the new headwall is perpendicular to the roadway</u>. In other words the embankment slope should <u>not</u> be warped to fit the skew of the pipe; the headwall should be installed and the pipe should be mitered to match the

final embankment slope, so that the roadside fill slope is fairly consistent prior to the pipe, at the pipe, and beyond the pipe. When completed, the edges of the Sloped & Mitered Concrete Headwall should be flush with the surrounding ground line. Payment at the Contract unit price Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary to install the headwall and miter the pipe.

NOTE: For pipes that receive the Sloped & Mitered Concrete Headwall, the pipe length will be measured to the furthest point along the mitered end of the pipe.

Intermediate Anchor/Collar. There are quantities of Class A Concrete included in the contract to construct an intermediate anchor, or collar, around the pipes at the pipe extension locations. This is so the new pipe can be securely connected to the existing pipe. The intermediate anchors shall be constructed as shown on Standard Drawing RDX-060, current edition.

Channel Lining. The Contractor and Engineer should work together to determine the location and best use of Channel Lining throughout this project. The Engineer will make the final determination as to the needed quantities and placement of Channel Lining.

Erosion Control Blanket. A quantity of Erosion Control Blanket has been included in the contract for potential use along areas of regraded shoulders, ditch lines, fills slopes and/or back slopes, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the quantities and placement of Erosion Control Blanket.

Guardrail Replacement. Existing guardrail within the project will be replaced. Refer to the Guardrail Summary for the approximate locations for guardrail replacement. The work will include removal of the existing guardrail, and the installation of new guardrail and end treatments. See the Special Note for Guardrail for more information on this work.

Removal of Existing Signing Assemblies and Installation of Proposed Signing. A quantity of "Remove Sign" has been included in the Sign Summary for removal of existing signing along the corridor. An estimated quantity of new signing and sign post is also included on the Sign Summary. Refer to the Special Note for Signing, Special Note for Staking, and Special Note for Signage for more details.

SPECIAL NOTE FOR STAKING

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

1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer.
2. Using the proposed pavement superelevation rates, runout, and runoff lengths, determine the necessary changes in pavement edge elevation along the curves and the transitions leading into and out of the curve to achieve the proposed superelevation improvements. The intent to provide a consistent superelevation throughout the curves and smooth transitions into and out of the curves. Once the proposed changes in pavement edge elevations are determined and prior to starting paving operations, verify the proposed roadside re-grading along the curve can be constructed so that the new roadside is flush with the new pavement edge elevation and the new toe of slope, or top of cut, will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. If necessary, and with the approval of the Engineer, reduce the proposed superelevation rate of a curve if the new edge of pavement elevation will cause the new roadside grading to extend beyond the Right-of-Way and/or impact a sensitive obstruction. Alternatively, with the approval of the Engineer and to the extent allowable by the "Roadside Regrading and Embankment Benching Details" and/or the Special Note for Roadside Regrading, 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. After the final proposed changes in pavement edge elevations are determined and before paving operations begin, submit to the Engineer and obtain approval for the number of asphalt lifts, each asphalt lift's thickness, and the asphalt mix type of each lift the contractor plans to use to achieve the superelevation improvement. Ensure positive drainage upon completion of the work.
3. Verify the dimensions, type, and quantities of the culvert pipes, entrance pipes, and/or box culverts as listed and detailed in the proposal, and determine 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. Produce and furnish to the Engineer "As Built" information for the superelevation improvements and the drainage improvements. For superelevation improvements, as built information will consist of a record of the final pavement cross slopes every 50 feet, for each lane of travel along the curves and the transitions into and out of the curves. Elevation data of the curve improvements is not necessary; simply the cross slope percentage every 50 feet. For the drainage improvements, as built information will consist of a final record of the actual types, sizes, and locations of the drainage structures (i.e. box inlets, headwalls, junction boxes, etc.), culvert pipes, and/or box culverts constructed. Final elevation data of the drainage improvements is not necessary.
6. 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.
7. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
8. Perform any and all other staking operations required to control and construct the work.

Special Note for Erosion Control

I. DESCRIPTION

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

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

II. MATERIALS

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

III. CONSTRUCTION

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

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

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

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

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

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

The use of Temporary Mulch is encouraged.

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

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

IV. MEASUREMENT

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

V. Basis of Payment

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

Special Note for Roadside Regrading

I. DESCRIPTION

Except as provided herein, all work shall be performed in accordance with Department's Standard Specifications, Interim Supplemental Specifications, applicable Standard and Sepia Drawings, and applicable Special Provisions and Special Notes, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Site Preparation; (3) Roadside Regrading; (4) Constructing Embankments, Embankment Benching, and/or Excavation; (5) Erosion Control; and (6) Any other work as specified in this Contract.

II. MATERIALS

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

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

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

C. Channel Lining, Class II. When listed as a bid item, furnish Channel Lining, Class II as per Section 805.

D. Geotextile Fabric Class 1. When listed as a bid item, furnish Geotextile Fabric Class 1 as per Section 843.

III. CONSTRUCTION METHODS

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

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

C. Site Preparation. Be responsible for all site preparation including, but not limited to: staking; clearing, grubbing, and removal of all obstructions or any other items; excavation, embankment benching, compacting embankment in place; temporary pollution and erosion control; disposal of excess, waste, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the Engineer.

D. Staking. See Special Note for Staking.

E. Roadside Regrading. Perform Roadside Regrading at the approximate locations listed on the Summary Sheets and/or Plan Sheets, or at locations as directed by the Engineer. All work shall be completed as specified in the ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS, the Typical Sections, the Plan Sheets, or as directed by the Engineer. Roadside Regrading shall consist of any necessary clearing, grubbing, grading, and/or reshaping of the existing shoulder, ditch, and/or roadside to achieve the proposed shoulder, ditch, and/or roadside dimensions detailed on the Typical Sections. Depending on the existing conditions encountered and to achieve the dimensions as detailed in the Typical Sections, Roadside Regrading may also include, but is not limited to: embankment benching, excavating and removing excess material, excavation of rock, providing additional earth material suitable for vegetation growth and grading, shaping, and compacting the earth material.

Provide positive drainage of ditches and slopes at all times during and upon completion of construction. When asphalt surfacing or resurfacing is included in the contract, perform all Roadside Regrading operations as is practical before beginning final surfacing operations.

F. Embankment Benching. Embankment Benching shall be required when the existing groundline has an incline greater than 15%. Any and all required embankment benching shall be incidental to the bid item ROADSIDE REGRADING. For more information refer to the ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS.

G. Channel Lining. Install Class II Channel Lining along any sections of ditches, fill slopes, or ditch backslopes identified in the Proposal, or any other locations the Engineer directs for slope protection or erosion control. When Channel Lining is proposed to be installed along a steep fill slope in order to establish a width of shoulder (as shown in Figure 5 of the ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS), the Channel Lining is to be capped with Geotextile Fabric Class 1 and 4” of Crushed Stone Base. In lieu of 4” of Crushed Stone Base, 4” of DGA and a Double Asphalt Seal Coat may be specified in the Proposal. Install whichever aggregate capping material the Proposal specifies, or as directed by the Engineer.

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

I. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor’s activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

J. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

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

L. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

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

M. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed excess material, debris, and other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

N. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed

areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. METHOD OF MEASUREMENT

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

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

C. Site Preparation. Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.

D. Staking. See Special Note for Staking.

E. Roadside Regrading. The Department will measure the bid item ROADSIDE REGRADING in linear feet along the centerline of the roadway as the length of the actual Roadside Regrading work performed. Further, this measurement will only include one side of the roadway. Therefore, for areas where roadside regrading occurs on both sides of the road, the Department will measure each side independently. The Department will not measure cleaning pipe structures 36 inches or less in diameter or reshaping any deformed ends on metal entrance pipes that are to remain in place, as these operations are considered incidental to the bid item ROADSIDE REGRADING.

F. Embankment Benching. The Department will not measure Embankment Benching for payment. Any and all required embankment benching shall be incidental to the bid item ROADSIDE REGRADING.

G. Channel Lining, Class II. When listed as a bid item, Class II Channel Lining shall be measured according to Section 703.04.

H. Geotextile Fabric, Class 1. When listed as a bid item, Geotextile Fabric, Class 1 shall be measured according to Section 214.04.

I. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection. The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.

V. BASIS OF PAYMENT

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

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

C. Staking. See Special Note for Staking.

D. Roadside Regrading. The Department will make payment for the completed and accepted quantities under the bid item ROADSIDE REGRADING. The Department will consider payment full compensation for furnishing all labor, materials, equipment, and incidentals necessary to perform Roadside Regrading as required by these notes, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

E. Channel Lining, Class II. When listed as a bid item, the Department will make payment for Class II Channel Lining according to Section 703.05.

F. Geotextile Fabric, Class 1. When listed as a bid item, the Department will make payment for Geotextile Fabric, Class 1 according to Section 214.05.

Special Note for Box Culvert Extensions

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Section references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Contractor staking; (2) Site preparation; (3) Removing existing concrete masonry, as necessary; (4) Foundation preparation and construction of reinforced concrete box culvert extensions and headwalls; (4) Maintain and Control Traffic; and (5) all other work specified as part of this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

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

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

C. Foundation Preparation. Furnish materials according to Section 603, the drawings, and as directed by the Engineer.

D. Reinforced Concrete Box Culvert Extensions. Furnish Class A Concrete and deformed Steel Reinforcement according to Sections 601 and 602. Contrary to Section 602.03.03, field bending bars will be allowed; however, obtain the Engineers approval of proposed field bending methods prior to bending. Furnish additional reinforcement to provide adequate splice lengths with existing box culvert steel as determined by the Engineer.

E. Steel Reinforcement. See Section 811.

III. CONSTRUCTION

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

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

C. Site Preparation. Be responsible for all Site Preparation, including but not limited to Clearing and Grubbing; Removing pavement; Tree and Stump removal; Temporary Fencing; Roadway Excavation and Structure Excavation; Embankment and Embankment in Place; removal of obstructions or any other items; Grading, Reshaping, and Compacting; Roadside Regrading, obtaining borrow and waste

sites, and disposal of materials, waste, and debris; cleaning inlet and outlet ditches; and restoration, cleanup and final dressing. Clear and Grub only the minimum area required for construction and/or as directed by the Engineer. Limit clearing and grubbing to the absolute minimum required to construct the box culvert extensions. Obtain the Engineer's approval before removing trees and stumps from the cleared areas. Phase construction such that the potential for erosion is as minimal as possible. Excavate as needed to remove any portion of the existing structure necessary for construction of the box culvert extension. Perform any ditching or roadside grading as directed by the Engineer. Stockpile suitable materials for incorporation into the work as approved by the Engineer. Be responsible for all excavation (common, roadway, structure, solid rock, and unclassified) required for foundation preparation, toe walls, and all other excavation required for the box culvert extensions. Excavate rock in channel as required to allow for construction of foundation and construction of box culvert extensions. Be responsible for all embankment, embankment in place, and borrow required for backfilling the box culvert extension, constructing widened roadway and shoulder transitions, and all other embankment required to complete the work. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials not incorporated into the work at sites off the right of way obtained by the Contractor at no additional cost to the Department (see the Special Provision for Waste and Borrow Sites). Perform all excavation and removal of obstructions only as approved or directed by the Engineer.

Sheeting, shoring, cofferdams, and/or dewatering methods may be necessary for construction of the culvert. Include all costs in the unit price bid for Foundation Preparation.

D. Remove Headwall. Remove the existing headwall(s) and wingwalls at the existing box culvert end(s) to sound concrete masonry, or as directed by the Engineer. Before removing any concrete masonry saw around the perimeter of the removal area on the interior and exterior to a depth of 1 inch. When sawing, take care not to cut into the existing steel reinforcement. Do not kink or unnecessarily bend exposed existing steel reinforcement. Remove structure excavation to solid rock, or as directed by the Engineer, and prepare foundation. Existing steel reinforcement shall be thoroughly cleaned of concrete and straightened for use to bond the new concrete and reinforcement with a minimum overlap of 1'-9", unless otherwise shown in the drawings. Coat exposed ends of cut reinforcement with a bituminous produce to prevent corrosion of the ends of the exposed reinforcement. As an alternative, if the existing headwall is sound, the Engineer may approve leaving the existing headwall in place, in which case the existing parapet should be removed to 6" below proposed roadway elevation. If the Engineer approves leaving the existing headwall in place, center 3'-0" long, #6 dowel bars at 12" spacing into the existing slabs and walls, embedded 1'-6" deep into the existing box culvert concrete, and set with an adhesive anchorage system to provide a pullout strength of equal or greater capacity than the corresponding reinforcing steel.

E. Box Culvert Extensions. Construct the box culvert extension(s) according to the notes and details in the drawings, and Sections 601, 602, 603, 610, and/or any other applicable Standard Specifications. Class A Concrete shall be used throughout. Bond the proposed plastic concrete to the existing hardened concrete in all locations using a Type V Epoxy Resin or other approved structural adhesive, as prescribed in Section 826. Follow the manufacturer's application instructions. All exposed concrete edges shall be beveled ¾", unless otherwise noted. Reinforcement shall have a 2" clear distance to the proposed face of concrete, unless otherwise noted. Obtain the Engineer's approval

of the final centerline, flow line, length, skew, and revised dimensions and/or steel pattern, if any, of each box culvert extension prior to placing concrete.

The Contractor is required to complete the box culvert extension(s) in accordance with the plans and all applicable specifications. The cost of any and all labor, materials, equipment, and/or any other items necessary to construct the box culvert extension(s) shall be incidental to the most appropriate bid items. Incidental items may include, but are not limited to, cofferdams, shoring, excavation, backfilling, and phased construction.

F. Remove Concrete Masonry. If the Engineer approves leaving the existing headwall(s) in place, a portion of the existing parapet(s) may need to be removed in order to construct a shoulder of suitable depth from the edge of pavement to the proposed headwall. Any necessary removal of a portion of the existing parapet shall be considered Site Preparation and shall be incidental to the box culvert bid items. Also, if the existing headwall(s) are left in place, one or both of the existing wingwalls, or a portion of either wingwall may need to be removed in order to construct the proposed box culvert extension(s) and/or headwall(s). In this situation, any necessary removal of the existing wingwall(s), or any portion thereof, shall be considered Site Preparation and shall be incidental to the box culvert bid items.

G. Embankments. Backfill box culvert extensions and construct embankments, slopes, roadway shoulders, and ditches as shown on the drawings, or as directed by the Engineer. Warp and tie the embankment slopes into the adjacent existing roadway to match the existing slopes and ditches. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

H. Roadside Regrading. Construct ditches and shoulders to provide positive drainage. Transition the ditches and shoulders between the existing typical section and the reconstructed roadway at the box culvert extension site(s). Clean all new and existing cross drainage and entrance structures within the limits of the roadside regrading and/or ditching areas according to Section 209.03.B.

I. Clean Culvert. Remove all deleterious material and objects not native to the box culvert barrel, such as, but not limited to debris and silt. The Contractor may choose to clean the box culvert prior to, or after, the proposed box culvert extension work. If the Contractor chooses to clean the box culvert prior to the proposed box culvert extension work, and additional debris, silt, etc. builds up during the box culvert extension operations, the Contractor shall remove the additional debris, silt, etc. at no additional cost to the Department, after the box culvert extension operations are complete.

NOTE: The proposal lists the existing box culverts that are to receive the Clean Culvert bid item. These identified box culverts are those that had existing debris, silt, etc. at the time the proposal was developed. The Engineer and the Contractor are encouraged to review the proposed box culvert extension site(s) prior to the Contractor beginning the box culvert extension work and determine if the Clean Culvert bid item applies. The Engineer shall determine the final approved quantities. If an existing box culvert location has a buildup of debris, silt, etc., but the Clean Culvert bid item is NOT listed in the proposal for that box culvert, the Contractor shall notify the Engineer prior to beginning box culvert extension operations, so that the Engineer can confirm that the existing box culvert has a buildup of debris, silt, etc. If the contactor does not notify the Engineer of this situation prior to

beginning the box culvert extension operations, the Engineer will assume the buildup was a result of the Contractor's operations, and the cost of cleaning the box culvert shall be at no additional cost to the Department.

J. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

K. On-Site Inspection. Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department does not warrant or give any guarantee as to the accuracy of the data and information shown and no claims for money or time extensions will be considered if the conditions encountered, items used or omitted, and final quantities required are not in accordance with the information shown.

L. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of the Contractor's operations at no additional cost to the Department.

M. Right of Way Limits. The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

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

O. Clean Up, Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

P. Final Dressing, Seeding and Protection. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. MEASUREMENT

Quantities shown on the summaries and drawings are approximate only. The Department will measure for payment only the listed bid items and the actual quantities incorporated in the work. All other items required to complete the construction shall be incidental to the listed bid items.

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

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

C. Site Preparation. Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the applicable project bid items.

D. Remove Headwall. The Department will measure the removal of existing headwalls as Each. If the Engineer allows a proposed box culvert extension to be constructed without removing the existing headwall, the Remove Headwall bid item shall not be measured for payment.

E. Foundation Preparation. The Department will measure Foundation Preparation of box culvert extensions as Lump Sum. The Lump Sum unit price shall include all extensions at each identified box culvert and shall not be measured as individual units per inlet or outlet. Except for the Foundation Preparation bid items listed, the Department will NOT measure Foundation Preparation for any other items of work and shall consider it incidental to the other items of work, as applicable.

F. Concrete-Class A. See Section 601.04.

G. Steel Reinforcement. See Section 602.04.

H. Clean Culvert. The Department will measure each box culvert cleaned as Lump Sum. The bid item Clean Culvert will not be measured when a box culvert must be cleaned due to buildup of debris, silt, etc. that occurs during the Contractor's construction operations.

V. PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the listed bid items.

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

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

C. Foundation Preparation. Payment at the Lump Sum unit price shall be full compensation for furnishing all labor, materials, and equipment necessary for Foundation Preparation of all extensions at each identified box culvert.

D. Concrete-Class A. See Section 601.05.

E. Steel Reinforcement. See Section 602.05.

F. Clean Culvert. The Department will make payment for the completed and accepted quantities of each box culvert cleaned, as approved by the Engineer. Payment at the Lump Sum unit price shall be full compensation for furnishing all labor, materials, and equipment necessary to clean each box culvert measured for payment. Any box culverts that require cleaning but are not approved by the Engineer for measurement of payment, shall be incidental to the box culvert bid items.

Special Note for Pipe Replacements and Extensions

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Constructing pipe replacements and/or pipe extensions; (3) Embankment and/or Excavation; (4) Erosion Control; and (6) Any other work as specified by this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

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

B. Culvert Pipe. Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer’s approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.

C. Flowable Fill. Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).

D. Erosion Control. See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

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

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

C. Site Preparation. Be responsible for all site preparation including, but not limited to, saw cutting and removing existing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct the drainage features. Perform all site preparation only as approved or directed by the Engineer.

D. Removing Headwalls, Pipe, and Excavation. Remove existing headwalls and lengths of culvert

and/or entrance pipes at the approximate locations noted on the summary. The Engineer will determine the exact locations and lengths of pipe to be removed at the time of construction. When any portion of pipe under the roadway, saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. NOTE: Saw cutting the pavement shall be incidental. Obtain the Engineer's approval of trench width and/or saw cutting limits prior to saw cutting the pavement. Excavate the trench and remove the pipe as directed, or approved, by the Engineer without disturbing existing underground utilities.

E. Constructing Pipe, Headwalls, and Drainage Boxes. Construct culvert and/or entrance pipes, pipe extensions, headwalls, drainage boxes, and other drainage structures at the locations shown in the proposal or as designated by the Engineer. The Contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing and/or proposed ditches and other proposed improvements. (See the Special Note for Staking.) Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings, current editions. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide positive drainage upon completion of pipe installation.

F. Pipe Backfill. Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, regardless of cover height, backfill culvert pipes with flowable fill as shown on the Culvert Pipe Replacement Detail from the outside edge of shoulder or back of curb to outside edge of shoulder or back of curb. Steel plates will likely be required to maintain traffic while the flowable fill cures. Once the flowable fill has sufficiently cured, place the Asphalt Base in lifts with thicknesses of 3-4 inches, up to the surface of the existing pavement. Seal with Leveling & Wedging. Allow the asphalt base and leveling & wedging to be exposed to traffic for a minimum of 14 days to allow for settlement. During the waiting period, level & wedge any settlement as directed by the Engineer. After the waiting period has been met for the last pipe replacement constructed, the final milling and/or surfacing operations can begin, unless directed otherwise by the Engineer. For culvert pipe beyond the outside edge of shoulder or back of curb, backfill according to Section 701.03.06.

G. Embankments. Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. The Contractor shall bench into the existing slope and apply proper compaction according to Section 206. For more information and details on benching, refer to Note 2 on the detail sheet titled: ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS, found elsewhere in the Proposal. Provide positive drainage of ditches, shoulders, and slopes at all times during and upon completion of construction.

H. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design, as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

I. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or

underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

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

K. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

L. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

M. Erosion Control. See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

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

B. Site Preparation. Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to culvert and/or entrance pipe bid items, as applicable.

C. Remove Headwall. The Department will measure the removal of existing headwalls as Each. Any excavation, including rock excavation, necessary to remove existing headwalls will NOT be measured for payment, but shall be incidental to the bid item "Remove Headwall".

D. Remove Pipe. Removal of existing culvert and entrance pipe shall be measured according to Section

701.04.14. Any excavation, including rock excavation, necessary to remove existing pipe will NOT be measured for payment, but shall be incidental to the bid item "Remove Pipe".

E. Culvert and Entrance Pipe. The Department will measure the quantities according to Section 701.04. Any excavation, including rock excavation, necessary to install culvert or entrance pipe shall be incidental to the corresponding pipe bid items.

F. Headwalls, Drainage Boxes. The Department will measure according to Section 710. Any excavation, including rock excavation, necessary to construct headwalls and/or drainage boxes will NOT be measured for payment, but shall be incidental to the applicable bid item.

G. Excavation, Pipe Backfill, Embankments. The Department will NOT measure for payment the following items: any excavation, including rock excavation, necessary to remove the existing pipe and/or install the proposed culvert or entrance pipe, pipe backfill material, geotextile fabric, flowable fill, and re-constructing shoulder embankments, but shall considered these items incidental to the bid items for culvert and entrance pipe.

H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection. The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.

I. Erosion Control. See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

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

B. Remove Headwall. The Department will make payment for the completed and accepted quantities of Each headwall removed. Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing headwall.

C. Remove Pipe. The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.

D. Culvert and Entrance Pipe. The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.

E. Headwalls, Drainage Boxes. The Department will make payment according to Section 710.

F. Erosion Control. See the Special Note for Erosion Control.

Special Note for Signage

The final advisory speeds and some sign types will have to be determined after the curve superelevation improvements and final surfacing operations have been completed. The Contractor shall notify the Engineer and District Traffic Engineer when all of the superelevation improvements and surfacing operations have been completed. Once notified, the District Traffic Engineer will ball-bank the newly surfaced curves to determine the appropriate advisory speeds and work with the Contractor to determine the final Signing Plan. The Engineer and/or District Traffic Engineer will provide the Contractor with the final advisory speeds, any changes to proposed sign types, and the final quantities within three (3) weeks of being notified by the Contractor that final surfacing operations are complete. After the Contractor has received this information from the Engineer and/or the District Traffic Engineer, the Contractor shall then proceed to layout and stake the signing according to the Special Note for Staking, included elsewhere in this Proposal.

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

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

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

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

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

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

Special Note for Signing

I. DESCRIPTION

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

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

II. MATERIALS

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

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

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

III. CONSTRUCTION METHODS

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

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

C. Staking. See Special Note for Staking.

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

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

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

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

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

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

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

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

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

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

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

E. Property Damage. The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

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

H. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department

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

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

I. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, debris, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for disposal of waste and debris from the project. Existing anchors, signs, posts, and any other hardware or material removed from the site are to become the property of the Contractor. See Special Provision for Waste and Borrow Sites.

J. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

K. Erosion Control. See Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

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

B. Site Preparation. Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.

C. Signs. The Department will measure the finished in-place area of signs in Square Feet.

D. Sign Posts. The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.

E. Type D Breakaway Sign Supports. The Department will measure Type D sign supports as Each support installed.

F. Type D Surface Mounts. The Department will measure Type D Surface Mounts as Each surface mount installed.

G. Class A Concrete for Signs. The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.

H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection. The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.

I. Erosion Control. See Special Note for Erosion Control.

J. Remove Sign. The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.

K. Items Provided by KYTC. The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.

V. BASIS OF PAYMENT

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

B. Signs. The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

C. Sign Posts. The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the proposal.

D. Type D Breakaway Sign Supports. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.

E. Type D Surface Mounts. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D (SURFACE MOUNT). The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.
NOTE: The permissible Type D Surface Mount alternative is: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL

F. Class A Concrete for Signs. The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work

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

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

H. Erosion Control. See Special Note for Erosion Control.

Special Note for Completion Date & Liquidated Damages

I. COMPLETION DATE

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

II. LIQUIDATED DAMAGES

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

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

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

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

1.1 Description. The KYCT (Kentucky Method for Cracking Test) and the Hamburg 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 of the bituminous mixes. Additionally, the data will help the Department to create future performance-based specifications which will include the KYCT and Hamburg test methods.

2.0 Equipment

2.1 KYCT Testing Equipment. The Department will require a Marshall Test Press with digital recordation 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^{o} +/- 1.8^{o} 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 Hamburg Wheel Track Testing. The department encourages the use of the PTI APA/Hamburg Jr. test equipment to perform the loaded wheel testing. The Department will allow different equipment for the Hamburg testing, but the testing device must be approved by the Department prior to testing.

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. Hamburg test specimens will be submitted to the Division of Materials for testing on the PTI APA/Hamburg Jr if the asphalt contractor or district materials office does not have an approved Hamburg testing device.

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 mix design phase and during the plant production of all surface mixtures. For mix design approvals, submit KYCT results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for verification.

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 immediately after, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens and gradation will be required one per sublot 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 a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance with KM 64-411. KYCT mix design specimens shall be short-term conditioned uncovered for four hours at compaction 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. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned 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 Hamburg testing, reheating of the asphalt mixture is prohibited.

3.2.3 Record Times. For each sublot, 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.

3.2.4 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 Hamburg Testing. Perform the rut resistance analysis (Hamburg) in accordance with AASTHO T-324, not to exceed 20,000 passes for all bituminous mixtures during the mix design phase and production. For mix design approvals, submit Hamburg results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.

3.3.1 Hamburg Testing Frequency. Perform testing and analysis per lot of material. The plant produced bituminous material sampled for the Hamburg test does not have to be obtained at the same time as the acceptance and KYCT sample. If the Hamburg 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 Hamburg specimens.

3.3.2 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 and the time the Hamburg testing was started. All times shall be recorded on the AMAW.

3.3.3 File Name. Save the Excel spreadsheet with the following file name; "Hamburg_CID_Approved Mix Number_Lot Number_Sublot Number_Date" and upload the file into the AMAW.

4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and Hamburg 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 Hamburg specimens shall be considered incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

June 15th, 2022

COORDINATION OF WORK WITH OTHER CONTRACTS

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

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

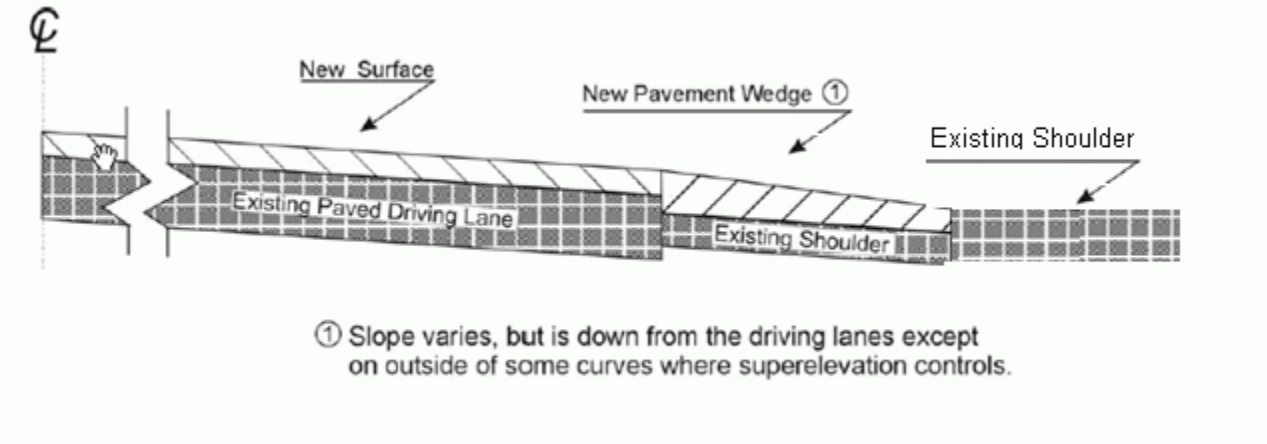
1.0 MATERIALS. Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



3.0 MEASUREMENT. The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.

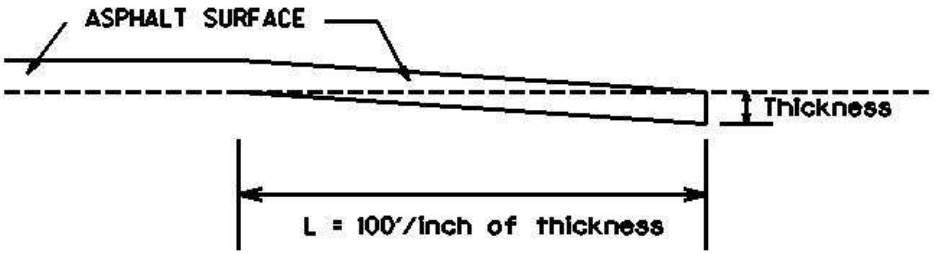
4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

SPECIAL NOTE FOR EDGE KEY

FD05 098 0197 004-011

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1 Inch

L = 100 LF

L= Length of Edge Key

1-3309 Edge key by Ton
01/02//2012

Special Note for Guardrail

I. DESCRIPTION

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

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

II. MATERIALS

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

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

B. Guardrail. Furnish guardrail system components according to Section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.

C. Delineators for Guardrail. Furnish white and/or yellow Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.

D. Erosion Control. See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

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

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

approved or directed by the engineer.

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

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

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

D. Delineators for Guardrail. Construct Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.

E. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

G. Right of Way Limits. The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

H. Clean Up, Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

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

J. Erosion Control. See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

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

B. Site preparation. Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.

C. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail. The Department will measure according to Section 719.04.

D. Delineators for Guardrail. See Standard Drawing RBR-055 – Delineators for Guardrail.

E. Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection. The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.

F. Erosion Control. See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

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

B. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail. The Department will make payment according to Section 719.05.

C. Delineators for Guardrail. See Standard Drawing RBR-055 – Delineators for Guardrail.

D. Erosion Control. See the Special Note for Erosion Control.

SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING

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

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

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

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN
PIKE COUNTY
KY 197
ITEM NO. 12-9008

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, Supplemental Specifications, and the Standard and Sepia Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic shall be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The KY 197 HSIP improvements begin near Bartleytown Road and end at Pond Branch Road; the approximate length of the project is 8.5 miles. The proposed improvements include the following:

- Roadside regrading
- Pipe extensions and end treatment replacements
- Box culvert extensions
- Modification to superelevation
- Pavement surface repair
- Removal and replacement of guardrail
- Removal and replacement of existing signs and placement of new signs
- Waterline relocation

Additionally, KY 197 between Upper Pigeon Branch Road and Hurricane Creek Road is to be resurfaced as part of this project. This effort will be funded separately from the HSIP improvements, but the following notes concerning the maintenance of traffic should apply to all work in this project.

Maintain alternating one-way traffic during construction. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

Unless otherwise approved by the Engineer, no lane closures will be allowed during the following times:

Thanksgiving Weekend	Thursday, November 24, 2022 – Sunday, November 27, 2022
Christmas Weekend	Friday, December 23, 2022 – Sunday. December 25, 2022
New Year's Weekend	Friday, December 30, 2022 – Sunday, January 1, 2023
Easter Weekend	Friday, April 7, 2023 – Sunday, April 9, 2023

Memorial Day Weekend	Friday, May 26, 2023 – Monday, May 29, 2023
Independence Day Weekend	Friday, June 30, 2023 – Wednesday, July 5, 2023
Labor Day Weekend	Friday, September 1, 2023 – Monday, September 4, 2023

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

LANE CLOSURES

Long term lane closures shall not be allowed; therefore, lane closures will not be measured for payment. Do not leave lane closures in place during non-working hours and prohibited periods

TEMPORARY SIGNS

Temporary signposts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Temporary signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term temporary signs (temporary signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term temporary signs (temporary signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs approximately one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens, relocate or provide additional changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign. If the damage or mechanical/electrical failure is identified during active work operations, repair or replace the Changeable Message Sign within 6 hours. If the damage or mechanical/electrical failure is identified when there are no active work operations on the project, repair or replace the Changeable Message Sign within 12 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and/or relocated during the duration of the project. The Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

BARRICADES

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

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties, and apartments or apartment complexes of four or more units at all times. Access to fire hydrants must also be maintained at all times

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exception:

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

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½”. Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500’ intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and un-resurfaced areas which traffic

may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

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

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the Engineer.

Traffic Control Plan
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USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

Application

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

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

CMS should not be used for:

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

Messages

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

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

Placement

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

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

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Standard Abbreviations

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

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

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Standard Abbreviations (cont.)

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

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NOT USE THESE ABBREVIATIONS:

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

Typical Messages

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

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

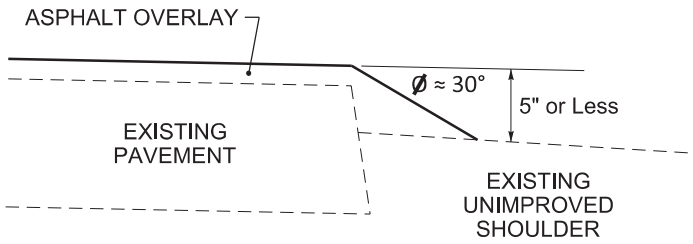
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Typical Messages (cont.)

Reason/Problem	Action
FOG XX MILES	PASS TO RIGHT
FREEWAY CLOSED	PREPARE TO STOP
FRESH OIL	REDUCE SPEED
HAZMAT SPILL	SLOW
ICE	SLOW DOWN
INCIDENT AHEAD	STAY IN LANE
LANES (NARROW, SHIFT, MERGE, ETC.)	STOP AHEAD
LEFT LANE CLOSED	STOP XX MILES
LEFT LANE NARROWS	TUNE RADIO 1610 AM
LEFT 2 LANES CLOSED	USE NN ROAD
LEFT SHOULDER CLOSED	USE CENTER LANE
LOOSE GRAVEL	USE DETOUR ROUTE
MEDIAN WORK XX MILES	USE LEFT TURN LANE
MOVING WORK ZONE, WORKERS IN ROADWAY	USE NEXT EXIT
NEXT EXIT CLOSED	USE RIGHT LANE
NO OVERSIZED LOADS	WATCH FOR FLAGGER
NO PASSING	
NO SHOULDER	
ONE LANE BRIDGE	
PEOPLE CROSSING	
RAMP CLOSED	
RAMP (SLIPPERY, ICE, ETC.)	
RIGHT LANE CLOSED	
RIGHT LANE NARROWS	
RIGHT SHOULDER CLOSED	
ROAD CLOSED	
ROAD CLOSED XX MILES	
ROAD (SLIPPERY, ICE, ETC.)	
ROAD WORK	
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)	
ROAD WORK XX MILES	
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)	
NEW SIGNAL XX MILES	
SLOW 1 (OR 2) - WAY TRAFFIC	
SOFT SHOULDER	
STALLED VEHICLES AHEAD	
TRAFFIC BACKUP	
TRAFFIC SLOWS	
TRUCK CROSSING	
TRUCKS ENTERING	
TOW TRUCK AHEAD	
UNEVEN LANES	
WATER ON ROAD	
WET PAINT	
WORK ZONE XX MILES	
WORKERS AHEAD	

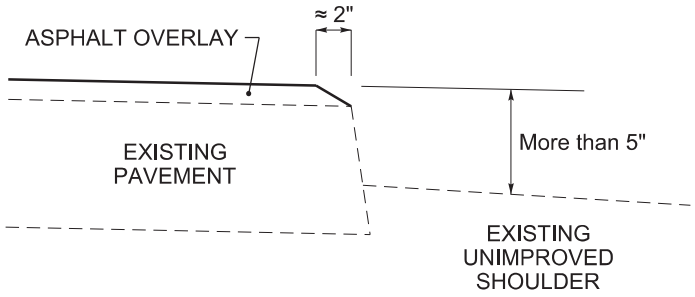
DURABLE PAVEMENT EDGE DETAIL

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



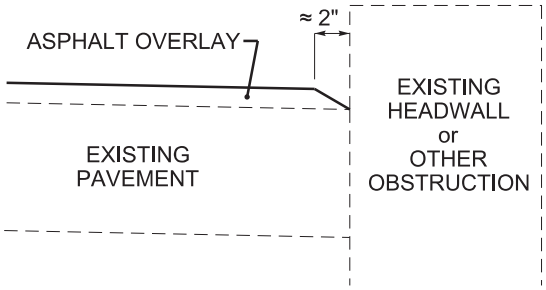
DURABLE PAVEMENT EDGE DETAIL

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



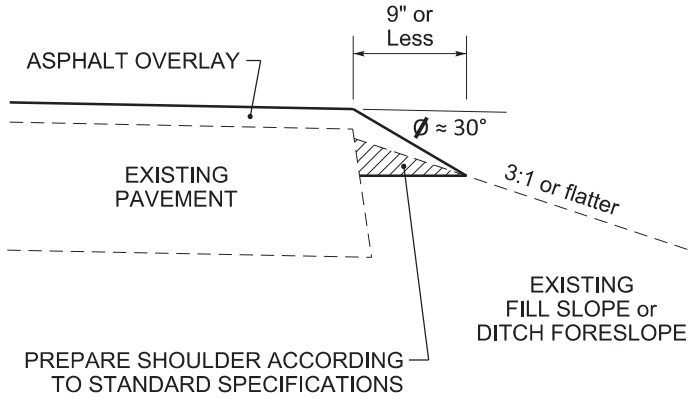
DURABLE PAVEMENT EDGE DETAIL

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



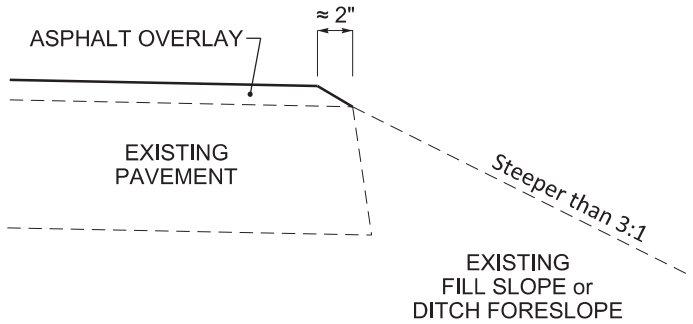
DURABLE PAVEMENT EDGE DETAIL

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



DURABLE PAVEMENT EDGE DETAIL

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



NOTES

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

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

TEAM KENTUCKY TRANSPORTATION CABINET

KENTUCKY TRANSPORTATION CABINET
Department of Highways
DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226
Rev. 01/2016
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RIGHT OF WAY CERTIFICATION

☒ Original	☐ Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	**COUNTY**	**PROJECT # (STATE)**	**PROJECT # (FEDERAL)**
12-9008	Pike	12F0 FD52 098 9454901R	HSIP 5344009
PROJECT DESCRIPTION			
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 197 FROM MP 4.210 – 15.237 IN PIKE COUNTY. (2018BOP)			

☐ **No Additional Right of Way Required**

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

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

All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.

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

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

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

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

Total Number of Parcels on Project	1	**EXCEPTION (S) Parcel #**	**ANTICIPATED DATE OF POSSESSION WITH EXPLANATION**
Number of Parcels That Have Been Acquired			
Signed Deed	1		
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	Joe Tackett
Signature		Signature	Joe Tackett
Date		Date	12/13/2022
Right of Way Director		**FHWA**	
Printed Name		Printed Name	
Signature	2022.12.13 13:35:50 -05'00'	Signature	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Date		Date	

UTILITIES AND RAIL CERTIFICATION NOTE

Pike County, HSIP 5344 (009)
FD52 098 0197 006-016; FD05 098 0197 004-011
Safety Improvements on KY 197 from MP 4.210-15.237
Item No. 12-9008.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

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.

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/her activities. The contractor will coordinate his/her activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

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.

UTILITIES AND RAIL CERTIFICATION NOTE

Pike County, HSIP 5344 (009)
FD52 098 0197 006-016; FD05 098 0197 004-011
Safety Improvements on KY 197 from MP 4.210-15.237
Item No. 12-9008.00

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

Gas

- There are two companies that own gas lines which service the area: Diversified Gas & Oil, and Kinzer Drilling Company. Mapping of some of these gas lines has been included in the plans. Contractor is responsible for verifying location of facilities within the project corridor and work with the companies before constructing around their facilities. Contractor is to pay special attention to RCP extension at Sta. 410+20 to ensure work does not impact existing gas main crossing.

Water

- The Mountain Water District waterline runs along the north side of KY 197 from the beginning of the project to just past Kettlecamp Branch Road before crossing over to the south side of KY 197 for the remainder of the project corridor.

Electric

- There are overhead power poles on both sides of the roadway along the project corridor. Owner is Kentucky Power.

Telecommunications

- AT&T and Suddenlink Communications both have facilities along the corridor. Contractor shall verify in the field the location of these lines.

Sanitary

- No public sanitary sewers, all lines are private.

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

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

None (Completion date provided by company)

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

None (Construction Working Days provided by company)

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

Mountain Water District has a 6" DI waterline and a 3" PVC waterline in the area of the box culvert at Sta. 576+08, near Jackson Branch Road. The 6" DI waterline is to be relocated to facilitate the planned culvert extension.

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

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

UTILITIES AND RAIL CERTIFICATION NOTE

Pike County, HSIP 5344 (009)
FD52 098 0197 006-016; FD05 098 0197 004-011
Safety Improvements on KY 197 from MP 4.210-15.237
Item No. 12-9008.00

AREA UTILITIES CONTACT LIST

Utility Company/Agency	Contact Name	Contact Information
1. Diversified Gas & Oil 100 Diversified Way Pikeville, KY 41501	Rick Duty	606-433-2913 (office) 606-225-2558 (cell) rduty@dgoc.com
2. Mountain Water District PO Box 3157 Pikeville, KY 41501	Roy Sawyers	606-631-6165 (office) 606-616-8366 rsawyers@mtwater.org
3. Suddenlink Communications County Route 5 Mt. Gaye, WV 25637	Rusty Pauley	304-654-1137 franklin.pauley@suddenlink.com
4. Kentucky Power 3249 North Mayo Trail Pikeville, KY 41501	Bill Johnson	606-437-3828 (office) 606-794-7381 (cell) wmjohnson@aep.com
5. AT&T of KY 29 Willis Branch Rd Prestonsburg, KY 41653	Jackie Salyer	606-874-2715 (office) 606-424-9328 (cell) js2299@att.com
6. Kinzer Drilling Company P.O. Box 155 Allen, KY 41601	Randy Tincher	606-874-8041 rtincher@kinzerdrilling.com

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

GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT

The contractor should be aware the following utility notes and KYTC Utility Bid Item Descriptions shall supersede, replace and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

PROTECTION OF EXISTING UTILITIES

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

PREQUALIFIED UTILITY CONTRACTORS

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. Those utility owners with a prequalification or preapproval requirement are as follows:

1.) Ronnie Mullins and Sons Inc.
P.O. Box 427
Elkhorn City, KY 41522
Mike Mullins: 606-434-2665

2.) H2O Construction, Inc.
470 Ziegler Drive
Pikeville, KY 41501
Steve Lockhart: 606-477-4392

3.) BOCA Enterprises, Inc.
7435 KY Route 321
Hager Hill, KY 41222
Kirby Bowling: 606-454-1694

The bidding contractor needs to review the above list and choose from the list of approved subcontractors at the end of these general notes as identified above before bidding. When the list of approved subcontractors is provided, only subcontractors shown on the following list(s) will be allowed to work on that utility as a part of this contract.

When the list of approved subcontractors for the utility work is not provided in these general notes, the utility work can be completed by the prime contractor. If the prime contractor chooses to subcontract the work, the subcontractor shall be prequalified with the KYTC Division of Construction Procurement in the work type of "Utilities" (I33). Those who would like to become prequalified may contact the Division of Construction Procurement at (502) 564-3500. Please note: it could take up to 30 calendar days for prequalification to be approved. The prequalification does not have to be approved prior to the bid, but must be approved before the subcontract will be approved by KYTC and the work can be performed.

CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

ENGINEER

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word "Inspector" or "Resident Project Representative" appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Inspector" or "Resident Project Representative" is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shut downs are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns . If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so following the rules, procedures and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shut downs is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be; but is not limited to, a door hanger, notice by newspaper ad, telephone contact, or any combination of communication methods deemed necessary, customary and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner's shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

CUSTOMER SERVICE AND LATERAL ABANDONMENTS When temporary or permanent abandonment of customer water, gas, or sewer services or laterals are necessary during relocation of utilities included in the contract, the utility contractor shall perform these abandonments as part of the contract as incidental work. No separate payment will be made for service line and lateral abandonments. The contractor shall provide all labor, equipment and materials to accomplish the temporary or permanent abandonment in accordance with the plans, specifications and/or as directed by the engineer. Abandonment may include, but is not limited to, digging down on a water or gas main at the tap to turn off the tap valve

or corporation stop and/or capping or plugging the tap, digging down on a sewer tap at the main and plugging or capping the tap, digging down on a service line or lateral at a location shown on the plans or agreeable to the engineer and capping or plugging, or performing any other work necessary to abandon the service or lateral to satisfactorily accomplish the final utility relocation.

STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be "in-kind" as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

Standard Water Bid Item Descriptions

W AIR RELEASE VALVE This bid item description shall apply to all air release valve installations of every size except those defined as "Special". This item shall include the air release valve, main to valve connecting line or piping, manhole, vault, structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release valve at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. All air release/vacuum valves on a project shall be paid under one bid item regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release valve would a separate bid item be established. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

BOLLARDS This item is for payment for furnishing and installing protective guard posts at above ground utility installations. A bollard may consist of, but not limited to, a steel post set in concrete or any other substantial post material. This item shall include all labor, equipment, and materials needed for complete installation of the bollard as specified by the utility owner specifications and plans. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: A bid code for this item has been established in standard roadway bid items and shall be used for payment of this item. The bid code is 21341ND

W CAP EXISTING MAIN This item shall include the specified cap, concrete blocking and/or mechanical anchoring, labor, equipment, excavation, backfill, and restoration required to install the cap at the location shown on the plans or as directed in accordance with the specifications. This item is not to be paid on new main installations. This pay item is only to be paid to cap existing mains. Caps on new mains are incidental to the new main. Any and all caps on existing mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of water main under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT CONCRETE Includes all labor, equipment, excavation, concrete, reinforcing steel, backfill, restoration, and etc., to construct the concrete encasement of the water main as shown on the plans, and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasement shall be paid under one bid item included in the contract regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open cut and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W FIRE HYDRANT ADJUST Includes all labor, equipment, excavation, materials, and backfill to adjust the existing fire hydrant using the fire hydrant manufacturer's extension kit for adjustments of 18" or less. Adjustments greater than 18" require anchoring couplings and vertical bends to adjust to grade. The Contractor will supply and install all anchor couplings, bends, fire hydrant extension, concrete blocking, restoration, granular drainage material, etc, needed to adjust the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. This also includes allowing for the utility owner inspector to inspect the existing fire hydrant prior to adjusting, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete and ready for use.

W FIRE HYDRANT ASSEMBLY Includes all labor, equipment, new fire hydrant, isolating valve and valve box, concrete pad around valve box (when specified in specifications or plans), piping, anchoring tee, anchoring couplings, fire hydrant extension, excavation, concrete blocking, granular drainage material, backfill, and restoration, to install a new fire hydrant assembly as indicated on plans and on standard drawings compete and ready for use. No additional payment will be made for rock excavation. Please refer to the Utility Company's

Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT RELOCATE This item includes all labor and equipment to remove the existing fire hydrant from its existing location and reinstalling at a new location. This item shall include a new isolating valve and valve box, concrete pad around valve box (when required in specifications or plans), new piping, new anchoring tee, anchoring couplings, fire hydrant extensions, concrete blocking, restoration, granular drainage material, excavation, and backfill as indicated on plans, specifications, and on standard drawings compete and ready for use. This item shall also include allowing for utility owner inspector to inspect the existing fire hydrant prior to reuse, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant for use, if the existing fire hydrant is determined unfit for reuse. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT REMOVE This bid item includes removal of an abandoned fire hydrant, isolating valve, and valve box to the satisfaction of the engineer. The removed fire hydrant, isolating valve and valve box shall become the property of the contractor for his disposal as salvage or scrap. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSH HYDRANT ASSEMBLY This item shall include the flushing hydrant assembly, service line, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the flush hydrant at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSHING ASSEMBLY This item shall include the flushing device assembly, service line, meter box and lid, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the flushing device at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W LEAK DETECTION METER This item is for payment for installation of a water meter at main valve locations where shown on the plans for detection of water main leaks. The meter shall be of the size and type specified in the plans or specifications. This item shall include all labor, equipment, meter, meter box or vault, connecting pipes between main and meter, main taps, tapping saddles, casting, yoke, and any other associated material needed for installation of a functioning water meter in accordance with the plans and specifications, complete and ready for use. No separate payment will be made under any other contract item for connecting pipe or main taps. Any and all leak detection meters shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete and ready for use.

W LINE MARKER This item is for payment for furnishing and installing a water utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

W LINE STOP SIZE 1 OR 2: This item shall include the line stop saddle/sleeve, valve, completion plug and any other material, labor, and equipment necessary to complete the line stop as indicated in the plans and/or specifications. This installation shall allow the waterline system to operate as usual without any interruption of service. The size shall be the measured internal diameter of the live pipe to be tapped. The line stop size to be

paid under sizes 1 or 2 shall be as follows:

Size 1 = All live tapped main sizes up to and including 8 inches
Size 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. This bid item is to be used to relocate an existing water main at point locations such as to clear a conflict at a proposed drainage structure, pipe or any other similar short relocation situation, and where the existing pipe material is to be reused. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specification as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case by case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Water Main Relocate shall not be paid on a linear feet basis; but, shall be Paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER This item is for payment for installation of all standard water meters of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER ADJUST This item includes all labor, equipment, excavation, materials, backfill, restoration, and etc., to adjust the meter casting to finished grade (whatever size exists) at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER RELOCATE This item includes all labor, equipment, excavation, additional fittings, disinfection, testing, restoration, and etc., to relocate the existing water meter (whatever size exists), meter yoke, meter box, casting, and etc., from its old location to the location shown on the plans or as directed, in accordance with the specifications and standard drawings complete and ready for use. The new service pipe (if required) will be paid under short side or long side service bid items. Any and all meter relocations of 2 inches or less shall be paid under one bid item included in the contract regardless of size. Each individual relocation shall be paid individually under this item; however, no separate bid items will be established for meter size variations of 2 inches ID or less. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER VAULT SIZE RANGE 1 OR 2 This item is for payment for installation of an underground structure for housing of a larger water meter, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s) valve(s), all piping, and fitting materials associated with installing a functioning meter and vault in accordance with the plans, standard drawings, and specifications, complete and ready for use. The size shall be the measured internal diameter of the meter and piping to be installed. The size meter vault to be paid under size 1 or 2 shall be as follows:

Size Range 1 = All meter and piping sizes greater than 2 inches up to and including 6 inches
Size Range 2 = All meter and piping sizes greater than 6 inches

This item shall be paid EACH (EA) when complete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER/FIRE SERVICE COMBO VAULT This item is for payment for installation of an underground structure for housing of a water meter and fire service piping, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s), valve(s), all piping, and fitting materials associated with installing a functioning meter and fire service vault in accordance with the plans and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER WITH PRESSURE REDUCING VALVE (PRV) This item is for payment for installation of all standard water meters with pressure reducing valves (PRV) of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, PRV, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter with PRV in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W PIPE This description shall apply to all PVC, ductile iron, and polyethylene/plastic pipe bid items of every size and type to be used as water main, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specification), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, sanitizing, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. This item shall include all temporary and permanent materials and equipment required to pressure test and sanitize mains including, but not limited to, pressurization pumps, hoses, tubing, gauges, main taps, saddles, temporary main end caps or plugs and blocking, main end taps for flushing, chlorine liquids or tablets for sanitizing, water for testing/sanitizing and flushing (when not supplied by the utility), chlorine neutralization equipment and materials, and any other items needed to accomplish pressure testing and sanitizing the main installation. This item shall also include pipe anchors, at each end of polyethylene pipe runs when specified to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W PLUG EXISTING MAIN This item shall include the specified plug, concrete blocking and/or anchoring, labor, equipment, excavation, backfill, and restoration required to install the plug in an existing in-service main that is to remain at the location shown on the plans or as directed in accordance with the specifications. Any and all plugs on all existing in-service mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: This utility bid item is not to be paid on new main installations or abandoned mains. This pay item is to plug existing in-service mains only. Plugs on new mains are incidental to the new main just like all other fittings.

NOTE: Plugging of existing abandon mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications For Road And Bridge Construction and paid using Bid Code 01314 Plug Pipe.

W PRESSURE REDUCING VALVE This description shall apply to all pressure reducing valves (PRV) of every size required in the plans and specifications except those bid items defined as "Special". Payment under this description is to be for PRVs being installed with new main. This item includes the PRV as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), pit or vault, backfill, restoration, testing, disinfection, and etc., required to install the specified PRV at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, PRVs shall be restrained. PRV restraint shall be considered incidental to the PRV and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W PUMP STATION This item is for payment for installation of pumps and an above or below ground structure for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) when complete.

W REMOVE TRANSITE (AC) PIPE This item shall include all labor, equipment, and materials needed for removal and disposal of the pipe as hazardous material. All work shall be performed by trained and certified personnel in accordance with all environmental laws and regulations.
Any and all transite AC pipe removed shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W SERVICE LONG SIDE This bid item description shall apply to all service line installations of every size bid up to and including 2 inch inside diameter, except those service bid items defined as "Special". This item includes the specified piping material, main tap, tapping saddle (if required), and corporation stop materials, coupling for connecting the new piping to the surviving existing piping, encasement of 2 inches or less internal diameter (if required by plan or specification), labor, equipment, excavation, backfill, testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service installations where the ends of the service connection are on opposite sides of the public roadway and the service line crosses the centerline of the public roadway as shown on the plans. The length of the service line is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for special bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE SHORT SIDE This bid item description shall apply to all service line installations of every size up to and including 2 inch internal diameter, except those service bid items defined as "Special". This item includes installation of the specified piping material of the size specified on plans, encasement of 2 inches or less internal diameter (if required by plan or specification), main tap, tapping saddle (if required), corporation stop, coupling for connecting the new piping to the surviving existing piping, labor, equipment, excavation, backfill,

testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service installations were both ends of the service connection are on the same side of the public roadway, or when an existing service crossing a public roadway will remain and is being extended, reconnected, or relocated with all work on one side of the public roadway centerline as shown on the plans. The length of the service line is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the service crosses a private residential or commercial entrance; but, not a public roadway. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE RELOCATE This item is for the relocation of an existing water service line where a meter is not involved, and where an existing service line can easily be adjusted by excavating alongside and moving the line horizontally and/or vertically a short distance without cutting the service line to avoid conflicts with road construction. This item shall include excavation, labor, equipment, bedding, and backfill to relocate the line in accordance with the plans and specifications complete and ready for use. Payment under this item shall be for each location requiring relocation. Payment shall be made under this item regardless of service size or relocation length. No separate pay items will be established for size or length variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE ABANDONMENT This item is to be used to pay for abandonment of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., abandonment of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE REMOVAL This item is to be used to pay for removal of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., removal of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TAPPING SLEVE AND VALVE SIZE 1 OR 2 This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready for use in accordance with the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Size 1 = All live tapped main sizes up to and including 8 inches
Size 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TIE-IN This bid description shall be used for all main tie-in bid items of every size except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, disinfection, testing and backfill required to make the water main tie-in as shown on the plans, and in accordance with the specifications complete and ready for use. Pipe for tie-ins shall be paid under separate bid items. This item shall be paid EACH (EA) when complete.

W VALVE This description shall apply to all valves of every size required in the plans and specifications except those bid items defined as "Special". Payment under this description is to be for gate or butterfly valves being installed with new main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, disinfection, and etc., required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, valves shall be restrained. Valve restraint shall be considered incidental to the valve and adjoining pipe. This description does not apply to cut-in valves. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE ANCHOR EXISTING This bid item is intended to pay for installation of restraint hardware on an existing valve where no restraint exists to hold the valve in place to facilitate tie-ins and other procedures where restraint is prudent. This work shall be performed in accordance with water specifications and plans. This bid item shall include all labor equipment, excavation, materials and backfill to complete restraint of the designated valve, regardless of size, at the location shown on the plans, complete and ready for use. Materials to be provided may include, but is not limited to, retainer glands, lugs, threaded rod, concrete, reinforcing steel or any other material needed to complete the restraint. Should the associated valve box require removal to complete the restraint, the contractor shall reinstall the existing valve box, the cost of which shall be considered incidental to this bid item. No separate bid items are being provided for size variations. All sizes shall be paid under one bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE BOX ADJUST Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, and etc., to adjust the top of the box to finished grade complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE CUT-IN This bid description is for new cut-in valve installations of all sizes where installation is accomplished by cutting out a section of existing main. This item shall include cutting the existing pipe, supplying the specified valve, couplings or sleeves, valve box, concrete pad around valve box (when required in specifications or plans), labor, equipment, and materials to install the valve at the locations shown on the plans, or as directed by the engineer, complete and ready for use. Any pipe required for installation shall be cut from that pipe removed or supplied new by the contractor. No separate payment will be made for pipe required for cut-in valve installation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE VAULT This item is for payment for installation of an underground structure for housing of specific valve(s) as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or doors, the specified valve(s), all piping, and fitting materials associated with installing a functioning valve vault in accordance with the plans, standard drawing, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Kentucky Transportation
Cabinet Project: 12-9008

N O T I C E

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NATIONWIDE SECTION 404 PERMIT AUTHORIZATION

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
KENTUCKY DIVISION OF WATER
SECTION 401 WATER QUALITY CERTIFICATION

PROJECT DESCRIPTION: Pike County 12-9008- Safety Improvements, KY 197, MP 006-016

The Sections 404 and 401 activities for this project have previously been permitted under the authority of the Department of the Army, Nationwide Section 404 Permit Number 14, *Linear Transportation Projects* (with additional *Kentucky Regional General Conditions*), and the Division of Section 401 Water General Water Quality Certification. For these authorized permits to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Number 14 permit and General Water Quality Certification in a conspicuous location at the project site, with unencumbered public access, for the duration of construction and comply with the general conditions required.

Locations Impacting Water Quality

Station-Location	Description
576+11	Extend Double 7.7'x 8' Box culvert- 6 LF with headwall for an additional impact of 0.0028 ac. to Jackson Branch of Elkhorn Creek which is a perennial stream. Latitude: 37.2718 deg. Longitude: -82.419 deg.

Kentucky Transportation
Cabinet Project: 12-9008

Station-Location	Description
671+40	Extend Double 10'x4' Box culvert- 11 LF with headwall for an additional impact of 0.0076 ac. to Adams Branch of Elkhorn Creek which is a perennial stream. Latitude: 37.2787 deg. Longitude: -82.3967 deg.
740+00	Extend Double 6'x4' Box culvert- 7 LF with headwall for an additional impact of 0.0032 ac. to Rough Branch of Elkhorn Creek which is a perennial stream. Latitude: 37.2767 deg. Longitude: -82.3761 deg.
*761+64	Extend 4'x3' Box culvert- 9 LF with headwall for an additional impact of 0.0011 ac. to an UT of Elkhorn Creek which is an intermittent stream. Latitude: 37.2809 deg. Longitude: -82.3712 deg.
*769+10	Extend 2.5'x 2.5' Box culvert- 8 LF with headwall for an additional impact of 0.001 ac. to an UT of Elkhorn Creek which is an intermittent stream. Latitude: 37.282 deg. Longitude: -82.3691 deg.

Note: These streams may be ephemeral in nature in which case they would not be considered WOTUS and therefore non-jurisdictional.

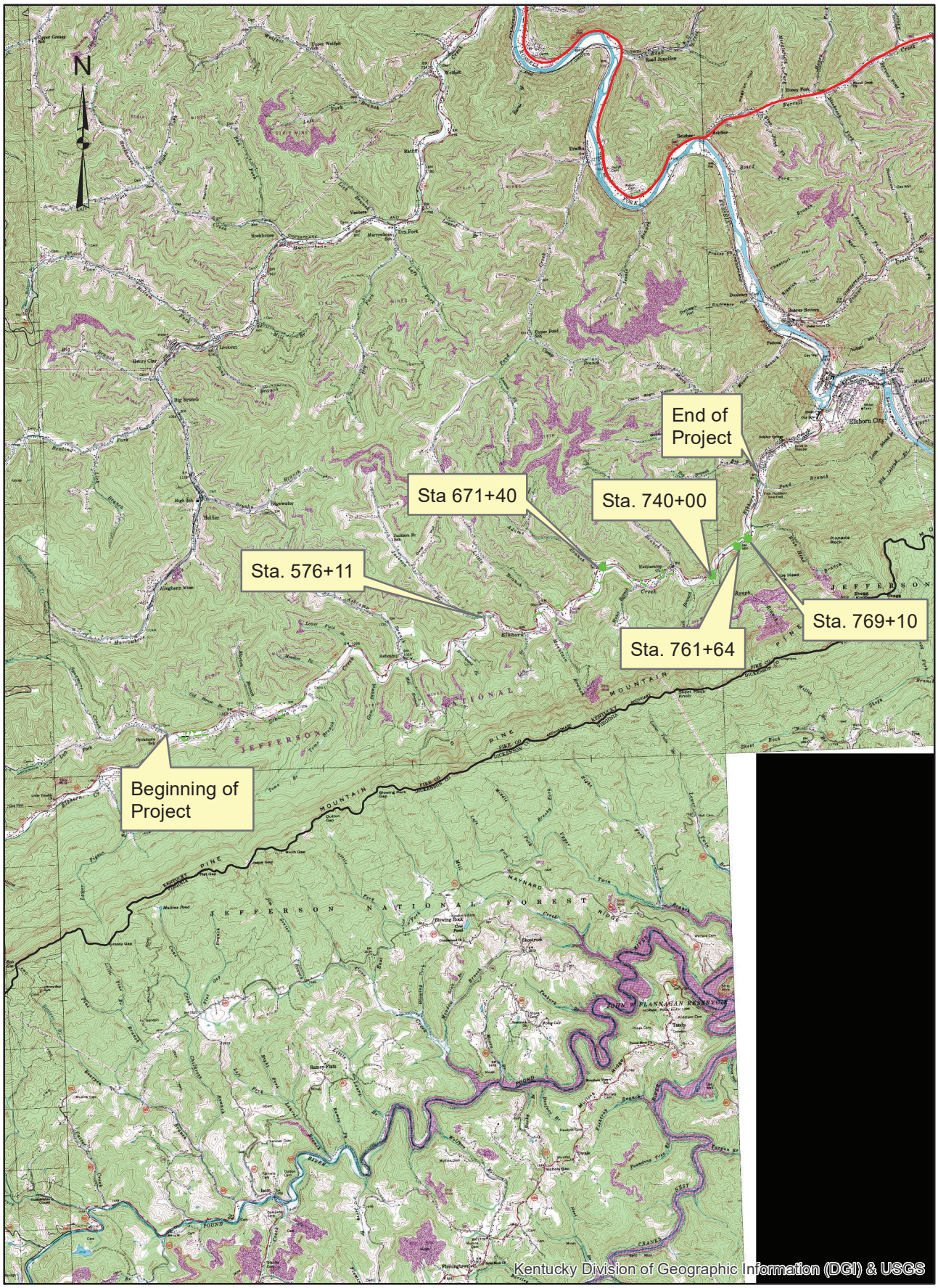
This project involves work near and/or within Jurisdictional Waters of the United States as defined by the U. S. Army Corps of Engineers; therefore, requiring a Nationwide Number 14 General Section 404 permit. The Division of Water conditionally certified this General Permit. Importantly, one of those conditions regards the use of heavy equipment in any stream channel, or streambed. If there is need to cross the stream channel with heavy equipment, or conduct work within the stream channel, a work platform or temporary crossing, is authorized. This should be constructed with clean rock (preferably sandstone or granite east of a line stretching from the McCreary-Wayne County line to the southwest, northeasterly to Lewis-Greenup County line), and sufficient pipe to allow stream flow to continue, unimpeded (refer to the attached standard drawing for low-water crossings at end of the document). Other conditions may be found under the heading, *General Certification—Nationwide Permit # 14 Linear Transportation Projects*.

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Number 14 Approval in a conspicuous location at the project site, for the duration of the construction, and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the

Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

12-9008 -Safety Improovements to KY 197
Pike County, KY Stream Impacts



Public Notice

US Army Corps of Engineers
Louisville District ®

Public Notice No.
LRL-2016-00006

Expiration Date
18 MAR 2022

Please address all comments and inquiries to
U.S. Army Corps of Engineers, Louisville District
ATTN: Ms. Meagan Knuckles, CELRL-RDS
P.O. Box 59
Louisville, Kentucky 40201-0059
Phone: (502) 315-6709

PUBLIC NOTICE ANNOUNCING REGIONAL CONDITIONS AND WATER QUALITY CERTIFICATIONS FOR NATIONWIDE PERMITS

On January 6, 2017, the U.S. Army Corps of Engineers (Corps) published a notice in the *Federal Register* (82 FR 1860) announcing the reissuance of all 50 existing Nationwide Permits (NWPs), general conditions, and definitions with some modifications. The Corps also issued two new NWPs, one new general condition, and five new definitions. The NWPs became effective on March 19, 2017, and will expire on March 18, 2022.

On March 17, 2017, the Great Lakes and Ohio River Division (LRD) Engineer approved Regional Conditions for the NWPs in Kentucky. These conditions apply to all activities authorized by NWPs. Regional Conditions provide additional protection for the aquatic environment by ensuring that the NWPs authorize only those activities with minimal adverse effects on the aquatic environment. The Regional Conditions for Kentucky are attached to this public notice. Additionally, the Louisville District has posted the Regional Conditions for the NWPs on its Internet home page at: http://www.lrl.usace.army.mil/Missions/Regulatory/Obtain-a-Permit/Nationwide/

The Kentucky Division of Water (KDOW) denied the 401 Water Quality Certification (WQC) for NWPs 16, 17, 32, 38, 43, 44, 52, 53 and 54. An individual 401 WQC from KDOW will be required for any project authorized by one of the NWPs with a 401 WQC denial. The KDOW conditioned the 401 WQC for NWPs 3, 5, 7, 12, 13, 14, 15, 18, 19, 21, 23, 25, 27, 29, 30, 31, 33, 36, 37, 39, 42, 45, 46, 49, 50, and 51. An individual 401 WQC will be required by KDOW under certain conditions. The full text of the Water Quality Certifications issued by KDOW is available on the Louisville District website at the link listed above.

Questions concerning implementation of the new and modified NWPs and conditions or the Corps Regional Conditions should be sent to the Louisville District, Corps of Engineers, ATTN: Ms. Meagan Knuckles, CELRL-RDS, P.O. Box 59, Louisville, Kentucky 40201-0059.

2017 Nationwide Permits Regional and Permit-Specific Conditions
COMMONWEALTH OF KENTUCKY

These regional conditions are in addition to, but do not supersede, the requirements in the Federal Register (Volume 82, No. 4 of January 6, 2017, pp 1860).

Regulatory Division
Public Notice No. LRL-2016-00006

Notifications for all Nationwide Permits (NWPs) shall be in accordance with General Condition No. 32.

1. For activities that would impact Outstanding State or National Resource Waters (OSNRWs), Exceptional Waters (EWs), Coldwater Aquatic Habitat Waters (CAHs) under the Endangered Species Act for the NWPs listed below, a Pre-Construction Notification (PCN) will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs (Section 404 activities), for impacts to these waters.

NWP 3 (Maintenance)
NWP 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities)
NWP 5 (Scientific Measurement Devices)
NWP 6 (Survey Activities)
NWP 7 (Outfall Structures and Associated Intake Structures)
NWP 12 (Utility Line Activities)
NWP 13 (Bank Stabilization)
NWP 14 (Linear Transportation Projects)
NWP 15 (U.S. Coast Guard Approved Bridges)
NWP 16 (Return Water from Upland Contained Disposal Areas)
NWP 17 (Hydropower Projects)
NWP 18 (Minor Discharges)
NWP 19 (Minor Dredging)
NWP 20 (Response Operations for Oil or Hazardous Substances)
NWP 21 (Surface Coal Mining Activities)
NWP 22 (Removal of Vessels)
NWP 23 (Approved Categorical Exclusions)
NWP 25 (Structural Discharges)
NWP 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities)
NWP 29 (Residential Developments)
NWP 30 (Moist Soil Management for Wildlife)
NWP 31 (Maintenance of Existing Flood Control Facilities)
NWP 32 (Completed Enforcement Actions)
NWP 33 (Temporary Construction, Access, and Dewatering)
NWP 34 (Cranberry Production Activities)
NWP 36 (Boat Ramps)
NWP 37 (Emergency Watershed Protection and Rehabilitation)
NWP 38 (Cleanup of Hazardous and Toxic Waste)
NWP 39 (Commercial and Institutional Developments)
NWP 40 (Agricultural Activities)
NWP 41 (Reshaping Existing Drainage Ditches)
NWP 42 (Recreational Facilities)
NWP 43 (Stormwater Management Facilities)
NWP 44 (Mining Activities)
NWP 45 (Repair of Uplands Damaged by Discrete Events)

NWP 46 (Discharges in Ditches)
NWP 48 (Commercial Shellfish Aquaculture Activities)
NWP 49 (Coal Remining Activities)
NWP 50 (Underground Coal Mining Activities)
NWP 51 (Land-Based Renewable Energy Generation Facilities)
NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
NWP 53 (Removal of Low-Head Dams)
NWP 54 (Living Shorelines)

2. In addition to the notification and agency coordination requirements in the NWPs, for impacts greater than 0.25 acres in all "waters of the U.S." for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:

NWP 3 (Maintenance)
NWP 7 (Outfall Structures and Associated Intake Structures)
NWP 12 (Utility Line Activities)
NWP 14 (Linear Transportation Projects)
NWP 29 (Residential Developments)
NWP 39 (Commercial and Institutional Developments)
NWP 40 (Agricultural Activities)
NWP 41 (Reshaping Existing Drainage Ditches)
NWP 42 (Recreational Facilities)
NWP 43 (Stormwater Management Facilities)
NWP 44 (Mining Activities)
NWP 51 (Land-Based Renewable Energy Generation Facilities)
NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
NWP 53 (Removal of Low-Head Dams)

3. For activities in all "waters of the U.S." for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:

NWP 21 (Surface Coal Mining Activities)
NWP 27 (Aquatic Habitat Restoration, Establishment & Enhancement Activities)
NWP 49 (Coal Remining Activities)
NWP 50 (Underground Coal Mining Activities)

4. Nationwide Permit No. 14 – Linear Transportation Projects.

(a) New road alignments or realignments are limited to a permanent loss of 500 linear feet of intermittent or perennial stream length at each crossing. Road crossings with permanent losses greater than 500 linear feet of intermittent or perennial stream associated with new alignments or realignments will be evaluated as an individual permit (i.e., a Letter of Permission or as a Standard Individual Permit).

(b) In addition to the notification requirements contained in NWP 14, the permittee must submit a PCN to the district engineer prior to commencing the activity for the permanent loss of greater than 300 feet of ephemeral, intermittent and perennial stream of all "waters of the U.S." (See General Condition 32 and the definition of "loss of waters of the United States" in the Nationwide Permits for further information.)

5. Notification in accordance with General Condition 32 is required to the Corps for all activities which are subject to jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

6. All applications are required as both a paper copy and in an electronic media format, including electronic mail or compact disc.

7. For all activities, the applicant shall review the U.S. Fish and Wildlife Service's IPaC website: http://ecos.fws.gov/ipac to determine if the activity might affect threatened and/or endangered species or designated critical habitat. If federally-listed species or designated critical habitat are identified, a PCN in accordance with General Condition 18 and 32 would be triggered and the official species list generated from the IPaC website must be submitted with the PCN.

Further information:

Outstanding State or National Resource Water (OSNRWs), Exceptional Waters (EWs), and Coldwater Aquatic Habitat Waters (CAHs) are waters designated by the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet. The list can be found at the following link: http://eppcapp.ky.gov/spwaters/

Information on Pre-Construction Notification (PCN) can be found at NWP General Condition No. 32 in the Federal Register (Volume 81, No. 105 of June 1, 2017, pp 35211).

Regulatory Division
Public Notice No. LRL-2016-00006

COORDINATING RESOURCE AGENCIES

Chief, Wetlands Regulatory Section
U.S. Environmental Protection Agency
Region IV
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

Supervisor
U.S. Fish & Wildlife Service
JC Watts Federal Building, Room 265
330 West Broadway
Frankfort, Kentucky 40601

Supervisor
401 Water Quality Certification
Kentucky Division of Water
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601

Commissioner
Department of Fish and Wildlife Resources
#1 Game Farm Road
Frankfort, Kentucky 40601

Executive Director and State Historic Preservation Officer
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

ADDITIONAL COORDINATING RESOURCE AGENCY FOR NWPS 21, 49, AND 50

Kentucky Department for Natural Resources
Division of Mine Permits
300 Sower Boulevard
Frankfort, Kentucky 40601

2017 Nationwide Permit

14. Linear Transportation Projects. Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to

ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

General Certification--Nationwide Permit # 14
Linear Transportation Projects

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.

2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.

3. The activity will impact less than 1/2 acre of wetland/marsh.

4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet and in-stream stormwater detention/retention basins are not covered under this general water quality certification.

5. For complete linear transportation projects, all impacts shall not exceed a cumulative length of 500 linear feet within each Hydrologic Unit Code (HUC) 14.

6. Any crossings must be constructed in a manner that does not impede natural water flow.

7. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).

8. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.

9. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.

10. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:

    - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
    - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
    - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to,

upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.

- Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
- To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

GENERAL CONDITIONS FOR WATER QUALITY CERTIFICATION

1. The Kentucky Division of Water may require submission of a formal application for an Individual Certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.

2. Nationwide permits issued by the U.S. Army Corps of Engineers for projects in Outstanding State Resource Waters, Cold Water Aquatic Habitats, and Exceptional Waters as defined by 401 KAR 10:026 shall require individual water quality certifications.

3. Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.

4. Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur.

5. Sediment and erosion control measures (e.g., check-dams, silt fencing, or hay bales) shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, placement shall not be conducted in such a manner that may cause instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control measures shall be removed and the natural grade restored prior to withdrawal from the site.

6. Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.

7. To the maximum extent practicable, all in-stream work under this certification shall be performed during low flow.

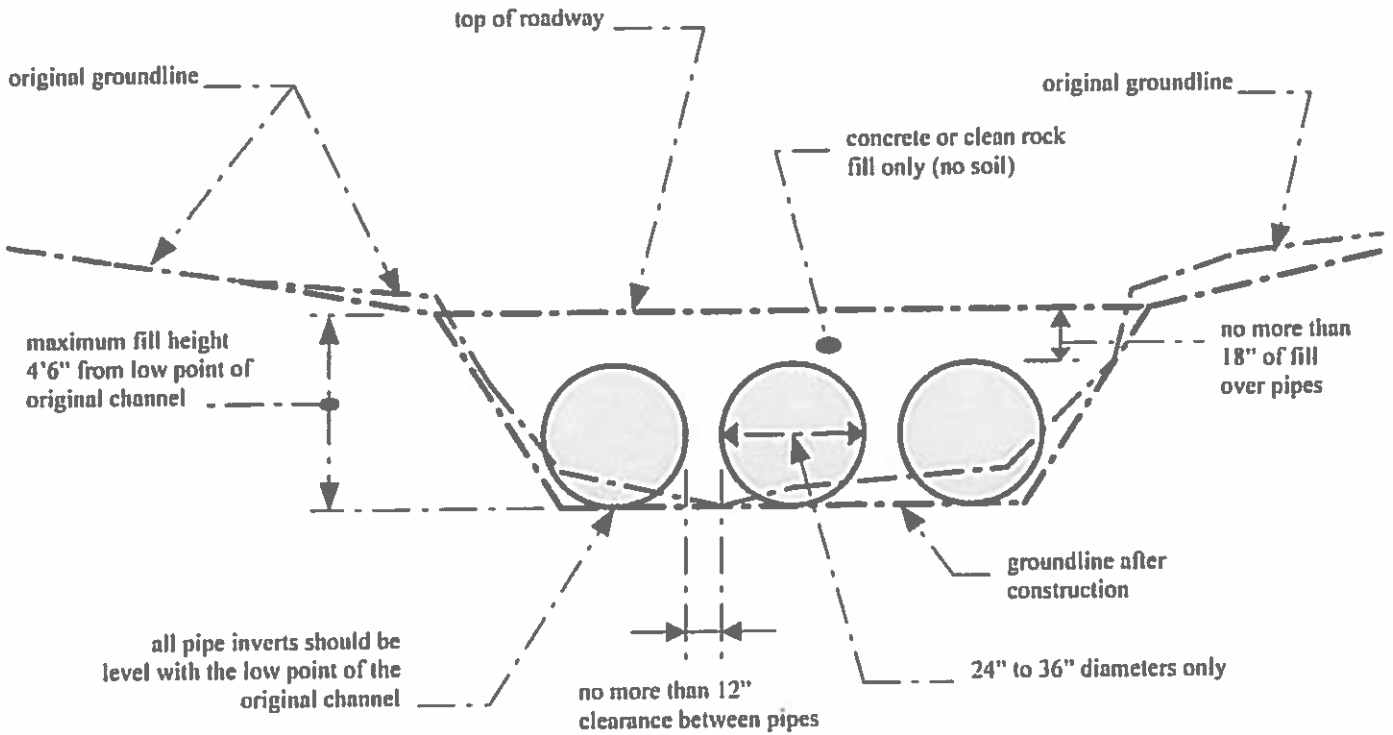
8. Heavy equipment (e.g. bulldozers, backhoes, draglines, etc.), if required for this project, should not be used or operated within the stream channel. In those instances where such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize re-suspension of sediments and disturbance to the channel, banks, or riparian vegetation.

9. If there are water supply intakes located downstream that may be affected by increased turbidity, the permittee shall notify the operator when work will be performed.

10. Removal of existing riparian vegetation should be restricted to the minimum necessary for project construction.

11. Should stream pollution, wetland impairment, and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380.

ATTACHMENT 1



NOTES:

1. This is a conceptual drawing. The number and size of pipes and other details will vary depending on specific site conditions.
2. The pipes and backfill must be contained within the stream channel as shown above. During the construction of the approaches and access roadway across the floodplain, unstable and unconsolidated materials unsuitable for roadways may be excavated and replaced with riprap, crushed stone, or other stable road construction materials. This may only be done, however, with the following provisions: (1) the disposal of excess, unconsolidated materials thus excavated must be outside of the floodplain and (2) the finished surface of the completed road may be no more than three inches (3") above the pre-construction surface of the floodplain at any point beyond the top of banks.

LOW-WATER CROSSING

STANDARD DRAWING
Not to Scale

Kentucky Transportation Cabinet

Highway District 12

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System Permit KYR10 Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Highway Safety Improvement Project on KY 197 in Pike County

Project: Item # 12-9008

Revised 3/4/2016

KYTC BMP Plan for Project Item # **12-9008**

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 12
2. Resident Engineer: (2)
3. Contractor name: (2)
   Address: (2)

   Phone number: (2)
   Contact: (2)
   Contractor's agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number: (2)
5. Route (Address): KY 197
6. Latitude/Longitude (project mid-point): 37° 16' 47.3", -82° 22' 23.88"
7. County (project mid-point): Pike
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project Item # **12-9008**

A. Site description:

1. Nature of Construction Activity (from letting project description): Ditching and Shouldering, Asphalt pavement, Culvert Extensions, Roadway Rehabilitation

2. Order of major soil disturbing activities: (2) and (3)

3. Projected volume of material to be moved: *This project does not involve significant cut and fill.*

4. Estimate of total project area (acres): 51.6 Acres

5. Estimate of area to be disturbed (acres): 9.6 Acres

6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.

7. Data describing existing soil condition: (1) & (2)

8. Data describing existing discharge water quality (if any): (1) & (2)

9. Receiving water name: Elkhorn Creek

10. TMDLs and Pollutants of Concern in Receiving Waters: *No TDML's were involved on this project*

11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.

12. Potential sources of pollutants:
The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

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

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

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as “Do Not Disturb” until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP’s shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA’s as the work progresses. <u>All DDA’s will have adequate BMP’s in place before being disturbed.</u>

3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
   - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
   - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
   - Clearing and Grubbing – The following BMP’s will be considered and used where appropriate.
     - Leaving areas undisturbed when possible.

KYTC BMP Plan for Project Item # **12-9008**

- Silt basins to provide silt volume for large areas.
- Silt Traps Type A for small areas.
- Silt Traps Type C in front of existing pipes and drop inlets which are to be saved
- Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
- Brush and/or other barriers to slow and/or divert runoff.
- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.

➢ Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
  - Silt Traps Type B in ditches and/or drainways as they are completed
  - Silt Traps Type C in front of pipes and drop inlets after they are placed
  - Channel Lining
  - Erosion Control Blanket
  - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
  - Non-standard or innovative methods

➢ Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
  - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
  - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
  - Additional Channel Lining and/or Erosion Control Blanket.
  - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
  - Special BMP's such as Karst Policy

➢ Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probable changes include:
  - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
  - Permanent Seeding and Protection

- Placing Sod
- Planting trees and/or shrubs where they are included in the project

➢ BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: *This project does not include storm water BMPs or flow controls for post-construction use.*

C. Other Control Measures

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

2. Waste Materials

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

3. Hazardous Waste

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

4. Spill Prevention

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

➢ **Good Housekeeping:**

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

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

➢ **Hazardous Products:**

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

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

The following product-specific practices will be followed onsite:

➢ **Petroleum Products:**

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

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

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

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

- **Fertilizers:**

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

- **Paints:**

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

- **Concrete Truck Washout:**

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

- **Spill Control Practices**

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

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

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

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines, or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. *There are no other local (MS4) requirements that are expected to be necessary for this project.*

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

    - Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.

    - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. *There are no such BMP's for this project.*

F. Inspections

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

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water Discharges

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

- Water from water line flushings.
- Water form cleaning concrete trucks and equipment.

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

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

H. Groundwater Protection Plan (3)

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

- Contractors statement: (3)

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

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

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

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

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

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

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

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

KYTC BMP Plan for Project Item # **12-9008**

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

The contractor is responsible for the preparation of a plan that addresses the 401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

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

KYTC BMP Plan for Project Item # **12-9008**

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

Signed _____ title _____, _____
Typed or printed name[2] signature

(3) Signed _____ title _____, _____
Typed or printed name[1] signature

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

2. KYTC Note: to be signed by the Chief District Engineer, or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

KYTC BMP Plan for Project Item # **12-9008**

Sub-Contractor Certification

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

Subcontractor

Name:
Address:
Address:

Phone:

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

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

Signed _____ title _____, _____
Typed or printed name[1] signature

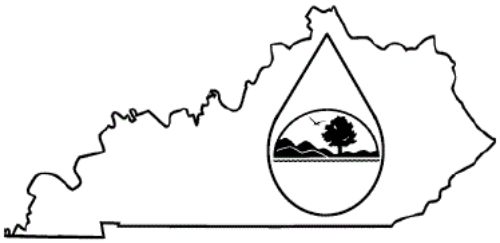
1. Sub-Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner, or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager,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

Item No.: 12-9008.00
Pike County
Highway Safety Improvement Project along KY 197
from MP 6.729 - 15.237

An electronic Notice of Intent (eNOI) for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, a copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the "Building Contractor" and the eNOI will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work within this contract in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control, as well as meeting the requirements of the KYR10 permit and the KDOW.

eForm Submittal ID: 323296

eForm Transaction ID: 8fc458bc-d06a-43e6-8ec5-c5d76a2333cd



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

Notice of Intent (NOI) for coverage of Storm Water Discharge Associated with Construction Activities Under the KPDES Storm Water General Permit KYR100000

Click here for Instructions
(Controls/KPDES_FormKYR10_Instructions.htm)

Click here to obtain information and a copy of the KPDES General Permit.
(http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field

Reason for Submittal:(*)	Agency Interest ID:	Permit Number:(✓)
Application for New Permit Coverage	Agency Interest ID	KPDES Permit Number

If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓)

ELIGIBILITY:
Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.

EXCLUSIONS:
The following are excluded from coverage under this general permit:
1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan;
2) Any operation that the DOW determines an individual permit would better address the discharges from that operation;
3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.

SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
Kentucky Transportation Cabinet, District 12	Mary	MI	Westfall-Holbrook

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
109 Loraine Street	Pikeville	Kentucky	41501

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
MaryW.Holbrook@ky.gov	(606) 433-7791	Phone

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)	Status of Owner/Operator(*)	SIC Code(*)
KYTC Project: Item 12-9008.00	State Government	1611 Highway and Street Const

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
Kentucky Transportation Cabinet - District 12	Mary	MI	Westfall-Holbrook

Site Physical Address:(*)
Pike County KY 197 from MP 6.729 to MP 15.237

City:(*)	State:(*)	Zip:(*)
Ashcamp	Kentucky	41512

County:(*)	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal)	Longitude(decimal degrees)(*)
Pike	37.266145	-82.433925

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)
Highway Safety Improvement Project consisting of ditching, shoulder work, pipe replacements, box culvert extensions, improvements to roadside slops, guardrail, signing,

a. For single projects provide the following information

Total Number of Acres in Project:(✓)	Total Number of Acres Disturbed:(✓)
51.6	9.6
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

b. For common plans of development provide the following information

Total Number of Acres in Project:(✓)	Total Number of Acres Disturbed:(✓)
# Acre(s)	# Acre(s)
Number of individual lots in development, if applicable:(✓)	Number of lots in development:(✓)
# lot(s)	# lot(s)
Total acreage of lots intended to be developed:(✓)	Number of acres intended to be disturbed at any one time:(✓)
Project Acres	Disturbed Acres
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

List Building Contractor(s) at the time of Application:(*)

	Company Name	
+		

SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED

Discharge Point(s):

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	
1	No	37.258089	-82.411964	Elkhorn Creek	Delete
2	No	37.271824	-82.418832	Elkhorn Creek	Delete
3	No	37.269804	-82.420499	Elkhorn Creek	Delete
4	No	37.268856	-82.422896	Elkhorn Creek	Delete
5	No	37.268585	-82.423739	Elkhorn Creek	Delete
6	No	37.266922	-82.425702	Elkhorn Creek	Delete
7	No	37.265667	-82.429123	Elkhorn Creek	Delete
8	No	37.265850	-82.433829	Elkhorn Creek	Delete
9	Yes	37.264257	-82.437057	Elkhorn Creek	Delete
10	No	37.264584	-82.439830	Elkhorn Creek	Delete

SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED

Name of MS4:

Date of application/notification to the MS4 for construction site permit coverage:	Discharge Point(s):(*)
Date	

	Latitude	Longitude	
+			

SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?

Will the project require construction activities in a water body or the riparian zone?: (*)	Yes
If Yes, describe scope of activity: (✓)	Extending culverts
Is a Clean Water Act 404 permit required?:(*)	Yes

Is a Clean Water Act 401 Water Quality Certification required?:(*)	Yes

SECTION VII -- NOI PREPARER INFORMATION

First Name:(*)	M.I.:	Last Name:(*)	Company Name:(*)
First Name	MI	Last Name	Company Name

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
Mailing Address	City		Zip

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
eMail Address	Phone	Phone

SECTION VIII -- ATTACHMENTS

Facility Location Map:(*)	Upload file
Supplemental Information:	Upload file

SECTION IX -- CERTIFICATION

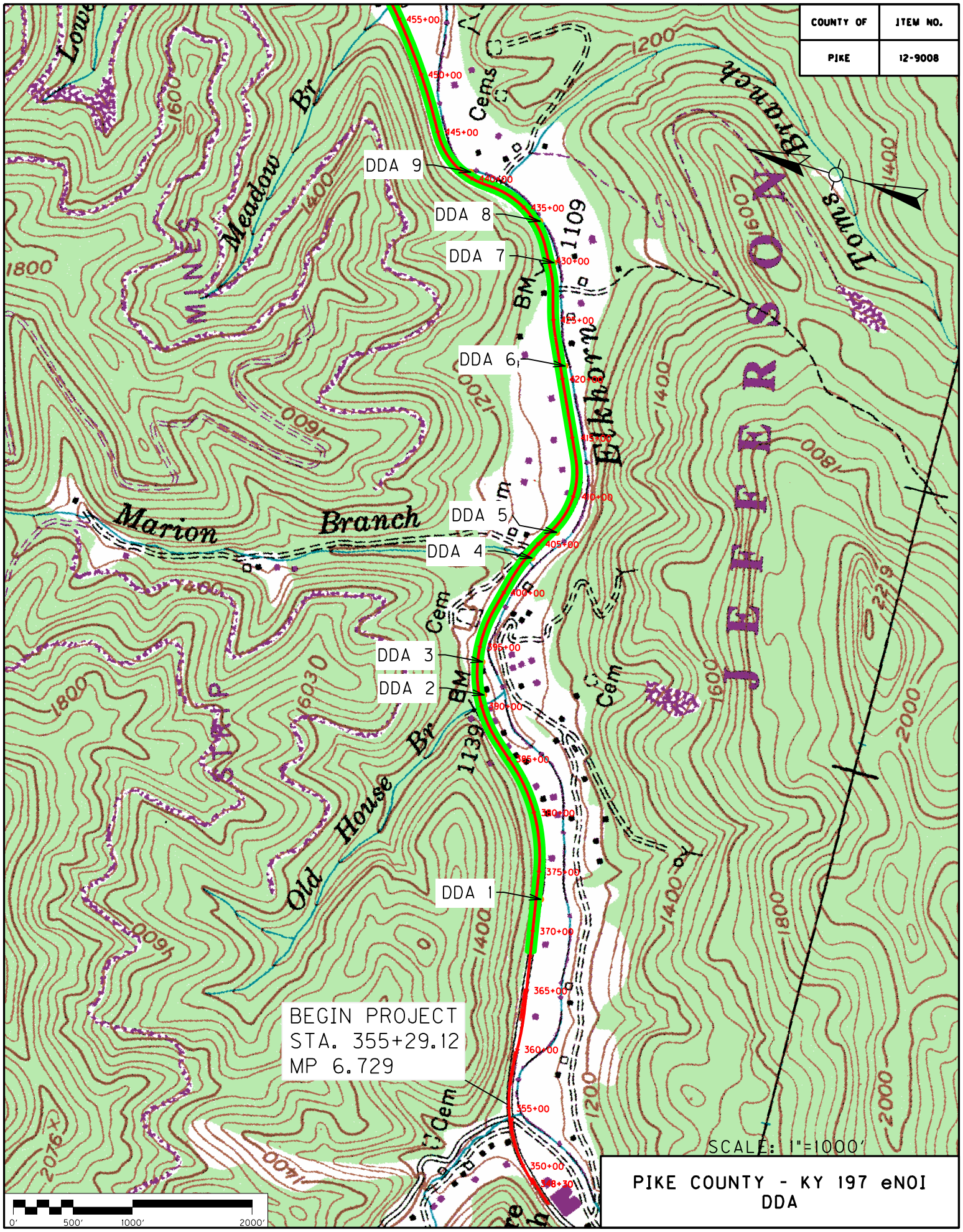
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

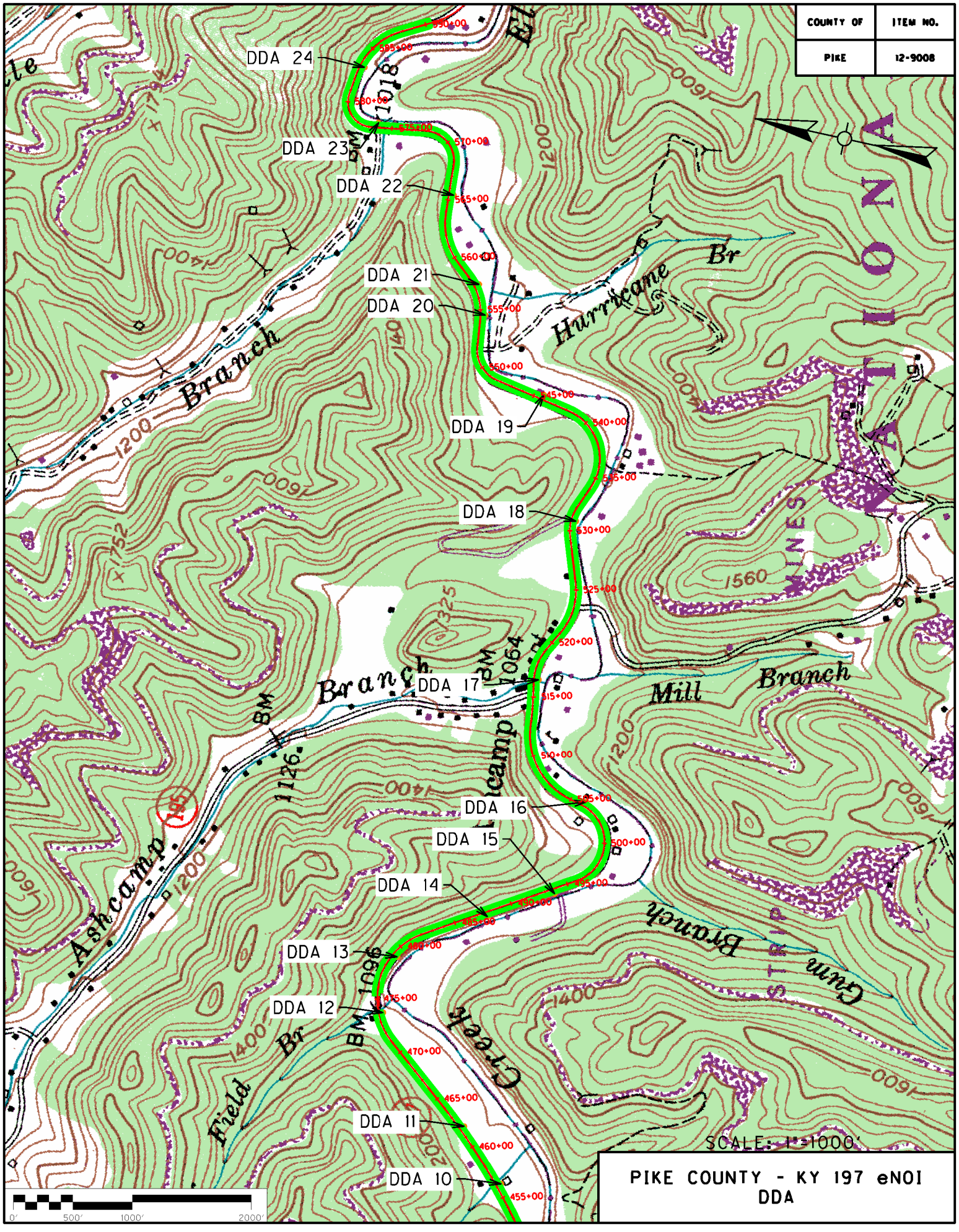
Signature:(*)	Title:(*)
Signature	Title

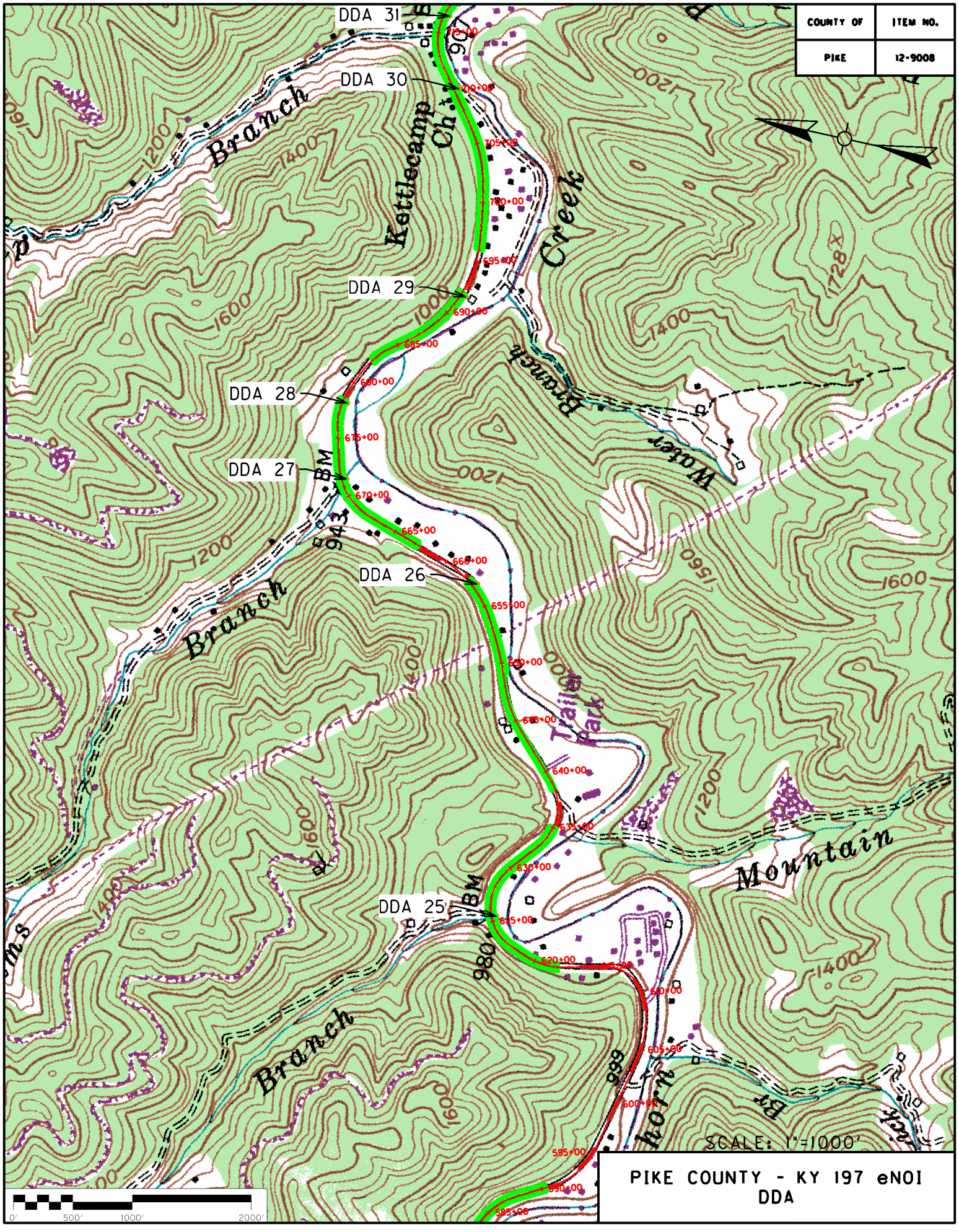
First Name:(*)	M.I.:	Last Name:(*)
First Name	MI	Last Name

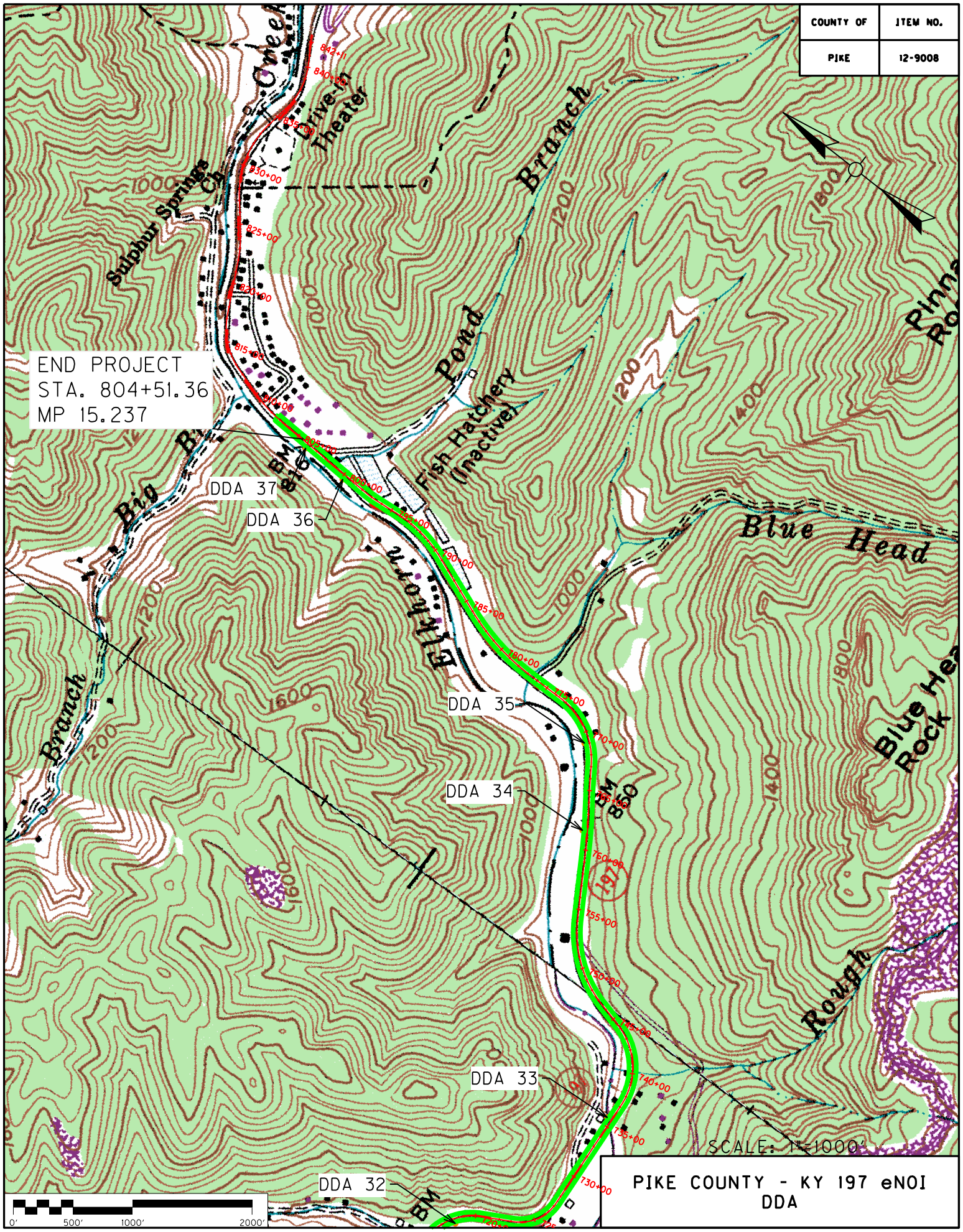
eMail Address:(*)	Business Phone:(*)	Alternate Phone:	Signature Date:(*)
eMail Address	Phone	Phone	Date

Click to Save Values for Future Retrieval | Click to Submit to EEC


COUNTY OF
PIKE
ITEM NO.
12-9008
DDA 9
DDA 8
DDA 7
DDA 6
DDA 5
DDA 4
DDA 3
DDA 2
DDA 1
BEGIN PROJECT
STA. 355+29.12
MP 6.729
Marion Branch
Meadow Br
Old House Br
Elkhorn
Toms Branch
JEFFERSON
SCALE: 1"=1000'
PIKE COUNTY - KY 197 eNOI
DDA
0'
500'
1000'
2000'


COUNTY OF
PIKE
ITEM NO.
12-9008
DDA 24
DDA 23
DDA 22
DDA 21
DDA 20
DDA 19
DDA 18
DDA 17
DDA 16
DDA 15
DDA 14
DDA 13
DDA 12
DDA 11
DDA 10
Hurricane Br
Branch
Mill Branch
Ashcamp
Creek
Field Br
Gum Branch
KENTUCKY UTILITIES
SCALE: 1"=1000'
PIKE COUNTY - KY 197 eNOI
DDA
0'
500'
1000'
2000'


DDA 31
DDA 30
DDA 29
DDA 28
DDA 27
DDA 26
DDA 25
Kettlecamp Ch
Branch
Creek
Water
Trailer Park
Mountain
BM
980
989
1128
COUNTY OF
PIKE
ITEM NO.
12-9008
SCALE: 1"=1000'
PIKE COUNTY - KY 197 eNOI
DDA
0'
500'
1000'
2000'


COUNTY OF
PIKE
ITEM NO.
12-9008
END PROJECT
STA. 804+51.36
MP 15.237
DDA 37
DDA 36
DDA 35
DDA 34
DDA 33
DDA 32
Sulphur Springs Ch
Drive-In Theater
Pond
Fish Hatchery (Inactive)
Elkhorn Creek
Big Branch
Blue Head
Rough
SCALE: 1"=1000'
0' 500' 1000' 2000'
PIKE COUNTY - KY 197 eNOI
DDA

MATERIAL SUMMARY

CONTRACT ID: 234100 **098GR23T001 HSIP & FD05** **120981972301**

ELKHORN CREEK ROAD (KY 197) FROM THE INTERSECTION OF KY 197 AND BARTLEYTOWN ROAD EXTENDING EAST TO THE INTERSECTION OF KY 197 AND POND BRANCH ROAD ASPHALT SURFACE WITH GRADE & DRAIN, A DISTANCE OF 8.51 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0075	00190	LEVELING & WEDGING PG64-22	231.00	TON
0080	00212	CL2 ASPH BASE 1.00D PG64-22	14.00	TON
0085	00301	CL2 ASPH SURF 0.38D PG64-22	1,778.00	TON
0090	00356	ASPHALT MATERIAL FOR TACK	11.10	TON
0095	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS
0100	02677	ASPHALT PAVE MILLING & TEXTURING	1,782.00	TON
0105	02159	TEMP DITCH	22,461.00	LF
0110	02160	CLEAN TEMP DITCH	11,231.00	LF
0115	02650	MAINTAIN & CONTROL TRAFFIC - (PIKE KY 197 HSIP)	1.00	LS
0120	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0125	02701	TEMP SILT FENCE	22,461.00	LF
0130	02703	SILT TRAP TYPE A	10.00	EACH
0135	02704	SILT TRAP TYPE B	10.00	EACH
0140	02705	SILT TRAP TYPE C	10.00	EACH
0145	02706	CLEAN SILT TRAP TYPE A	10.00	EACH
0150	02707	CLEAN SILT TRAP TYPE B	10.00	EACH
0155	02708	CLEAN SILT TRAP TYPE C	10.00	EACH
0160	02726	STAKING - (PIKE KY 197 HSIP)	1.00	LS
0165	05950	EROSION CONTROL BLANKET	1,000.00	SQYD
0170	05952	TEMP MULCH	30,976.00	SQYD
0175	05953	TEMP SEEDING AND PROTECTION	23,232.00	SQYD
0180	05963	INITIAL FERTILIZER	2.40	TON
0185	05964	MAINTENANCE FERTILIZER	1.44	TON
0190	05985	SEEDING AND PROTECTION	26,494.00	SQYD
0195	05992	AGRICULTURAL LIMESTONE	28.80	TON
0200	06510	PAVE STRIPING-TEMP PAINT-4 IN	42,230.00	LF
0205	06515	PAVE STRIPING-PERM PAINT-6 IN	101,016.00	LF
0210	06572	PAVE MARKING-DOTTED LANE EXTEN	140.00	LF
0215	26175EC	ROADSIDE REGRADING	15,953.00	LF
0220	00462	CULVERT PIPE-18 IN	108.00	LF
0225	00464	CULVERT PIPE-24 IN	117.00	LF
0230	01310	REMOVE PIPE	78.00	LF
0235	02483	CHANNEL LINING CLASS II	170.00	TON
0240	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	384.00	SQYD
0245	02625	REMOVE HEADWALL	17.00	EACH
0250	03262	CLEAN PIPE STRUCTURE	12.00	EACH
0255	08003	FOUNDATION PREPARATION - (MP 10.91 - STA. 576+08)	1.00	LS
0260	08003	FOUNDATION PREPARATION - (MP 12.72 - STA. 671+40)	1.00	LS
0265	08003	FOUNDATION PREPARATION - (MP 14.02 - STA. 740+00)	1.00	LS
0270	08003	FOUNDATION PREPARATION - (MP 14.43 - STA. 761+64)	1.00	LS
0275	08003	FOUNDATION PREPARATION - (MP 14.57 - STA. 769+10)	1.00	LS
0280	08100	CONCRETE-CLASS A - (CULVERTS)	90.12	CUYD

MATERIAL SUMMARY

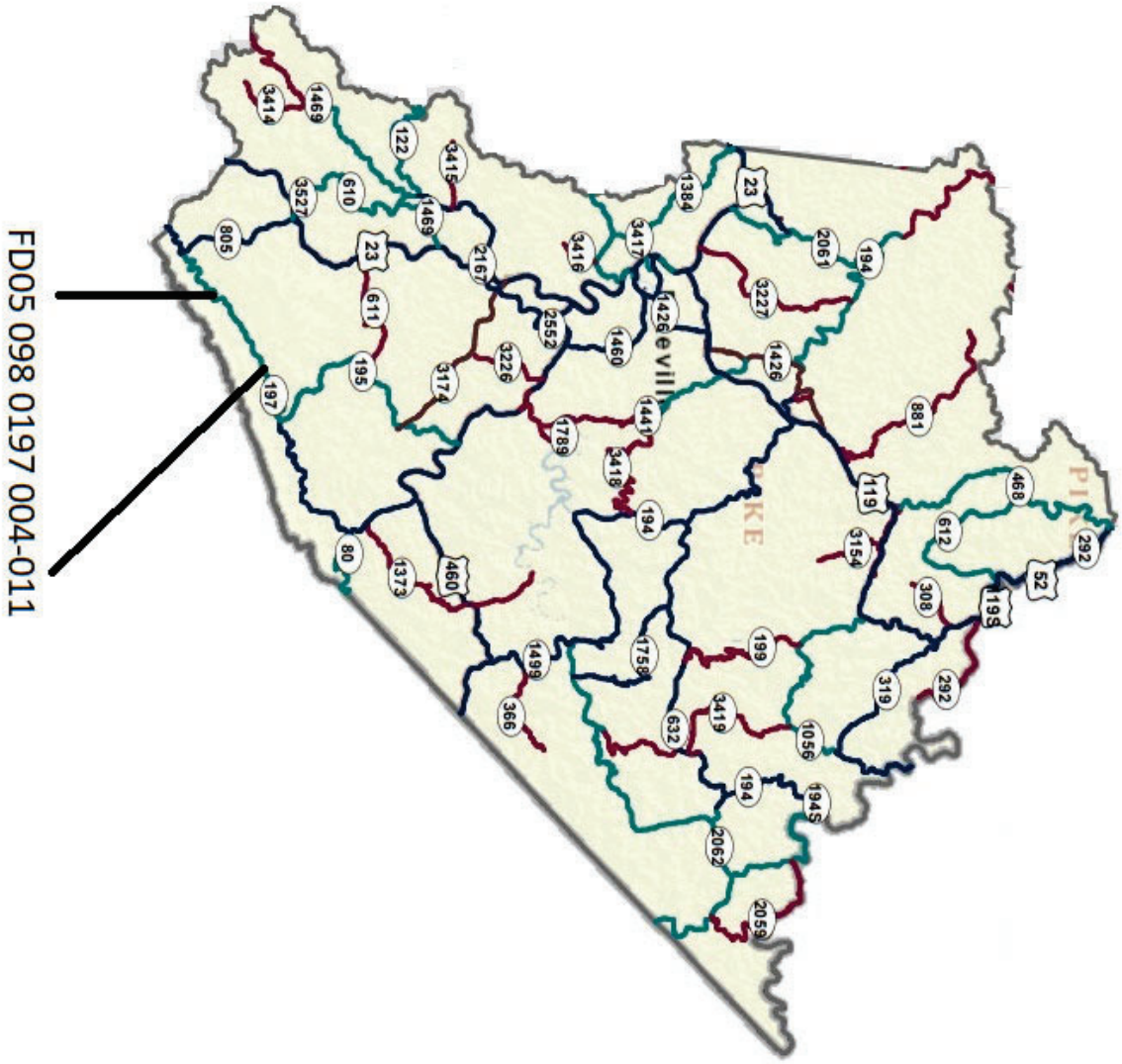
Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0285	08100	CONCRETE-CLASS A - (FOR INTERMEDIATE ANCHOR/ COLLAR)	22.39	CUYD
0290	08150	STEEL REINFORCEMENT - (CULVERTS)	24,119.00	LB
0295	20465EC	CLEAN CULVERT - (MP 10.91 - STA. 576+08)	1.00	LS
0300	20465EC	CLEAN CULVERT - (MP 12.72 - STA. 671+40)	1.00	LS
0305	20465EC	CLEAN CULVERT - (MP 14.02 - STA. 740+00)	1.00	LS
0310	20465EC	CLEAN CULVERT - (MP 14.43 - STA. 761+64)	1.00	LS
0315	20465EC	CLEAN CULVERT - (MP 14.57 - STA. 769+10)	1.00	LS
0320	26131ED	SLOPED AND MITERED HEADWALL-18 IN	7.00	EACH
0325	26132ED	SLOPED AND MITERED HEADWALL-24 IN	8.00	EACH
0330	02562	TEMPORARY SIGNS	800.00	SQFT
0335	06406	SBM ALUM SHEET SIGNS .080 IN	1,709.19	SQFT
0340	06407	SBM ALUM SHEET SIGNS .125 IN	69.16	SQFT
0345	06410	STEEL POST TYPE 1	4,115.00	LF
0350	21134ND	REMOVE-STORE AND REINSTALL SIGN	10.00	EACH
0355	21373ND	REMOVE SIGN	117.00	EACH
0360	24631EC	BARCODE SIGN INVENTORY	471.00	EACH
0365	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	81.00	EACH
0370	02351	GUARDRAIL-STEEL W BEAM-S FACE	3,858.75	LF
0375	02355	GUARDRAIL-STEEL W BEAM-S FACE A	50.00	LF
0380	02360	GUARDRAIL TERMINAL SECTION NO 1	6.00	EACH
0385	02367	GUARDRAIL END TREATMENT TYPE 1	2.00	EACH
0390	02369	GUARDRAIL END TREATMENT TYPE 2A	5.00	EACH
0395	02371	GUARDRAIL END TREATMENT TYPE 7	2.00	EACH
0400	02378	GUARDRAIL CONNECTOR TO BRIDGE END TY D	4.00	EACH
0405	02381	REMOVE GUARDRAIL	3,583.00	LF
0410	02391	GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH
0415	00441	ENTRANCE PIPE-18 IN	40.00	LF
0420	14036	W PIPE DUCTILE IRON 06 INCH	123.00	LF
0425	14094	W TIE-IN 06 INCH	2.00	EACH
0430	23561EC	EXCAVATION TRENCH-ROCK	123.00	LF
0435	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 234100 **098GR23T001 HSIP & FD05** **MP09801972201**

ELKHORN CREEK ROAD (KY 197) BEGINNING AT UPPER PIGEON BRANCH EXTENDING EAST TO HURRICANE CREEK. ASPHALT RESURFACING, A DISTANCE OF 6.24 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00190	LEVELING & WEDGING PG64-22	700.00	TON
0010	00301	CL2 ASPH SURF 0.38D PG64-22	5,725.00	TON
0015	00356	ASPHALT MATERIAL FOR TACK	51.00	TON
0020	02562	TEMPORARY SIGNS	800.00	SQFT
0025	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0030	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS
0035	02677	ASPHALT PAVE MILLING & TEXTURING	175.00	TON
0040	02697	EDGELINE RUMBLE STRIPS	67,000.00	LF
0045	06510	PAVE STRIPING-TEMP PAINT-4 IN	30,000.00	LF
0050	06515	PAVE STRIPING-PERM PAINT-6 IN	134,000.00	LF
0055	10020NS	FUEL ADJUSTMENT	10,001.00	DOLL
0060	10030NS	ASPHALT ADJUSTMENT	25,119.00	DOLL
0065	20458ES403	CENTERLINE RUMBLE STRIPS	33,450.00	LF
0070	02569	DEMOBILIZATION	1.00	LS


FD05 098 0197 004-011
Pleasureville
PIKE
3414
1469
122
3415
610
3527
1469
805
23
2167
3416
3417
1384
23
2061
194
3227
1426
2552
1460
1426
3226
3174
195
197
1441
1789
3418
881
119
468
612
3154
292
52
193
308
80
1373
460
194
1499
366
1758
199
319
292
632
3419
1056
194
1945
2062
2059

KY 197 (FD05 FUNDED)

GENERAL SUMMARY

COUNTY OF	ITEM NO.	FEDERAL NO.
PIKE	12-9008.00	5344 (009)

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
190	LEVELING & WEDGING PG64-22	TON	700
301	CL2 ASPH SURF 0.38D PG64-22	TON	5,725
356	ASPHALT MATERIAL FOR TACK	TON	51
2677	ASPHALT PAVE MILLING & TEXTURING*	TON	175
2697	EDGELINE RUMBLE STRIPS	LF	67,000
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LF	30,000
6515	PAVE STRIPING - PERM PAINT - 6 IN	LF	134,000
10020NS	FUEL ADJUSTMENT	DOLL	10,001
10030NS	ASPHALT ADJUSTMENT	DOLL	25,119
20458ES403	CENTERLINE RUMBLE STRIPS	LF	33,450

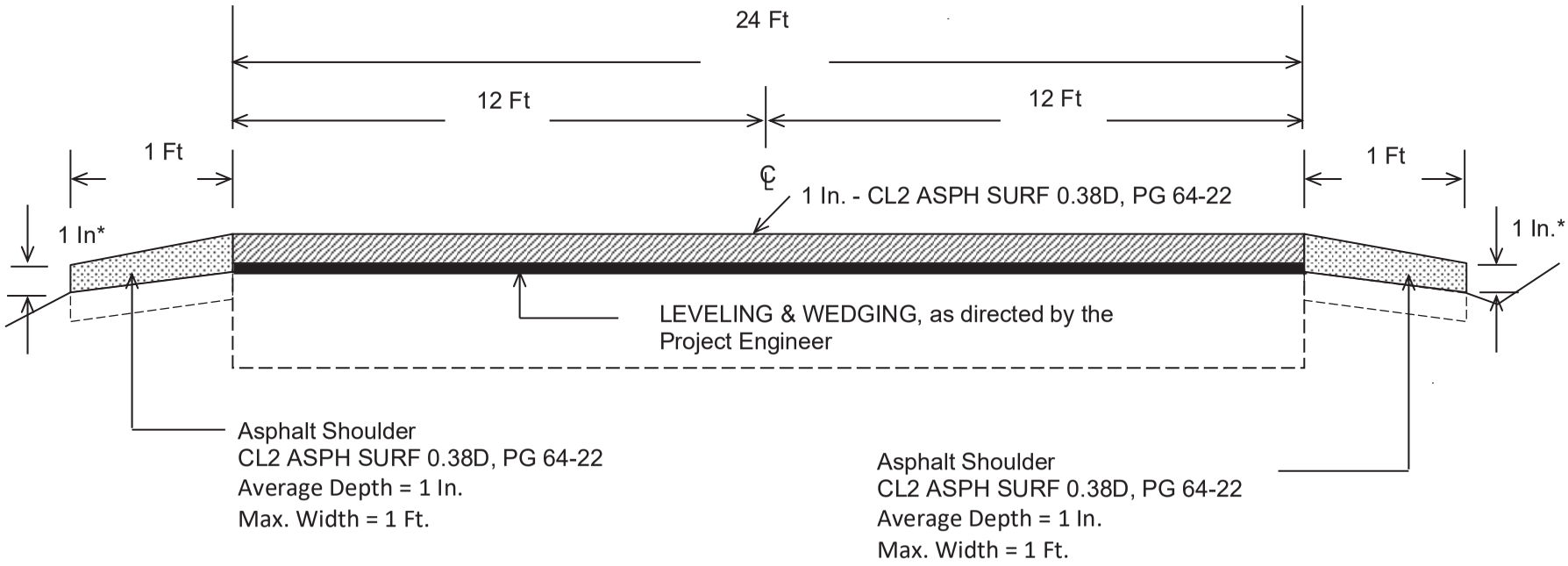
*Carried over from Milling Summary Sheet

Milling Summary Sheet

Project: FD05 098 0197 004-011 County: Pike District: D12 - Pikeville

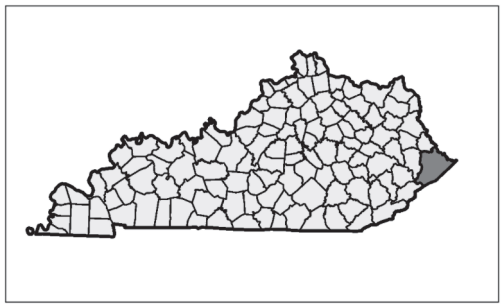
Mile Point	Notes	Length	Width	Avg Depth	Tons
10.454	Edge Key	100	23	0.5	7
4.210	Edge Key	100	23	0.5	7
4.376	Culvert	100	23	1	14.1
4.798	Culvert	100	23	1	14.1
5.375	Culvert	100	23	1	14.1
5.419	Culvert	100	23	1	14.1
5.745	Culvert	100	23	1	14.1
5.848	Culvert	100	23	1	14.1
5.915	Culvert	100	23	1	14.1
6.710	Bridge Ends	200	23	0.5	14.1
7.735	Culvert	100	23	1	14.1
7.976	Culvert	100	23	1	14.1
9.854	Culvert	100	23	1	14.1
				Total:	**175.0**

Pike County
TYPICAL SECTION
FD05 098 0197 004-011
MP's 4.210 to 10.545



***Where Existing Site Conditions Permit**

COUNTY OF	ITEM NO.
PIKE	12-9008



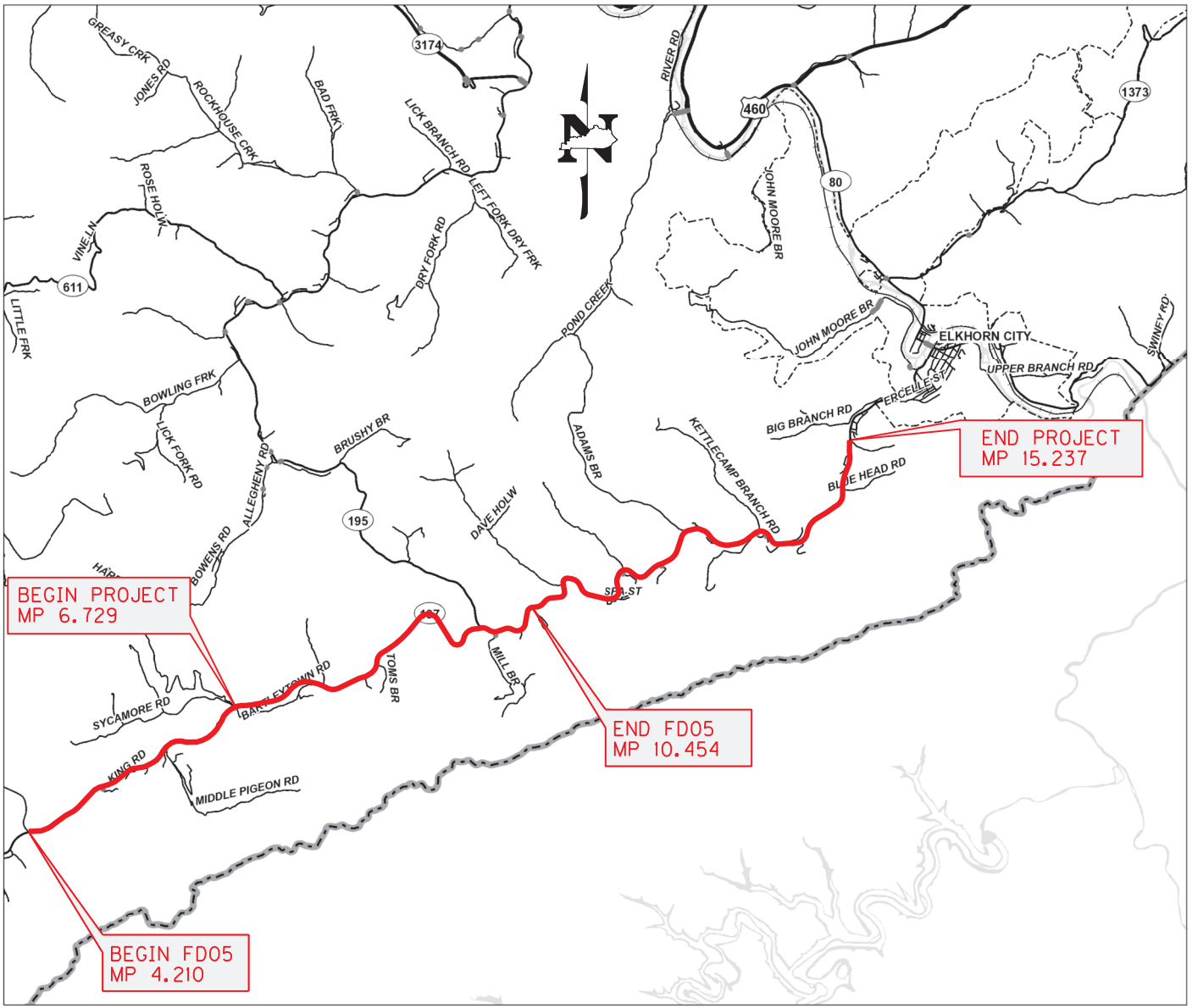


Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT

PIKE COUNTY

KY 197

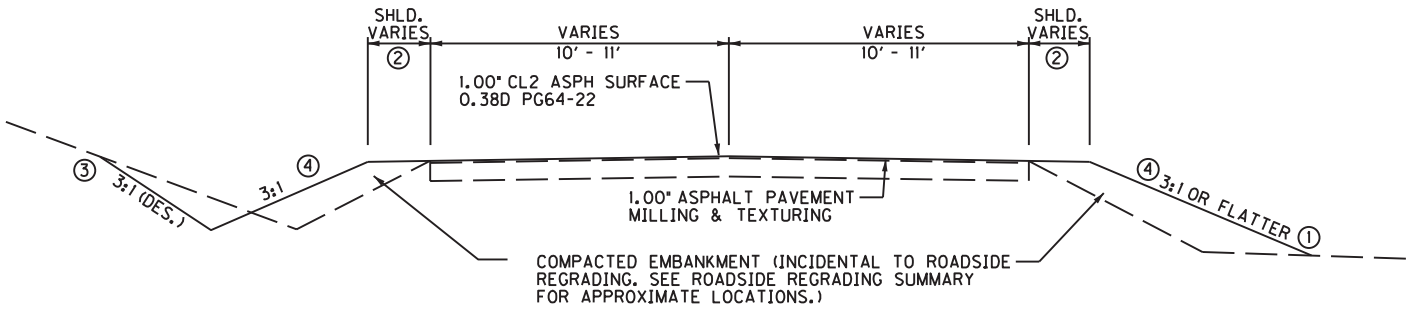


COUNTY OF	ITEM NO.
PIKE	12-9008.00

PAVEMENT REPAIR DETAIL

FD52 098 0197 006 016 (HSIP)

TYPICAL SECTIONS



PAVEMENT REPAIR DETAIL

SEE PAVEMENT REPAIR SUMMARY SHEET FOR APPROXIMATE LOCATIONS

① 3:1 OR FLATTER IS DESIRABLE. LOCATIONS THAT ARE LIMITED DUE TO RIGHT-OF-WAY, UTILITY POLE, TREES, FENCES, OR OTHER SENSITIVE OBSTRUCTIONS MAY REQUIRE EMBANKMENT BUT ONLY OUT TO THE EDGE OF THE RIGHT-OF-WAY OR SENSITIVE OBSTRUCTION(S). (SLOPE MAY BE STEEPER THAN 3:1)

② A 2' - 4' SHOULDER IS DESIRABLE BUT MAY HAVE TO BE ELIMINATED IN ORDER TO REMAIN WITHIN RIGHT-OF-WAY OR AVOID A SENSITIVE OBSTRUCTION.

③ FLATTEN DITCH BACKSLOPE WHEN POSSIBLE BUT REMAIN WITHIN RIGHT-OF-WAY. IN AREAS WHERE THE BACKSLOPE MUST REMAIN STEEP, THE ENGINEER MAY DETERMINE THAT CHANNEL LINING NEEDS TO BE INSTALLED TO STABLIZE THE BACKSLOPE.

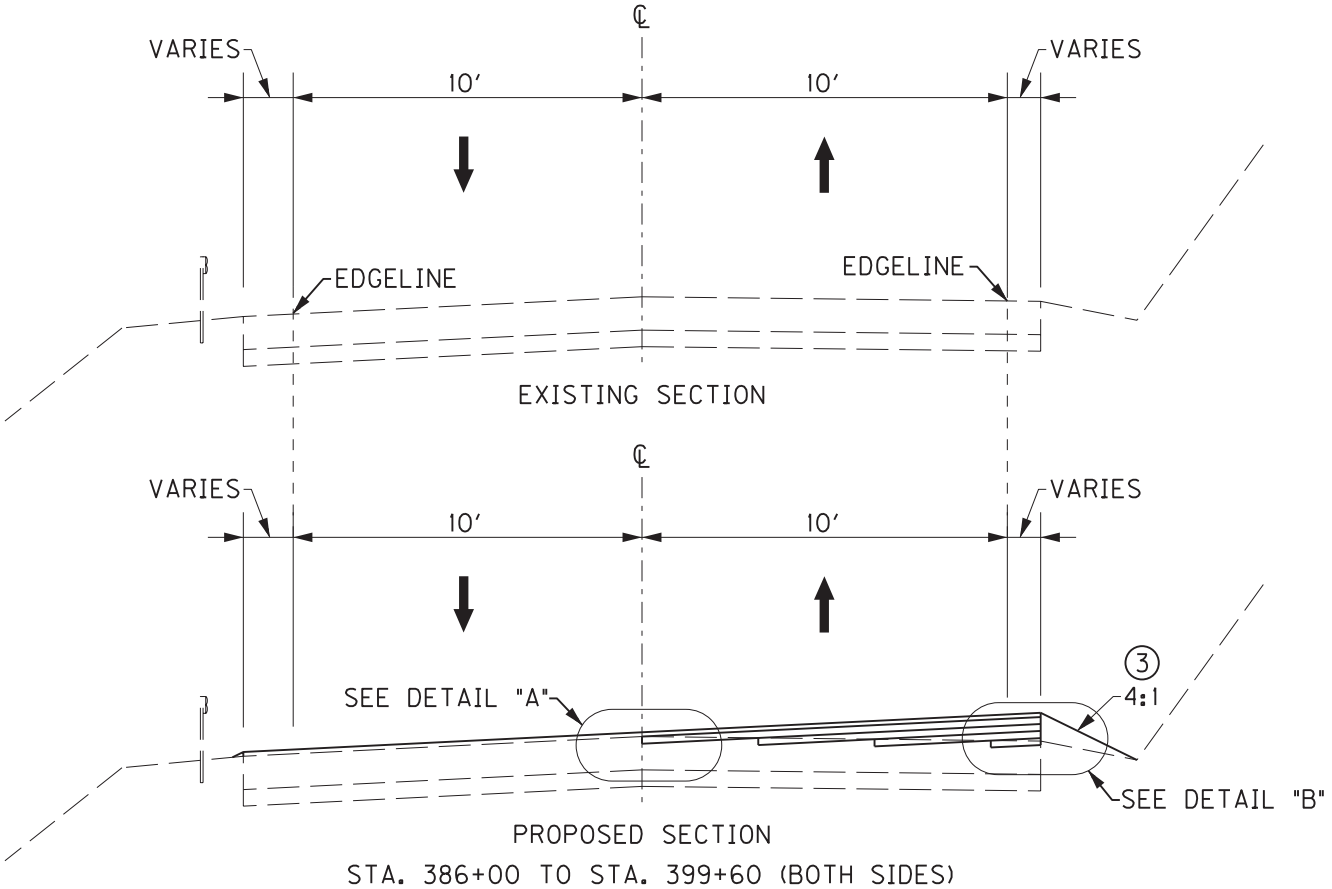
④ SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH.

KY 197
PAVEMENT REPAIR
DETAIL

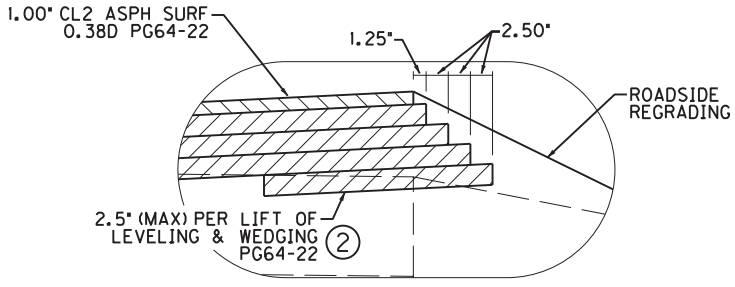
FD52 098 0197 006 016 (HSIP)

COUNTY OF	ITEM NO.
PIKE	12-9008.00

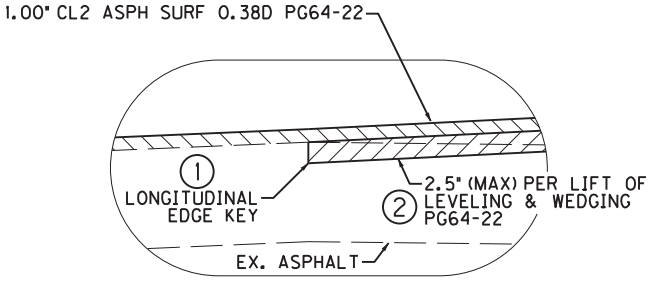
SUPERELEVATION IMPROVEMENT DETAIL



STA. 386+00 TO STA. 399+60 (BOTH SIDES)
STA. 711+50 TO STA. 722+00 (BOTH SIDES)
STA. 737+50 TO STA. 745+45 (BOTH SIDES)
STA. 745+45 TO STA. 755+50 (BOTH SIDES)
STA. 787+75 TO STA. 799+50 (BOTH SIDES)



DETAIL "B"



DETAIL "A"

NOTES:

1. SUPERELEVATION IMPROVEMENT WILL INVOLVE A LONGITUDINAL EDGE KEY FOR EACH LIFT OF LEVELING & WEDGING REQUIRED. LONGITUDINAL EDGE KEY IS TO BE PAID AS ASPHALT MILLING & TEXTURING.
2. LEVELING & WEDGING MIX DESIGN WILL BE BASED ON THE LIFT THICKNESS BEING PLACED FOR EACH CURVE. NUMBER AND THICKNESS OF LIFTS SHOWN IN THESE DETAILS ARE GRAPHICAL REPRESENTATIONS ONLY AND ARE NOT MEANT TO BE TAKEN AS AN INDICATION OF ACTUAL FIELD CONDITIONS.
3. SLOPE MAY VARY IF DIRECTED BY THE ENGINEER.

KY 197
SUPERELEVATION IMPROVEMENT
DETAIL

KY 197 (HSIP FUNDED)

GENERAL SUMMARY

COUNTY OF	ITEM NO.	FEDERAL NO.
PIKE	12-9008.00	5344 (009)

	ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
	190	LEVELING & WEDGING PG64-22	TON	231
	212	CL2 ASPH BASE 1.00D PG64-22	TON	14
①	301	CL2 ASPH SURF 0.38D PG64-22	TON	1,778
②	356	ASPHALT MATERIAL FOR TACK	TON	11.1
③	462	CULVERT PIPE-18 IN	LF	108
③	464	CULVERT PIPE-24 IN	LF	117
④	1310	REMOVE PIPE	LF	78
	1987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	EACH	81
	2159	TEMP DITCH	LF	22,461
	2160	CLEAN TEMP DITCH	LF	11,231
	2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	3,858.75
	2355	GUARDRAIL-STEEL W BEAM-S FACE A	LF	50
	2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	6
	2367	GUARDRAIL END TREATMENT TYPE 1	EACH	2
	2369	GUARDRAIL END TREATMENT TYPE 2A	EACH	5
	2371	GUARDRAIL END TREATMENT TYPE 7	EACH	2
	2378	GUARDRAIL CONNECTOR TO BRIDGE END TY D	EACH	4
	2381	REMOVE GUARDRAIL	LF	3,583
	2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	1
⑤	2483	CHANNEL LINING CLASS II	TON	170
	2562	TEMPORARY SIGNS	SQFT	800
	2569	DEMOBILIZATION	LS	1
	2607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	SQYD	384
	2625	REMOVE HEADWALL	EACH	17
	2650	MAINTAIN & CONTROL TRAFFIC	LS	1
	2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2
	2676	MOBILIZATION FOR MILL & TEXT	LS	1
⑥	2677	ASPHALT PAVE MILLING & TEXTURING	TON	1,782
	2701	TEMP SILT FENCE	LF	22,461
	2703	SILT TRAP TYPE A	EACH	10
	2704	SILT TRAP TYPE B	EACH	10
	2705	SILT TRAP TYPE C	EACH	10

① 978 TONS FOR SUPERELEVATION CORRECTIONS, 716 TONS FOR PAVEMENT REPAIRS AND 84 TONS FOR PIPE EXTENSIONS.

② 5.1 TONS FOR SUPERELEVATION CORRECTIONS, 5.4 TONS FOR PAVEMENT REPAIRS AND 0.6 TONS FOR PIPE EXTENSIONS.

③ PIPE EXTENSIONS SHALL BE OF IN-KIND MATERIAL.

④ 60 LF FOR PIPE EXTENSION & REPLACEMENT SUMMARY, 18 LF FOR WATERLINE RELOCATION DETAIL.

⑤ 20 TONS FOR PIPE EXTENSION & REPLACEMENT SUMMARY, 50 TONS FOR RCBC EXTENSION SUMMARY, 100 TONS FOR POTENTIAL USE AROUND INLETS AND OUTLETS OF PIPES, ALONG AREAS OF REGRADED DITCH LINE AND/OR FILL SLOPE, AND OTHER AREAS AS DIRECTED BY THE ENGINEER.

⑥ 982 TONS FOR SUPERELEVATION CORRECTIONS, 716 TONS FOR PAVEMENT REPAIRS AND 84 TONS FOR PIPE EXTENSIONS.

KY 197 (HSIP FUNDED)

GENERAL SUMMARY

COUNTY OF	ITEM NO.	FEDERAL NO.
PIKE	12-9008.00	5344 (009)

	ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
	2706	CLEAN SILT TRAP TYPE A	EACH	10
	2707	CLEAN SILT TRAP TYPE B	EACH	10
	2708	CLEAN SILT TRAP TYPE C	EACH	10
	2726	STAKING	LS	1
	3262	CLEAN PIPE STRUCTURE	EACH	12
	5950	EROSION CONTROL BLANKET	SQYD	1,000
	5952	TEMP MULCH	SQYD	30,976
	5953	TEMP SEEDING AND PROTECTION	SQYD	23,232
	5963	INITIAL FERTILIZER	TON	2.40
	5964	MAINTENANCE FERTILIZER	TON	1.44
	5985	SEEDING AND PROTECTION	SQYD	26,494
	5992	AGRICULTURAL LIMESTONE	TON	28.8
	6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	1,709.19
	6407	SBM ALUM SHEET SIGNS .125 IN	SQFT	69.16
	6410	STEEL POST TYPE 1	LF	4,115
	6510	PAVE STRIPING-TEMP PAINT - 4 IN	LF	42,230
	6515	PAVE STRIPING-PERM PAINT - 6 IN	LF	101,016
⑦	6572	PAVE MARKING-DOTTED LANE EXTEN	LF	140
	8003	FOUNDATION PREPARATION (MP 10.91 - STA. 576+11)	LS	1
	8003	FOUNDATION PREPARATION (MP 12.72 - STA. 671+40)	LS	1
	8003	FOUNDATION PREPARATION (MP 14.02 - STA. 740+00)	LS	1
	8003	FOUNDATION PREPARATION (MP 14.43 - STA. 761+64)	LS	1
	8003	FOUNDATION PREPARATION (MP 14.57 - STA. 769+10)	LS	1
	8100	CONCRETE-CLASS A (FOR INTERMEDIATE ANCHOR/COLLAR)	CUYD	22.39
⑧	8100	CONCRETE-CLASS A (CULVERTS)	CUYD	90.12
⑧	8150	STEEL REINFORCEMENT (CULVERTS)	LB	24,119
	20465EC	CLEAN CULVERT (MP 10.91 - STA. 576+11)	LS	1
	20465EC	CLEAN CULVERT (MP 12.72 - STA. 671+40)	LS	1
	20465EC	CLEAN CULVERT (MP 14.02 - STA. 740+00)	LS	1
	20465EC	CLEAN CULVERT (MP 14.43 - STA. 761+64)	LS	1
	20465EC	CLEAN CULVERT (MP 14.57 - STA. 769+10)	LS	1
	21134ND	REMOVE, STORE & REINSTALL SIGN	EACH	10
	21373ND	REMOVE SIGN	EACH	117
	24631EC	BARCODE SIGN INVENTORY	EACH	471
	26131ED	SLOPED & MITERED HEADWALL - 18 IN	EACH	7
	26132ED	SLOPED & MITERED HEADWALL - 24 IN	EACH	8
⑨	26175EC	ROADSIDE REGRADING	LF	15,953

⑦ FOR CONTINUING THE CENTERLINE AND EDGELINE STRIPING THROUGH THE INTERSECTIONS NOTED IN THE PLANS. TO BE AT A 2':6' STRIPE:GAP RATIO. 70 LF TO BE YELLOW AND 70 LF TO BE WHITE.

⑧ FOR CONSTRUCTION OF THE CULVERT EXTENSIONS AS NOTED IN THE RCBC SUMMARY AND SPECIFIED IN THE DETAILS.

⑨ 4,985 LF IN SUPERELEVATION CORRECTION AREAS, 675 LF IN PIPE EXTENSION AREAS AND 10,293 LF IN ROADSIDE REGRADING AREAS.

KY 197 (HSIP FUNDED)

GENERAL SUMMARY

COUNTY OF	ITEM NO.	FEDERAL NO.
PIKE	12-9008.00	5344 (009)

	ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
(11)	14036	W PIPE DUCTILE IRON 06 INCH	LF	123
(11)	14094	W TIE-IN 06 INCH	EACH	2
(11)	441	ENTRANCE PIPE - 18 IN	LF	40
(11)	23561EC	EXCAVATION TRENCH - ROCK	LF	123

(11) REFER TO THE WATERLINE RELOCATION DETAIL SHEET FOR MORE INFORMATION ON THIS ITEM

PAVEMENT REPAIR SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Begin		End		Side	Width (ft)	Length (LF)	Area (SY)	CL2 Asphalt Surface 0.38D PG64-22 (Ton)	Asphalt Pave Milling & Texturing (Ton)	Asphalt Material for Tack (TON)	Description
Mile Point	Station	Mile Point	Station								
7.04	371+94	7.07	373+20	LT&RT	22	126	308	17	17	0.13	
7.12	375+78	7.13	376+28	RT	11	50	62	4	4	0.03	
7.22	381+10	7.25	382+74	LT&RT	22	164	401	23	23	0.17	
7.64	403+58	7.78	410+70	LT&RT	22	712	1741	96	96	0.73	
7.83	413+21	7.84	414+07	LT	11	86	106	6	6	0.04	
7.86	415+08	7.89	416+41	LT&RT	22	133	326	18	18	0.14	
8.03	423+91	8.04	424+41	LT&RT	22	50	123	7	7	0.05	
8.23	434+50	8.25	435+55	LT&RT	22	105	257	15	15	0.11	
8.45	445+98	8.46	446+48	LT&RT	22	50	123	7	7	0.05	
8.56	451+80	8.57	452+30	LT&RT	22	50	123	7	7	0.05	
8.62	455+34	8.63	455+84	LT&RT	22	50	123	7	7	0.05	
8.72	460+47	8.75	462+08	LT&RT	22	161	394	22	22	0.17	
8.93	471+32	8.98	474+26	LT&RT	22	294	719	40	40	0.30	
9.07	479+14	9.19	485+45	LT&RT	22	631	1543	85	85	0.65	
9.23	487+40	9.32	492+27	LT&RT	22	487	1191	66	66	0.50	
9.34	493+33	9.38	495+05	LT&RT	22	172	421	24	24	0.18	
9.42	497+16	9.48	500+70	LT&RT	22	354	866	48	48	0.36	
9.71	512+50	9.75	514+58	LT&RT	22	208	509	28	28	0.21	
9.87	521+27	9.89	522+11	LT	11	84	103	6	6	0.04	
9.96	525+75	9.97	526+25	LT	11	50	62	4	4	0.03	
10.26	541+81	10.28	543+03	LT&RT	22	122	299	17	17	0.13	
10.50	554+54	10.53	556+04	LT&RT	22	150	367	21	21	0.15	
10.88	574+69	10.90	575+64	LT&RT	22	95	233	13	13	0.10	
11.42	602+74	11.43	603+24	RT	11	50	62	4	4	0.03	
11.52	608+25	11.53	608+75	RT	11	50	62	4	4	0.03	
12.08	637+75	12.16	641+95	LT&RT	22	420	1027	57	57	0.43	
12.78	675+04	12.81	676+42	LT&RT	22	138	338	19	19	0.14	
12.92	682+00	12.93	682+60	RT	11	60	74	5	5	0.03	
13.67	722+00	13.70	723+34	LT&RT	22	134	328	19	19	0.14	
14.42	761+46	14.46	763+40	LT&RT	22	194	475	27	27	0.20	
							TOTAL	716 TON	716 TON	5.4 TON	

ITEM	DESCRIPTION	UNIT	QUANTITY
301	CL2 ASPHALT SURFACE 0.38D PG64-22	TON	716
2677	ASPHALT PAVE MILLING & TEXTURING	TON	716
356	ASPHALT MATERIAL FOR TACK	TON	5.4

SUPERELEVATION IMPROVEMENT SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Begin Milepoint	Begin Station	End Milepoint	End Station	Width of Section (ft)	Length of Section (ft)	Runoff Length (ft)	Runout Length (ft)	Existing Superelevation (%)	Proposed Superelevation (%)	CL2 Asph Surface 0.38D PG64-22 (Ton)	Leveling & Wedging PG64-22 (Ton)	Asphalt Pave Milling & Texturing (Ton)	Roadside Regrading (LF)	Asphalt Material For Tack (Ton)
7.311	386+00	7.568	399+60	22	1,360	153	51	2%-10%	6%	244	59	198	1,360	1.4
13.475	711+50	13.674	722+00	22	1,050	204	51	3%-10%	8%	208	55	220	1,050	1.1
13.968	737+50	14.118	745+45	22	795	204	51	4%-10%	8%	180	20	184	795	0.8
14.118	745+45	14.309	755+50	22	1,005	153	51	0%-6%	6%	204	85	218	1,005	1.0
14.920	787+75	15.066	795+50	22	775	153	51	4%-9%	6%	142	12	162	775	0.8
									TOTAL	**978 TON**	**231 TON**	**982 TON**	**4,985 LF**	**5.1 TON**

ITEM	DESCRIPTION	UNIT	QUANTITY
190	LEVELING & WEDGING PG64-22	TON	231
301	CL2 ASPH SURFACE 0.38D PG64-22	TON	978
356	ASPHALT MATERIAL FOR TACK	TON	5.1
26175EC	ROADSIDE REGRADING	LF	4,985
2677	ASPHALT PAVE MILLING & TEXTURING	TON	982

Note: These numbers are for estimate purposes only. Final locations and quantities will be determined by the Engineer in the field.

Entrances reconstruction is considered to be incidental to superelevation improvements.

Superelevation improvements that cause notable entrance reconstruction are located at the following locations :

Sta. 390+35 LT
Sta. 391+10 LT
Sta. 713+50 LT
Sta. 714+90 LT
Sta. 715+50 LT
Sta. 739+40 LT
Sta. 752+00 RT

GUARDRAIL SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

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

Proposed Guardrail to be Constructed										Existing Guardrail to be Removed					
Side of Road	Proposed BEGINNING Treatment	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Proposed ENDING Treatment	Proposed Length (LF)	Number of Radius Rail	Remarks	Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Existing Length (LF)
RT	Type 2A	568+50	10.767	571+70	10.828	Type 7	275.00		Extend guardrail approximately 100' in the non-cardinal direction.	RT	569+90	10.794	571+70	10.828	180.00
RT	Type 2A	574+64	10.883	589+64	11.167	Type 2A	1,500.00			RT	574+64	10.883	589+64	11.167	1,500.00
RT	Type 4A	621+49	11.771	624+74	11.832	Single Face A	277.50	4	Tie to existing guardrail on bridge.	RT	621+49	11.771	624+74	11.832	325.00
RT	Single Face A	625+09	11.839	626+10	11.858	Type 1	48.75	3	Tie to existing guardrail on bridge.	RT	625+09	11.839	626+10	11.858	101.00
RT	Terminal Section 1	638+70	12.097	640+50	12.131	Terminal Section 1	202.50	4							
RT	Type 1	713+00	13.504	719+22	13.622	Terminal Section 1	586.25	3		RT	713+00	13.504	719+22	13.622	622.00
RT	Terminal Section 1	719+55	13.628	728+10	13.790	Type 7	820.00	2		RT	719+55	13.628	728+10	13.790	855.00
RT	Terminal Section 1	734+20	13.905	734+40	13.909	Connector Type D	32.50	2	Extend concrete Bridge Railing by adding new guardrail.						
LT	Terminal Section 1	734+40	13.909	734+60	13.913	Connector Type D	28.75	1	Extend concrete Bridge Railing by adding new guardrail.						
LT	Connector Type D	736+30	13.945	736+60	13.951	Type 2A	37.50		Extend concrete Bridge Railing by adding new guardrail.						
RT	Connector Type D	736+10	13.941	736+60	13.951	Type 2A	50.00		Extend concrete Bridge Railing by adding new guardrail.						

Summary of Items					
Guardrail-Steel W Beam-S Face	3,858.75	LF	Delineator for Guardrail B/W	81	EACH
Remove Guardrail	3,583.00	LF	GR Connector to Bridge End Type A	0	EACH
End Treatment Type 1	2	EACH	GR Connector to Bridge End Type A-1	0	EACH
End Treatment Type 2A	5	EACH	GR Connector to Bridge End Type C	0	EACH
End Treatment Type 3	0	EACH	GR Connector to Bridge End Type D	4	EACH
End Treatment Type 4A	1	EACH	DGA	0	TONS
End Treatment Type 7	2	EACH	Asphalt Seal Coat	0.00	TONS
Terminal Section No. 1	6	EACH	Asphalt Seal Aggregate	0.00	TONS
Guardrail-Steel W Beam-S Face A	50	LF	Guardrail-Bridge Case II	0	LF

(HSIP FUNDED)

Summary of Additional Materials Associated with Guardrail End Treatment Type 3

Side of Road	Approx. Milepoint of Proposed ET Type 3	Approx. Station of Proposed ET Type 3	18" Pipe (LF)	Concrete for End Anchor (CY)	Metal End Section TY 2 - 18" (EACH)	Embankment In Place (CY)	Channel Lining Class 2 (TON)	Remarks
RT	2.437	128+68	65	0.16	1	36	11	
	0.000							
	0.000							
	0.000							
	0.000							
	0.000							
	0.000							
	0.000							
	0.000							
	0.000							
		TOTALS:	**65 LF**	**0.16 CY**	**1 EA**	**36 CY**	**11 TON**	

PIPE REPLACEMENT & EXTENSION SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Mile Point	Station	Existing					Proposed																						Comments
		Pipe Size, Type	Left Hdwl	Right Hdwl	Skew	Length (LF)	Remove Headwall (EA)		Remove Pipe (LF)		Pipe Extension Length (LF)		Class A Concrete for Intermediate Anchor/Collar (CU YD)^3	Entrance Pipe 15" (LF)	Culvert Pipe 18" (LF)	Culvert Pipe 24" (LF)	Culvert Pipe 30" (LF)	Culvert Pipe 36" (LF)	Headwall or Drainage Box		Roadside Regrading (LF)		Ditching (LF) (Perp. to Rdwy)		Channel Lining Cl II (TON)		1.00" CL2 Asphalt Surface 0.38D PG64-22	Asphalt Pave Milling & Texturing	9" CL2 Asphalt Base 1.00D PG64-22	Asphalt Material For Tack	
							Left	Right	Left	Right	Left	Right							Left	Right	Left	Right	Left	Right	Left	Right	(TONS)	(TONS)	(TONS)	(TONS)	
6.90	364+16	24" RCP	STD HDWL	STD HDWL	0°	29		1		4		13	1.68			13				24" SLOPED & MITERED		25					6.4	6.4	0.9	0.05	
6.94	366+19	24" RCP	STD HDWL	STD HDWL	0°	29		1		4		16	1.68			16				24" SLOPED & MITERED		50					7.1	7.1	1.4	0.05	EXISTING PIPE TO BE CLEANED OUT
6.97	368+18	24" RCP	STD HDWL	STD HDWL	0°	31		1		4		17	1.68			17				24" SLOPED & MITERED		50				10	7.2	7.2	1.5	0.05	EXISTING PIPE TO BE CLEANED OUT. STABILIZE LEFT EMBANKMENT WITH CLASS II CHANNEL LINING
7.06	372+70	18" RCP	STD HDWL	STD HDWL	0°	30		1		4		15	1.13		15					18" SLOPED & MITERED		*					**	***	1.3		
7.77	410+20	24" RCP	STD HDWL	STD HDWL	0°	37		1		4		16	1.68			16				24" SLOPED & MITERED		50					**	***	0.8		EXISTING PIPE TO BE CLEANED OUT
7.97	421+00	24" RCP	STD HDWL	STD HDWL	0°	34		1		4		11	1.68			11				24" SLOPED & MITERED		50					6.8	6.8	0.6	0.05	EXISTING PIPE TO BE CLEANED OUT
11.71	617+97	24" RCP	STD HDWL	STD HDWL	0°	39		1		4		11	1.59			11				24" SLOPED & MITERED		50					6.7	6.7	0.9	0.05	EXISTING PIPE TO BE CLEANED OUT
12.09	638+25	18" RCP	STD HDWL	STD HDWL	0°	35																								EXISTING PIPE TO BE CLEANED OUT
12.44	656+36	18" RCP	STD HDWL	STD HDWL	5°	30		1		4		14	1.13		14					18" SLOPED & MITERED		50					7.1	7.1	0.7	0.05	EXISTING PIPE TO BE CLEANED OUT
12.55	662+79	24" RCP	STD HDWL	STD HDWL	0°	29		1		4		16	1.68			16				24" SLOPED & MITERED		50					6.8	6.8	1.1	0.05	EXISTING PIPE TO BE CLEANED OUT
13.11	692+16	18" RCP	STD HDWL	STD HDWL	0°	30		1		4		17	1.13		17					18" SLOPED & MITERED		50				10	7.0	7.0	0.8	0.05	EXISTING PIPE TO BE CLEANED OUT. STABILIZE LEFT EMBANKMENT WITH CLASS II CHANNEL LINING
13.18	696+04	18" RCP	STD HDWL	STD HDWL	0°	30		1		4		14	1.13		14					18" SLOPED & MITERED		50					7.1	7.1	1.0	0.05	
13.42	708+77	18" RCP	STD HDWL	STD HDWL	0°	33		1		4		14	2.26		14					18" SLOPED & MITERED		50					7.0	7.0	0.5	0.05	EXISTING PIPE TO BE CLEANED OUT
13.44	709+72	24" RCP	STD HDWL	STD HDWL	0°	31		1		4		17	1.68			17				24" SLOPED & MITERED		50					7.4	7.4	1.1	0.06	EXISTING PIPE TO BE CLEANED OUT
14.57	767+86	18" RCP	NA	STD HDWL	0°	39			4		15		1.13		15				18" SLOPED & MITERED		50						0.0	0.0	0.0	0.00	
15.15	799+92	18" RCP	STD HDWL	STD HDWL	0°	29	1		4		19		1.13		19				18" SLOPED & MITERED		50						7.3	7.3	1.4	0.06	EXISTING PIPE TO BE CLEANED OUT
					TOTALS:		14		60 LF				22.39 CU YD	0 LF	108 LF	117 LF	0 LF	0 LF			675 LF		0 LF		20 TON		84 TON	84 TON	14 TON	0.6 TON	

PIPE REPLACEMENT & EXTENSION SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Mile Point	Station	Existing					Proposed																						Comments
		Pipe Size, Type	Left Hdwl	Right Hdwl	Skew	Length (LF)	Remove Headwall (EA)		Remove Pipe (LF)		Pipe Extension Length (LF)		Class A Concrete for Intermediate Anchor/Collar (CU YD)[3]	Entrance Pipe 15" (LF)	Culvert Pipe 18" (LF)	Culvert Pipe 24" (LF)	Culvert Pipe 30" (LF)	Culvert Pipe 36" (LF)	Headwall or Drainage Box		Roadside Regrading (LF)		Ditching (LF) (Perp. to Rdwy)		Channel Lining Cl II (TON)		1.00" CL2 Asphalt Surface 0.38D PG64-22	Asphalt Pave Milling & Texturing	9" CL2 Asphalt Base 1.00D PG64-22	Asphalt Material For Tack	
							Left	Right	Left	Right	Left	Right							Left	Right	Left	Right	Left	Right	Left	Right	(TONS)	(TONS)	(TONS)	(TONS)	

Headwall Totals		
Safety Box Inlet - 18"	0	Each
Safety Box Inlet - 24"	0	Each
Dbl. Safety Box Inlet - 18"	0	Each
Dbl. Safety Box Inlet - 24"	0	Each
Sloped & Mitered Conc. Headwall - 18"	7	Each
Sloped & Mitered Conc. Headwall - 24"	8	Each
Drop Box Inlet Type 1	0	Each
Drop Box Inlet Type 2	0	Each
Standard Headwall - 24"	0	Each
Clean Pipe Structure	12	Each
Concrete - Class"A"	22.39	CY
Remove Pipe	60	LF
Remove Headwall	14	Each
Steel Reinforcement	0	LBS

* These locations of Roadside Regrading are already accounted for in the Shoulder Repair Summary and are NOT included in the Roadside Regrading TOTALS on this Pipe and Drainage Items Summary.

** These locations of Asphalt Pavement Milling & Texturing and Asphalt Surface are already accounted for in the Pavement Repair Summary and are NOT included in the Asphalt Pavement Milling & Texturing and Asphalt Surface TOTALS on this Pipe and Drainage Items Summary.

*** These locations of Asphalt Pavement Milling & Texturing and Asphalt Surface are already accounted for in the Pavement Repair Summary and are NOT included in the TOTALS on this Pipe and Drainage Items Summary.

NOTES:

1. These Pipe and Drainage Item quantities and locations are approximate and are intended to provide a basis for bid. Final locations, flow line elevations, grate elevations, and quantities will be determined by the contractor and approved by the engineer in the field.
2. Clearing and grubbing necessary to install drainage items, as directed by the Engineer, will be considered part of Site Preparation, which is incidental to the Contract.
3. See Standard Drawing RDX-060-03 for Intermediate Anchor details.

RCBC EXTENSION SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Milepoint	Station	Skew	Size	Extension Length (ft)	Extension End	Remove Headwall (EACH)	Foundation Preparation (LS)	Concrete - Class A (CU YD)	Steel Reinforcement (LBS)	Channel Lining Class II (TON)	Clean Culvert (EACH)
10.911	576+11	0	DBL. 7.7'X8'	6	INLET / LT	0	1	27.27	5,830		1
12.716	671+40	45 Sk Lt	DBL. 10'X4'	11	OUTLET/RT	0	1	36.33	10,870	50*	1
14.015	740+00	0	DBL. 6'X4'	7	OUTLET/LT	1	1	13.70	3,463		1
14.425	761+64	0	4'X3'	9	OUTLET/LT	1	1	7.40	2,231		1
14.566	769+10	0	2.5'X2.5'	8	OUTLET/LT	1	1	5.42	1,725		1
					TOTALS	**3 EACH**	**5 LS**	**90.12 CU YD**	**24,119 LBS**	**50 TON**	**5 EACH**

ITEM	DESCRIPTION	UNIT	QUANTITY
2483	CHANNEL LINING CLASS II	TON	50
2625	REMOVE HEADWALL	EACH	3
8003	FOUNDATION PREPARATION	LS	5
8100	CONCRETE - CLASS A	CU YD	90.12
8150	REINFORCEMENT	LBS	24,119
20465EC	CLEAN CULVERT	LS	5

Notes:

1.) See culvert detail sheets.

2.) Embankment to be used for backfilling culvert extensions and adjusting sideslopes around culvert and wingwalls shall be incidental.

* - Channel Lining Class II to be placed on the inlet end for lining the cleaned embankment.

ROADSIDE REGRADING SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

Notes:
* The "Figure References" noted below refer to the Figure number within the Roadside Regrading and Embankment Benching Detail Sheet that is the closest representation of the intended Roadside Regrading.
** The Estimated Volumes of Excavation and Embankment are provided for informational purposes ONLY. The Department gives no guarantee to the accuracy of the estimated volumes. The Bidder must draw his/her own conclusion. Payment will be based on the Linear Footage of Roadside Regrading performed, regardless of the accuracy of the Estimated Volumes of Excavation and Embankment.

LOCATION					Length (LF)	Estimated Excavation Volume** (CU YD)	Estimated Embankment Volume** (CU YD)	Roadside Regrading Detail Sheet Figure Ref.*	Target Fill Slope	Include DGA Wedge? (Yes/No)	DGA (TONS)	Asphalt Seal Coat (TON)	Asphalt Seal Aggregate (TON)	Channel Line Ditch, Fill Slope or Cut Slope? (Yes/No)	Channel Lining Class II (TONS)	Geotex. Fabric Type IV (SQ YD)	Remarks
Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint													
RT	364+16	6.897	365+94	6.931	178	138	212	Figure 9									
RT	370+30	7.013	372+95	7.063	265	134	163	Figure 9									
LT	428+50	8.116	431+00	8.163	250	108	198	Figure 2	3 : 1								
LT	431+00	8.163	456+00	8.636	2,500	94	0	Figure 7									
LT	460+50	8.722	463+00	8.769	250	143	137	Figure 3	2 : 1								
LT	463+00	8.769	472+00	8.939	900	48	0	Figure 7									
LT	477+50	9.044	502+50	9.517	2,500	174	0	Figure 7									
LT	531+50	10.066	541+50	10.256	1,000	49	0	Figure 7									
LT	550+00	10.417	560+00	10.606	1,000	50	0	Figure 7									
RT	562+00	10.644	566+00	10.720	400	466	569	Figure 3	2 : 1								
LT	566+00	10.720	570+50	10.805	450	21	0	Figure 7									
RT	760+00	14.394	766+00	14.508	600	40	0	Figure 7									

Summary of Items

Roadside Regrading	10,293	LF		Asphalt Seal Coat	0	TONS		Channel Lining Class II	0	TONS
DGA	0	TONS		Asphalt Seal Aggregate	0	TONS		Geotextile Fabric Type IV	0	SQ YD

REMOVE SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
L	365+42	6.921	NC	W1-4R	Right Reverse Curve		
				W13-1P	XX MPH (Advisory Speed)	25	
				D1-1	Mile Marker (1 digit)	7	
R	372+82	7.061	C	W1-4L	Left Reverse Curve		
R	398+17	7.541	C/NC	CUSTOM	Street Sign	Bartleytown Road	Remove, store & reinstall
L	400+96	7.594	NC	W1-4L	Left Reverse Curve		
R	401+39	7.602	C	W1-4R	Right Reverse Curve		
R	404+08	7.653	C	Other	Ice Possible Ahead		
L	410+10	7.767	NC	CUSTOM	Adopt A Highway	Keep Pike County Clean	Remove, store & reinstall
L	416+16	7.882	C	W14-3	No Passing Zone		
L	416+91	7.896	NC	Other	Ice Possible Ahead		
R	419+76	7.950	NC	W14-3	No Passing Zone		
L	420+90	7.972	NC	W1-4R	Right Reverse Curve		
R	421+34	7.980	C	D10-1	Mile Marker (1 digit)	8	
			NC	D10-1	Mile Marker (1 digit)	8	
R	424+25	8.035	C	W1-4L	Left Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	40	
L	463+15	8.772	C	W14-3	No Passing Zone		
R	465+00	8.807	NC	W14-3	No Passing Zone		
R	466+60	8.837	C	D10-1	Mile Marker (1 digit)	9	
			NC	D10-1	Mile Marker (1 digit)	9	
R	468+60	8.875	C	W1-2R	Right Curve		
			C	W13-1P	XX MPH (Advisory Speed)	40	
L	488+19	9.246	C	W14-3	No Passing Zone		

REMOVE SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
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(HSIP FUNDED)

SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
R	489+88	9.278	C	W1-4L	Left Reverse Curve		
R	490+00	9.280	NC	W14-3	No Passing Zone		
R	499+05	9.452	C	W1-8L	Left Chevron		
			NC	W1-8R	Right Chevron		
R	511+00	9.678	C	M2-1	Junction		
			C	M1-5	State Route Sign (1 or 2 digit)	195	
L	511+68	9.691	NC	M3-3	South		
			NC	M1-5	State Route Sign (1 or 2 digit)	197	
R	512+21	9.701	C	W1-4R	Right Reverse Curve		
R	515+49	9.763	C	M1-5	State Route Sign (1 or 2 digit)	195	
			C	M6-1L	Left Arrow		
			C	M1-5	State Route Sign (1 or 2 digit)	197	
			C	M6-3	Straight Arrow		
R	516+54	9.783	C	M3-1	North		
			C	M1-5	State Route Sign (1 or 2 digit)	197	
R	516+70	9.786	C	S3-1	School Bus Stop Ahead		

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SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
L	519+39	9.837	NC	M1-5	State Route Sign (1 or 2 digit)	197	
			NC	M6-3	Straight Arrow		
			NC	M1-5	State Route Sign (1 or 2 digit)	195	
			NC	M5-1R	Advance Right Turn Arrow		
			C	D10-2	Mile Marker (2 digit)	10	
			NC	D10-2	Mile Marker (2 digit)	10	
L	524+15	9.927	NC	M2-1	Junction		
			NC	M1-5	State Route Sign (1 or 2 digit)	195	
			NC	Custom	Keep Pike County Clean	Keep Pike County Clean	Remove, store & reinstall
R	527+16	9.984	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	40	
L	527+16	9.984	NC	W1-4R	Right Reverse Curve		
L	542+26	10.270	NC	S3-1	School Bus Stop Ahead		
L	543+58	10.295	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	40	
R	547+85	10.376	C	S3-1	School Bus Stop Ahead		
L	558+00	10.568	NC	S3-1	School Bus Stop Ahead		
L	558+58	10.579	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	

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PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
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SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
R	566+28	10.725	C	W1-1L	Left Turn		
			C	W13-1P	XX MPH (Advisory Speed)	25	
L	566+65	10.732	NC	W1-2L	Left Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
R	574+09	10.873	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
R	574+31	10.877	C	D10-2	Mile Marker (2 digit)	11	
			NC	D10-2	Mile Marker (2 digit)	11	
L	575+10	10.892	NC	W1-1R	Right Turn		
			NC	W13-1P	XX MPH (Advisory Speed)	25	
R	575+15	10.893	C	S3-1	School Bus Stop Ahead		
			C	Custom	Keep Pike County Clean	Keep Pike County Clean	Remove, store & reinstall
R	576+58	10.920	East	R1-1	Stop		
R	581+17	11.007	C	OM3-L	Object Marker Type 3 Left		
R	585+39	11.087	C	S3-1	School Bus Stop Ahead		
R	602+61	11.413	C	W1-2L	Left Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
L	602+66	11.414	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
R	614+97	11.647	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
L	617+29	11.691	NC	S3-1	School Bus Stop Ahead		

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SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
L	617+94	11.703	NC	W1-2R	Right Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
L	618+60	11.716	NC	W2-2L	Side Road Left		
R	624+73	11.832	C/NC	D3-1	Street Name	Mountain Branch Rd	Remove, store & reinstall
R	633+50	11.998	C	S3-1	School Bus Stop Ahead		
			C	Custom	Keep Pike County Clean	Keep Pike County Clean	Remove, store & reinstall
R	642+47	12.168	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
L	642+47	12.168	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
R	663+64	12.569	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
L	663+70	12.570	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
R	678+88	12.858	C	D10-2	Mile Marker (2 digit)	13	
			NC	D10-2	Mile Marker (2 digit)	13	
L	707+73	13.404	NC	W11-8	Emergency Vehicle	Left	
L	707+76	13.405	NC	OM3-L	Object Marker Type 3 Left		
L	709+79	13.443	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
R	710+00	13.447	C	W1-4R	Right Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	

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SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
R	719+08	13.619	C/NC	D3-1	Street Name	Gibson Btm	Remove, store & reinstall
			WEST	R12-1	Weight Limit X Tons	4	Remove, store & reinstall
L	728+22	13.792	NC	W1-4R	Right Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
L	730+28	13.831	C	D10-2	Mile Marker (2 digit)	14	
			NC	D10-2	Mile Marker (2 digit)	14	
R	733+13	13.885	C	W1-4L	Left Reverse Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
R	734+36	13.908	C	R12-5	Weight Limit Sign (multiple truck type symbols)	Extended Weights Coal Only 34T,35T,50T	Remove, store & reinstall
L	736+40	13.947	NC	R12-5	Weight Limit Sign (multiple truck type symbols)	Extended Weights Coal Only 34T,35T,50T	Remove, store & reinstall
R	747+28	14.153	C	CUSTOM	Modified W11-10 (Truck)	Truck Entrance	Remove, store & reinstall
L	759+16	14.378	NC	W1-4L	Left Reverse Curve		
			NC	W13-1P	XX MPH (Advisory Speed)	35	
L	759+79	14.390	C	W14-3	No Passing Zone		
R	760+00	14.394	NC	W14-3	No Passing Zone		
R	762+54	14.442	C	W1-2L	Left Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	
R	764+33	14.476	C	Other	Ice Possible Ahead		
R	783+24	14.834	NC	Other	Ice Possible Ahead		

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SIGN LOCATION				MUTCD Code	Sign Description	Sign Text / Remarks	Comments
Side of Road	Approx Station	Approx. Mile Point	Facing Traffic Traveling				
R	783+39	14.837	C	D10-2	Mile Marker (2 digit)	15	
			NC	D10-2	Mile Marker (2 digit)	15	
L	785+40	14.875	NC	W1-2L	Left Curve		
R	786+35	14.893	C	W1-4L	Left Reverse Curve		
R	798+44	15.122	NC	R2-1	Speed Limit XX	55	
R	803+56	15.219	C	W1-2R	Right Curve		
			C	W13-1P	XX MPH (Advisory Speed)	35	

Remove Sign	117	EACH
Remove, Store & Reinstall Sign	10	EACH

SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
1	LT	24	350+30	6.634	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	50	18 x 18	Black	FL Yellow	XI	2.25									1
2	RT	24	363+00	6.875	EB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W7-3aP	Next XX Miles	8	24 x 18	Black	Yellow	XI	3.00									1
3	RT	24	366+20	6.936	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
4	LT	24	368+30	6.975	EB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
5	RT	24	369+60	7.000	EB	D10-2	Mile Marker (2 digit)	7	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	7	10 x 27	White	Green	XI	1.88									1
6	LT	24	387+30	7.335	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
7	LT	24	388+50	7.358	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
8	LT	24	389+70	7.381	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
9	LT	24	391+50	7.415	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
10	LT	24	392+70	7.438	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
11	LT	24	393+90	7.460	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
12	LT	24	395+10	7.483	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
13	LT	24	396+30	7.506	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
14	LT	24	397+50	7.528	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
15	LT	24	398+90	7.555	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25									1
16	LT	24	402+00	7.614	WB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
17	RT	24	404+20	7.655	EB	W8-5	Slippery When Wet		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
18	RT	24	405+80	7.686	EB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	45	18 x 18	Black	FL Yellow	XI	2.25									1
19	RT	24	407+10	7.710	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
20	RT	24	408+30	7.733	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
21	RT	24	409+50	7.756	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
22	RT	24	410+70	7.778	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
23	RT	24	411+90	7.801	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
24	RT	24	413+10	7.824	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
25	LT	24	414+20	7.845	WB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
26	LT	24	415+70	7.873	EB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
27	LT	24	417+40	7.905	WB	W8-5	Slippery When Wet		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
28	RT	24	420+50	7.964	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
29	RT	24	422+40	8.000	EB	D10-2	Mile Marker (2 digit)	8	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	8	10 x 27	White	Green	XI	1.88									1
30	LT	24	429+60	8.136	WB	W1-2aR	Right Curve XX	50	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
31	RT	24	429+80	8.140	EB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
32	RT	24	431+10	8.165	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
33	RT	24	432+30	8.188	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
34	RT	24	433+50	8.210	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
35	RT	24	434+70	8.233	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
36	RT	24	436+20	8.261	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY
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SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
37	RT	24	437+00	8.277	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
38	RT	24	437+80	8.292	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
39	LT	24	438+20	8.299	WB	W1-2aR	Right Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
40	RT	24	439+10	8.316	EB	W1-2aR	Right Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
41	LT	24	439+20	8.318	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
42	LT	24	440+40	8.341	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
43	LT	24	441+60	8.364	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
44	LT	24	442+80	8.386	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
45	LT	24	444+00	8.409	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
46	LT	24	445+20	8.432	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
47	LT	24	447+20	8.470	WB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
48	RT	24	456+60	8.648	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
49	LT	24	463+20	8.773	EB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
50	RT	24	465+30	8.813	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
51	RT	24	470+60	8.913	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	45	18 x 18	Black	FL Yellow	XI	2.25									1
52	LT	24	471+80	8.936	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
53	LT	24	473+00	8.958	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
54	LT	24	474+20	8.981	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
55	RT	24	475+20	9.000	EB	D10-2	Mile Marker (2 digit)	9	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	9	10 x 27	White	Green	XI	1.88									1
56	LT	24	475+40	9.004	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
57	LT	24	476+60	9.027	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
58	LT	24	477+80	9.049	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
59	LT	24	479+00	9.072	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
60	LT	24	480+20	9.095	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
61	LT	24	481+40	9.117	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
62	LT	24	482+60	9.140	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
63	LT	24	484+60	9.178	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
64	LT	24	488+20	9.246	EB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
65	RT	24	489+90	9.278	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
66	RT	24	491+50	9.309	EB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
67	RT	24	494+00	9.356	EB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
68	RT	24	496+00	9.394	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
69	RT	24	497+00	9.413	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
70	RT	24	498+00	9.432	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
71	RT	24	499+00	9.451	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
72	RT	24	500+00	9.470	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
73	RT	24	501+10	9.491	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
74	RT	24	502+20	9.511	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
75	LT	24	503+10	9.528	WB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
76	RT	24	503+30	9.532	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
77	RT	24	505+50	9.574	EB	W1-2aR	Right Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
78	LT	24	505+90	9.581	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
79	LT	24	507+10	9.604	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
80	LT	24	508+30	9.627	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
81	RT	24	508+80	9.636	EB	M2-1	Junction		21 x 15	Black	White	XI	2.19				1	12.5			12.5	1
						M1-5a	State Route Sign (3 or 4 digit)	195	30 x 24	Black	White	XI	5.00									1
82	LT	24	509+50	9.650	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
83	LT	24	510+70	9.672	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
84	LT	24	511+90	9.695	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-2aL	Left Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00									1
85	LT	24	514+50	9.744	WB	M3-3	South		24 x 12	Black	White	XI	2.00				1	12.0			12.0	1
						M1-5a	State Route Sign (3 or 4 digit)	197	30 x 24	Black	White	XI	5.00									1
86	RT	24	514+90	9.752	EB	M1-5a	State Route Sign (3 or 4 digit)	195	30 x 24	Black	White	XI	5.00				1	13.0			13.0	1
						M6-1L	Left Arrow		21 x 15	Black	White	XI	2.19									1
87	RT	24	515+70	9.767	SB KY 195	M1-5a	State Route Sign (3 or 4 digit)	197	30 x 24	Black	White	XI	5.00				1	13.0			13.0	1
						M6-4	Horizontal Double Arrow		21 x 15	Black	White	XI	2.19									1
88	LT	24	516+50	9.782	WB	M1-5a	State Route Sign (3 or 4 digit)	195	30 x 24	Black	White	XI	5.00				1	13.0			13.0	1
						M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19									1
89	RT	24	516+70	9.786	EB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
90	RT	24	517+50	9.801	EB	M3-1	North		24 x 12	Black	White	XI	2.00				1	12.0			12.0	1
						M1-5a	State Route Sign (3 or 4 digit)	197	30 x 24	Black	White	XI	5.00									1
91	LT	24	519+40	9.837	WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
92	RT	24	520+70	9.862	EB	W1-2aL	Left Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
93	LT	24	522+40	9.894	WB	M2-1	Junction		21 x 15	Black	White	XI	2.19				1	12.5			12.5	1
						M1-5a	State Route Sign (3 or 4 digit)	195	30 x 24	Black	White	XI	5.00									1
94	RT	24	523+40	9.913	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
95	RT	24	524+60	9.936	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
96	RT	24	525+80	9.958	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
97	LT	24	525+90	9.960	WB	W1-2aR	Right Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
98	LT	24	527+70	9.994	WB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1

SIGN SUMMARY

PIKE COUNTY - KY 197

MP 6.729 TO MP 15.237

ITEM NO. 12-9008

(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
99	RT	24	528+00	10.000	EB	D10-2	Mile Marker (2 digit)	10	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	10	10 x 27	White	Green	XI	1.88									1
100	RT	24	529+00	10.019	EB	W1-2aR	Right Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
101	LT	24	529+10	10.021	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
102	LT	24	530+30	10.044	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
103	LT	24	531+50	10.066	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
104	LT	24	532+70	10.089	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00									1
105	RT	24	534+80	10.129	EB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
106	RT	24	536+00	10.152	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
107	RT	24	537+30	10.176	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
108	RT	24	538+60	10.201	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
109	RT	24	539+90	10.225	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
110	RT	24	541+20	10.250	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
111	LT	24	543+60	10.295	WB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
112	RT	24	543+70	10.297	EB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
113	RT	24	546+10	10.343	EB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	30	18 x 18	Black	FL Yellow	XI	2.25									1
114	LT	24	548+10	10.381	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
115	LT	24	548+90	10.396	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
116	LT	24	549+70	10.411	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
117	LT	24	550+50	10.426	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
118	LT	24	551+30	10.441	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
119	LT	24	552+10	10.456	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00									1
120	RT	24	554+80	10.508	EB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
121	RT	24	555+60	10.523	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
122	RT	24	556+40	10.538	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
123	RT	24	557+20	10.553	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
124	RT	24	558+00	10.568	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
125	LT	24	558+10	10.570	WB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
126	RT	24	559+50	10.597	EB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
127	LT	24	559+60	10.598	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
128	LT	24	560+70	10.619	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
129	LT	24	561+80	10.640	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY

PIKE COUNTY - KY 197

MP 6.729 TO MP 15.237

ITEM NO. 12-9008

(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
130	LT	24	562+90	10.661	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
131	LT	24	564+00	10.682	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00									1
132	RT	24	568+10	10.759	EB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
133	RT	24	568+90	10.775	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
134	RT	24	569+70	10.790	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
135	RT	24	570+50	10.805	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
136	RT	24	571+30	10.820	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
137	RT	24	572+10	10.835	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
138	LT	24	572+20	10.837	WB	W1-1aR	Right Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
139	RT	24	573+60	10.864	EB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
140	LT	15	576+00	10.909	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
141	RT	15	576+00	10.909	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
142	LT	15	576+20	10.913	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
143	RT	15	576+20	10.913	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
144	LT	24	576+25	10.914	EB Jackson Branch Rd	R1-1	Stop		36 x 36	White	Red	XI	9.00				1	14.0			14.0	1
145	RT	24	576+70	10.922	EB	W1-1aR	Right Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
146	LT	24	576+80	10.924	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
147	LT	24	577+60	10.939	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
148	LT	24	578+40	10.955	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
149	LT	24	579+30	10.972	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
150	LT	24	580+10	10.987	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
151	RT	24	580+80	11.000	EB	D10-2	Mile Marker (2 digit)	11	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	11	10 x 27	White	Green	XI	1.88									1
152	LT	24	581+00	11.004	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00									1
153	RT	24	582+80	11.038	EB	W1-2aR	Right Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
154	LT	24	582+90	11.040	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
155	LT	24	584+10	11.063	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
156	LT	24	585+30	11.085	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
157	LT	24	586+50	11.108	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
158	LT	24	587+70	11.131	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00									1
159	LT	24	590+20	11.178	WB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
160	RT	24	590+40	11.182	EB	W1-2aL	Left Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
161	RT	24	592+70	11.225	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
162	RT	24	593+70	11.244	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY

PIKE COUNTY - KY 197

MP 6.729 TO MP 15.237

ITEM NO. 12-9008

(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
163	RT	24	594+70	11.263	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
164	RT	24	595+70	11.282	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
165	LT	24	597+80	11.322	WB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	30	18 x 18	Black	FL Yellow	XI	2.25									1
166	RT	24	602+60	11.413	EB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	30	18 x 18	Black	FL Yellow	XI	2.25									1
167	RT	24	603+90	11.438	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
168	RT	24	605+10	11.460	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
169	RT	24	606+30	11.483	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
170	RT	24	607+50	11.506	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
171	LT	24	607+60	11.508	WB	W1-2aR	Right Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
172	RT	24	609+00	11.534	EB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
173	RT	24	610+20	11.557	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
174	RT	24	611+00	11.572	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
175	RT	24	611+80	11.587	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
176	RT	24	612+60	11.602	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
177	RT	24	613+40	11.617	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
178	RT	24	614+20	11.633	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
179	RT	24	614+30	11.634	WB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
180	RT	24	615+30	11.653	EB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
181	LT	24	615+90	11.665	WB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
182	RT	24	617+80	11.701	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
183	LT	24	618+00	11.705	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
184	LT	24	619+00	11.723	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
185	LT	24	620+00	11.742	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
186	LT	24	621+00	11.761	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
187	RT	19	621+49	11.771	EB	OM3-R	Object Marker Type 3 Right	For Guardrail End Treatment Type 4A	12 x 36	Black	Yellow	XI	3.00				1	14.0			14.0	1
188	RT	24	622+50	11.790	EB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
189	LT	24	622+60	11.792	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
190	LT	24	623+80	11.814	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
191	LT	24	625+00	11.837	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
192	RT	15	626+10	11.858	EB	OM3-L	Object Marker Type 3 Left	For Guardrail End Treatment Type 1	12 x 36	Black	Yellow	XI	3.00				1	14.0			14.0	1
193	LT	24	626+20	11.860	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
194	LT	24	627+30	11.881	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
195	LT	24	628+40	11.902	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY

PIKE COUNTY - KY 197

MP 6.729 TO MP 15.237

ITEM NO. 12-9008

(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
196	LT	24	629+50	11.922	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
197	LT	24	630+60	11.943	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.5			15.5	1
					WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00									1
198	LT	24	632+40	11.977	WB	S3-1	School Bus Stop Ahead		36 x 36	Black	FL Yellow-Green	XI	9.00				1	15.5			15.5	1
199	RT	24	633+10	11.991	EB	W1-2aL	Left Curve XX	40	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
200	RT	24	633+60	12.000	EB	D10-2	Mile Marker (2 digit)	12	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	12	10 x 27	White	Green	XI	1.88									1
201	RT	26	634+00	12.008	EB	W1-6L	Left One-Direction Lrg Arrow		48 x 24	Black	FL Yellow	XI		8.00			2	13.0			26.0	1
202	RT	24	634+10	12.009	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
203	RT	24	636+00	12.045	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
204	RT	24	637+00	12.064	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
205	RT	24	638+10	12.085	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
206	RT	24	639+20	12.106	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
207	LT	24	639+30	12.108	WB	W1-2aR	Right Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
208	LT	24	644+80	12.212	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
209	LT	24	646+00	12.235	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
210	LT	24	647+20	12.258	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
211	LT	24	648+40	12.280	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
212	LT	24	649+60	12.303	WB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
213	RT	24	653+80	12.383	EB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
214	RT	24	655+00	12.405	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
215	RT	24	656+10	12.426	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
216	RT	24	657+20	12.447	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
217	RT	24	658+30	12.468	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
218	RT	24	659+40	12.489	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
219	LT	24	660+60	12.511	WB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
220	RT	24	666+10	12.616	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
221	LT	24	668+00	12.652	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
222	LT	24	669+10	12.672	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
223	LT	24	670+20	12.693	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
224	LT	24	671+30	12.714	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
225	RT	24	671+40	12.716	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
226	RT	24	671+70	12.722	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
227	LT	24	673+00	12.746	WB	W1-2aL	Left Curve XX	35	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1

SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
228	LT	24	675+10	12.786	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
229	RT	24	675+30	12.790	EB	W1-2aR	Right Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
230	LT	24	676+80	12.818	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
231	LT	24	677+80	12.837	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
232	LT	24	678+80	12.856	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
233	LT	24	679+80	12.875	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	15.0			15.0	1
					WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25									1
234	RT	24	680+60	12.890	EB	W1-2aR	Right Curve XX	45	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
235	LT	24	680+70	12.892	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
236	LT	24	681+70	12.911	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
237	LT	24	682+70	12.930	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
238	LT	24	683+70	12.949	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
239	LT	24	685+70	12.987	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25									1
240	RT	24	686+40	13.000	EB	D10-2	Mile Marker (2 digit)	13	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	13	10 x 27	White	Green	XI	1.88									1
241	RT	24	697+30	13.206	EB	W11-8	Emergency Vehicle		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
242	LT	24	702+60	13.307	WB	W11-8	Emergency Vehicle		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
243	RT	24	710+30	13.453	EB	W1-3R	Right Reverse Turn		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	30	18 x 18	Black	FL Yellow	XI	2.25									1
244	LT	24	712+30	13.491	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
245	RT	24	713+00	13.504	EB	OM3-R	Object Marker Type 3 Right	For Guardrail End Treatment Type 1	12 x 36	Black	Yellow	XI	3.00				1	14.0			14.0	1
246	LT	24	713+20	13.508	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
247	LT	24	714+60	13.534	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
248	LT	24	716+10	13.563	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
249	LT	24	716+90	13.578	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
250	LT	24	717+70	13.593	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
251	LT	24	718+50	13.608	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
252	LT	24	719+30	13.623	EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
253	LT	24	720+10	13.638	WB	W1-1aL	Left Turn XX	XX	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
254	RT	24	723+30	13.699	EB	W1-1aL	Left Turn XX	30	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
255	RT	24	724+10	13.714	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
256	RT	24	724+90	13.729	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
257	RT	24	725+70	13.744	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
258	RT	24	726+50	13.759	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
259	RT	24	727+30	13.775	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
260	LT	24	729+00	13.807	WB	W1-3R	Right Reverse Turn		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25									1
261	RT	24	735+50	13.930	EB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25									1
262	RT	24	737+50	13.968	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
263	RT	24	738+70	13.991	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
264	RT	24	739+20	14.000	EB	D10-2	Mile Marker (2 digit)	14	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	14	10 x 27	White	Green	XI	1.88									1
265	LT	24	739+90	14.013	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
266	RT	24	739+90	14.013	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
					EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50									1
267	LT	24	740+10	14.017	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
268	RT	24	740+10	14.017	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
269	RT	24	741+00	14.034	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
270	RT	24	742+10	14.055	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
271	RT	24	743+20	14.076	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
272	RT	24	744+30	14.097	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
273	LT	24	744+40	14.098	WB	W1-2aR	Right Curve XX	XX	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
274	RT	24	746+60	14.140	EB	W1-2aR	Right Curve XX	XX	36 x 36	Black	FL Yellow	XI	9.00				1	15.5			15.5	1
275	LT	24	755+60	14.311	WB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	XX	18 x 18	Black	FL Yellow	XI	2.25									1
276	LT	24	758+70	14.369	WB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
277	LT	24	759+80	14.390	EB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
278	RT	24	760+10	14.396	WB	W14-3	No Passing Zone		48 x 48 x 36	Black	Yellow	XI		5.56			1	15.0			15.0	1
279	LT	24	761+00	14.413	WB	W8-5	Slippery When Wet		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
280	LT	24	761+50	14.422	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
281	RT	24	761+50	14.422	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
282	LT	24	761+60	14.424	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
283	RT	24	761+60	14.424	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
284	RT	24	765+90	14.506	EB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	40	18 x 18	Black	FL Yellow	XI	2.25									1
285	RT	24	766+90	14.525	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
286	RT	24	768+10	14.547	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
287	LT	24	769+00	14.564	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
288	RT	24	769+00	14.564	EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
289	LT	24	769+10	14.566	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
290	RT	24	769+10	14.566	WB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50				1	12.0			12.0	1
291	RT	24	769+30	14.570	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
292	RT	24	770+50	14.593	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
293	RT	24	771+70	14.616	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1
294	RT	24	772+90	14.638	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
					WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00									1

SIGN SUMMARY
PIKE COUNTY - KY 197
MP 6.729 TO MP 15.237
ITEM NO. 12-9008
(HSIP FUNDED)

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
295	RT	24	774+10	14.661	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00				1	13.0			13.0	1
296	LT	24	775+30	14.684	WB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W13-1P	XX MPH (Advisory Speed)	45	18 x 18	Black	FL Yellow	XI	2.25									1
297	RT	24	785+00	14.867	EB	W8-5	Slippery When Wet		30 x 30	Black	Yellow	XI	6.25				1	15.0			15.0	1
298	RT	24	792+00	15.000	EB	D10-2	Mile Marker (2 digit)	15	10 x 27	White	Green	XI	1.88				1	13.5			13.5	1
					WB	D10-2	Mile Marker (2 digit)	15	10 x 27	White	Green	XI	1.88									1
299	RT	24	798+80	15.129	EB	R2-1	Speed Limit XX	35	24 x 30	Black	White	XI	5.00				1	13.5			13.5	1
300	LT	24	798+80	15.129	WB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25				1	15.0			15.0	1
						W7-3aP	Next XX Miles	8	24 x 18	Black	Yellow	XI	3.00									1

Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	1,709.19	SQ FT
SBM Alum Sheet Signs 0.125 INCH	69.16	SQ FT
Barcode Sign Inventory	471	EACH

Summary of Items		
Steel Post - Type 1	4,115	LF
GMSS Type D	0	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	0	CU YD

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COUNTY OF	ITEM NO.
PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 355+29.12 TO 368+00

PIKE COUNTY
09809237001 HSIP & FD05

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COUNTY OF	ITEM NO.
PIKE	12-9008

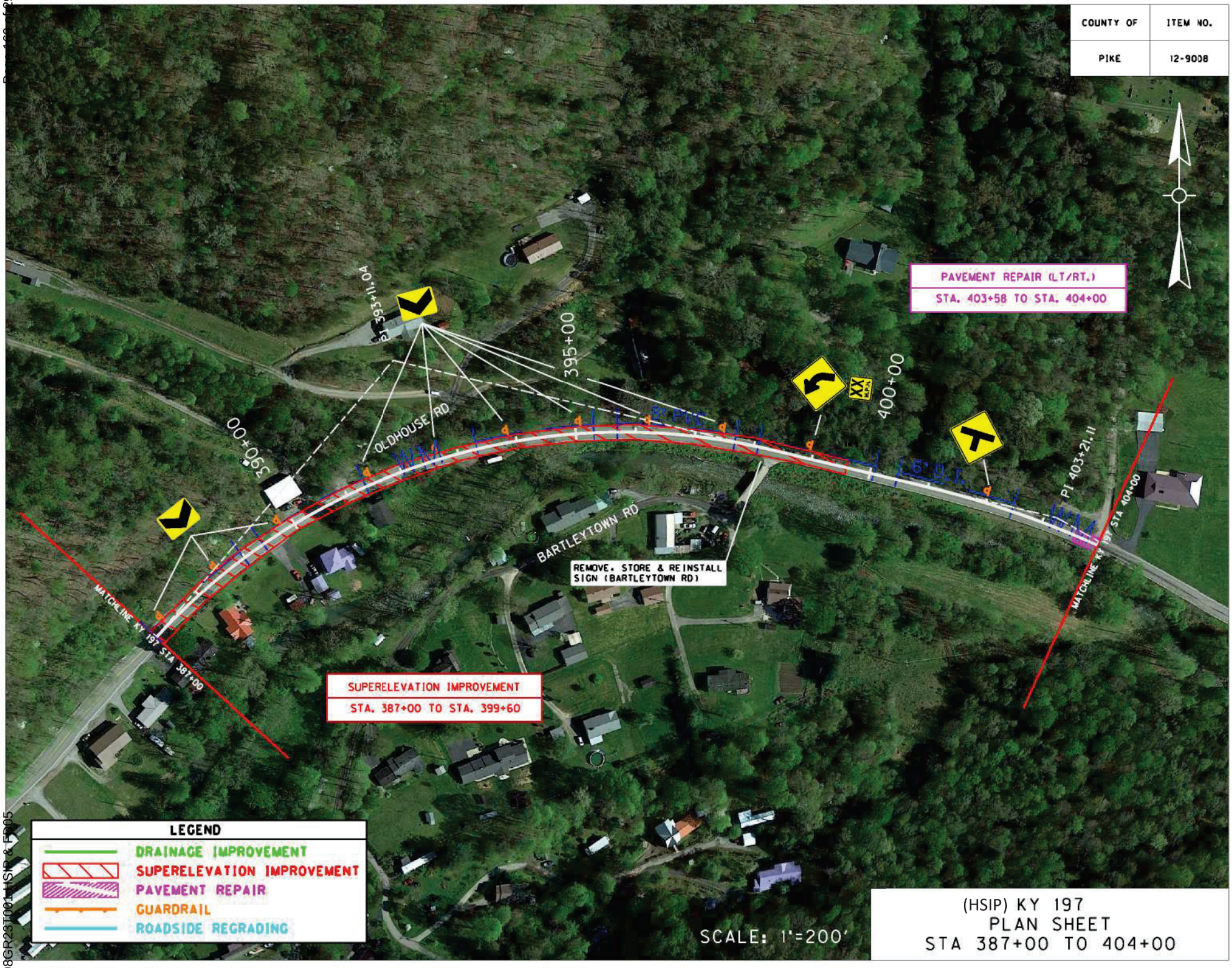


(HSIP) KY 197
PLAN SHEET
STA 368+00 TO 387+00

PIKE COUNTY
09802237004 HSIP & ED05

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COUNTY OF	ITEM NO.
PIKE	12-9008

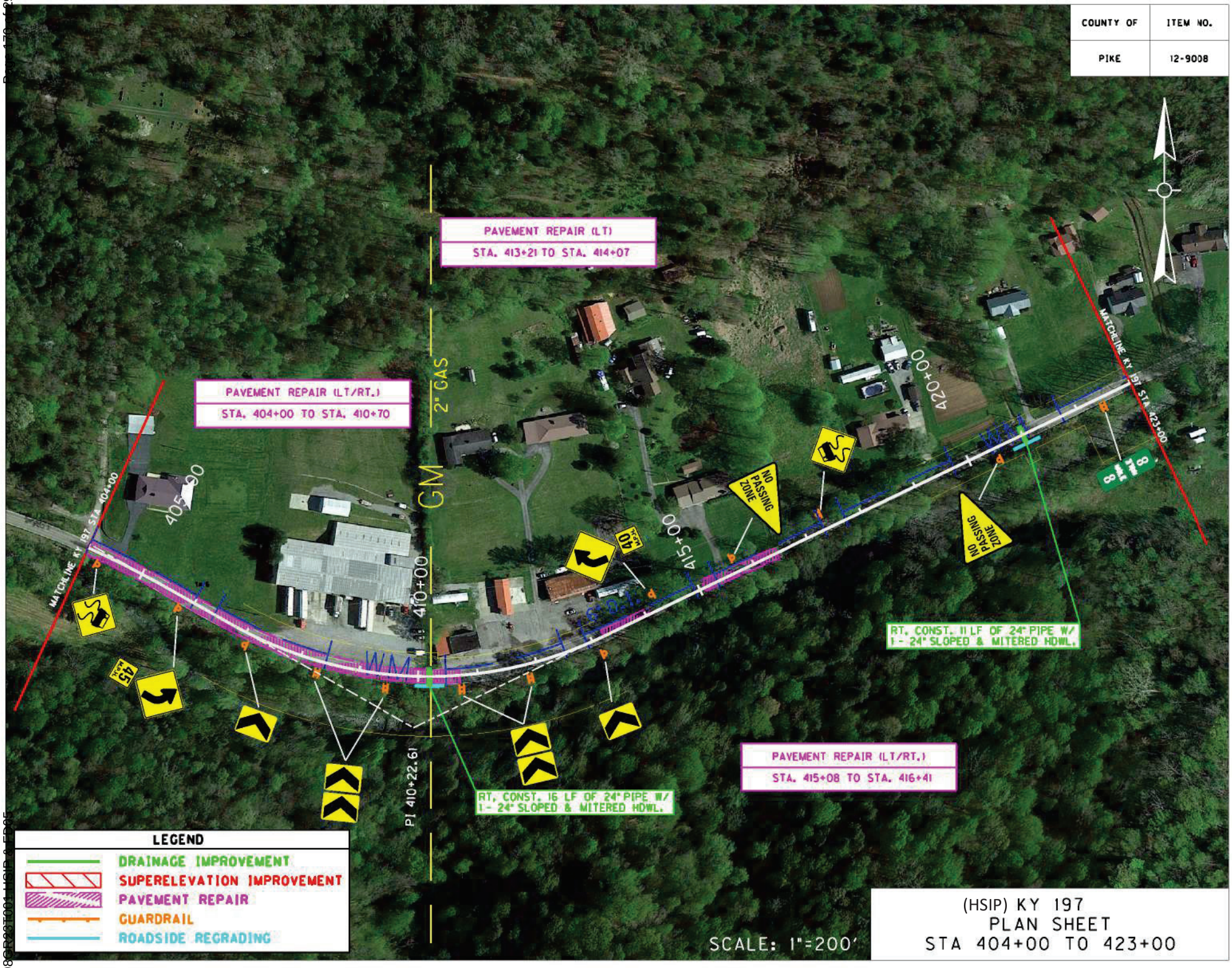


(HSIP) KY 197
PLAN SHEET
STA 387+00 TO 404+00

PIKE COUNTY
098GR23T001 HSIP & FD05

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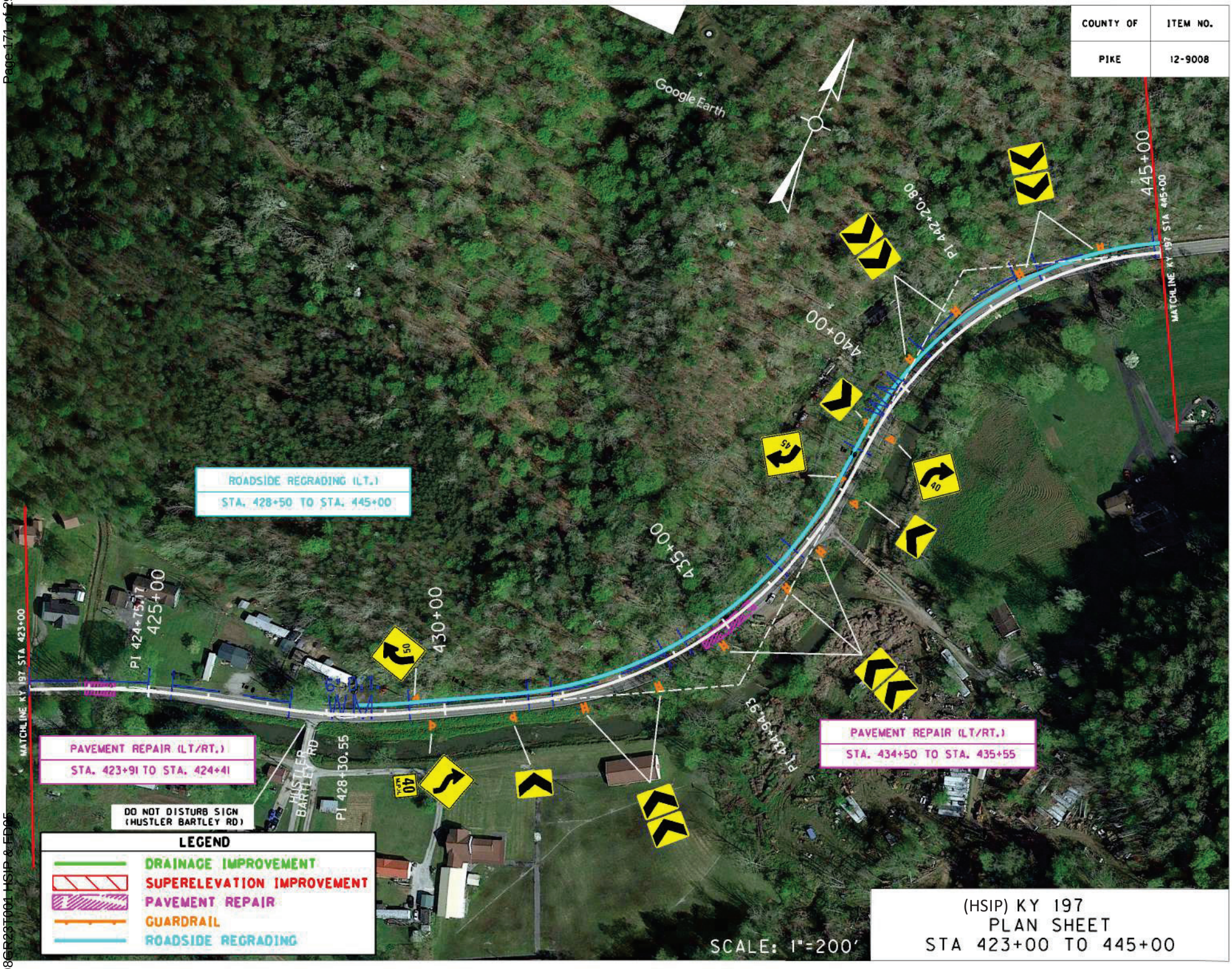
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PIKE	12-9008



PIKE COUNTY
0980[illegible]

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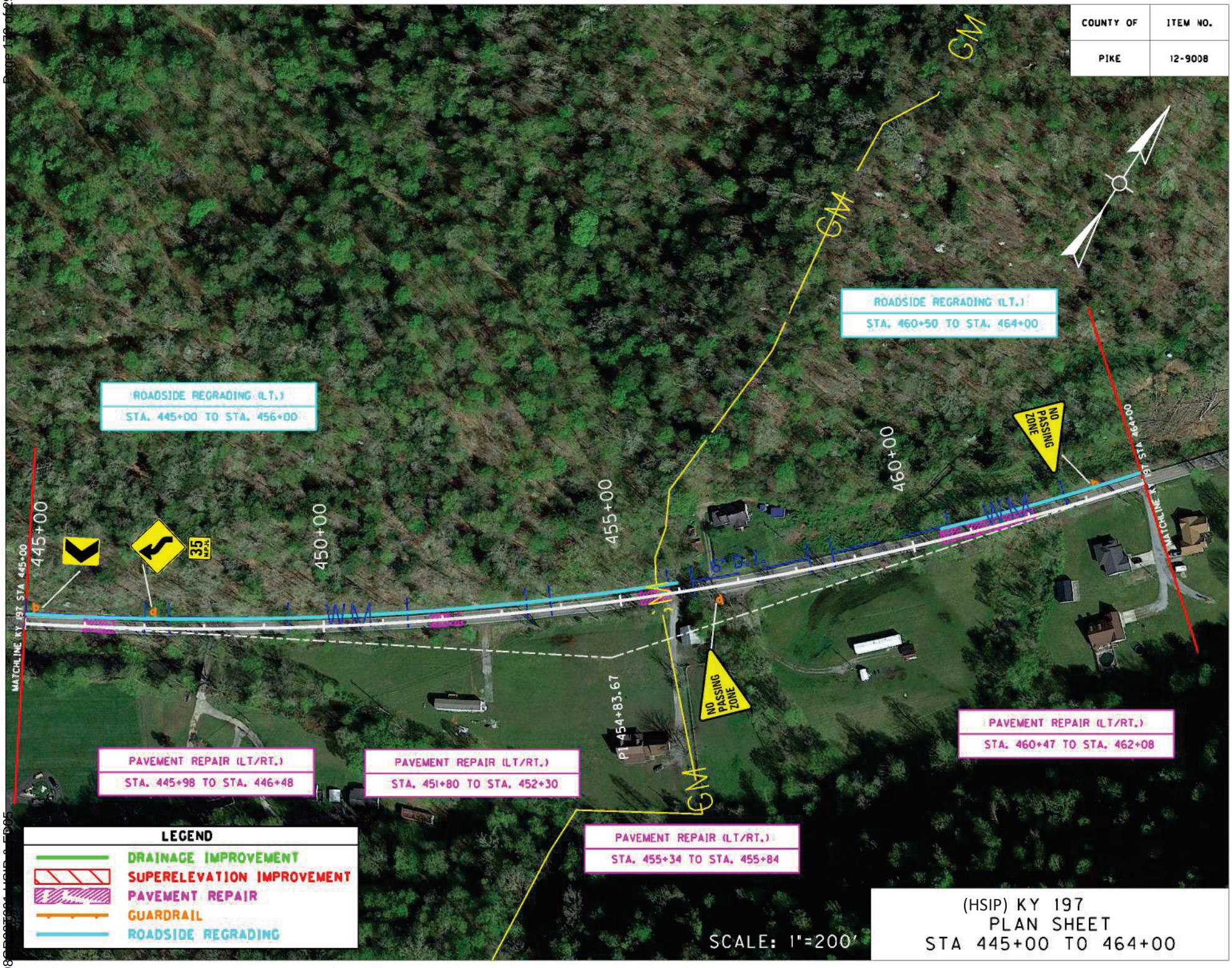
COUNTY OF	ITEM NO.
PIKE	12-9008



PIKE COUNTY
0986D23T001 HSIP & ED05

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COUNTY OF	ITEM NO.
PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 445+00 TO 464+00

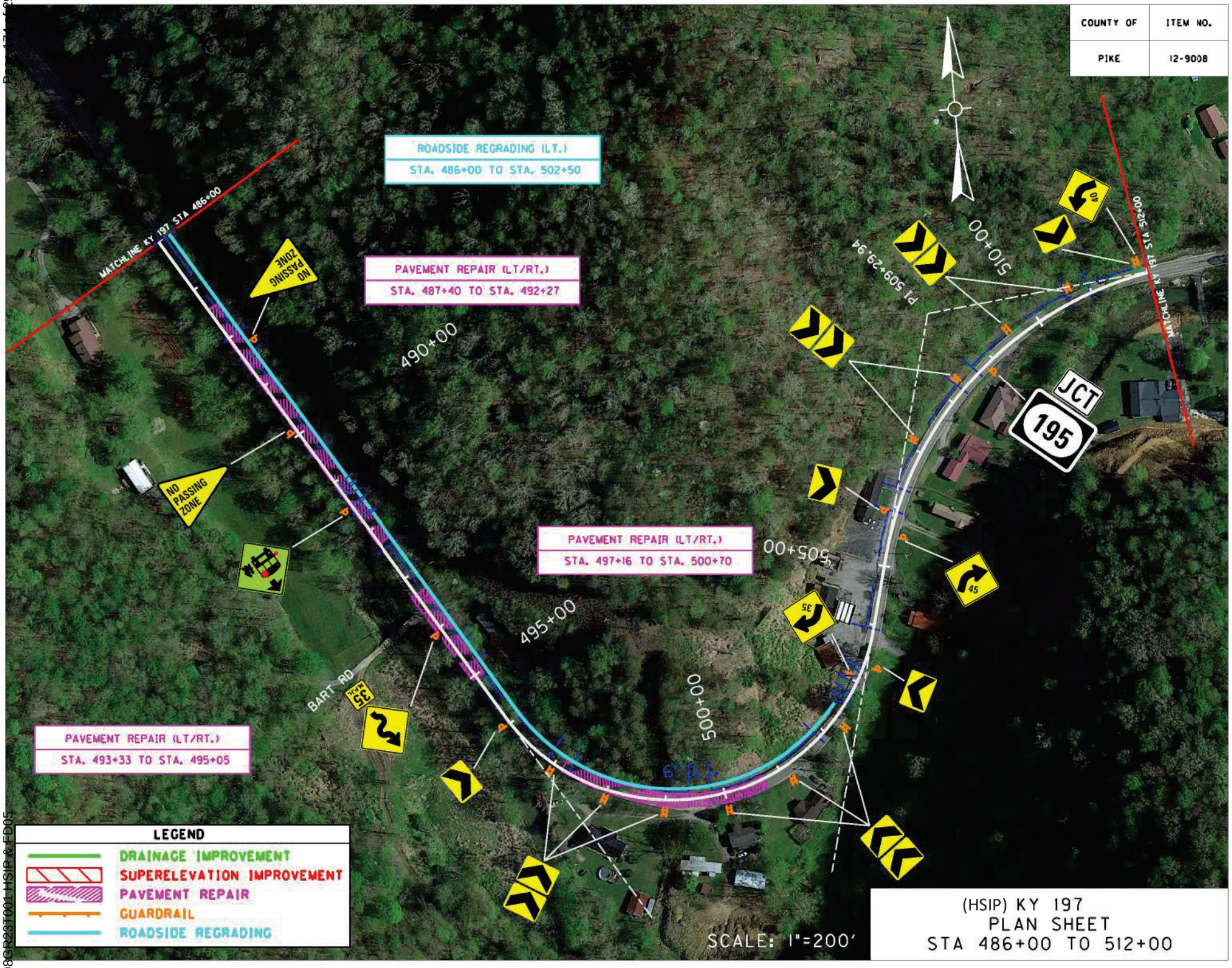
PIKE COUNTY
0980D2007004_HSIP_ED05

COUNTY OF	ITEM NO.
PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 464+00 TO 486+00

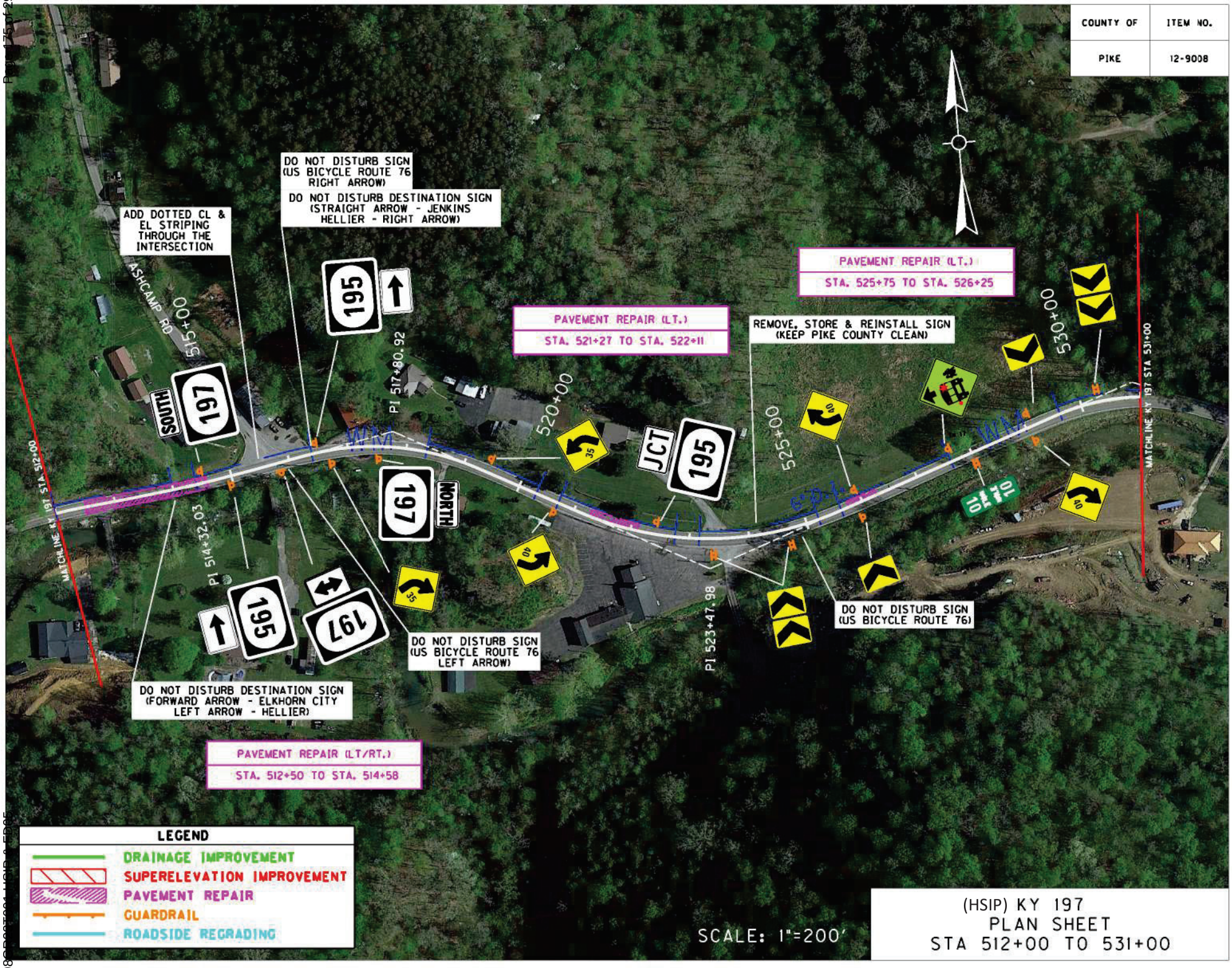
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PIKE COUNTY
098GR23T001 HSIP & ED05

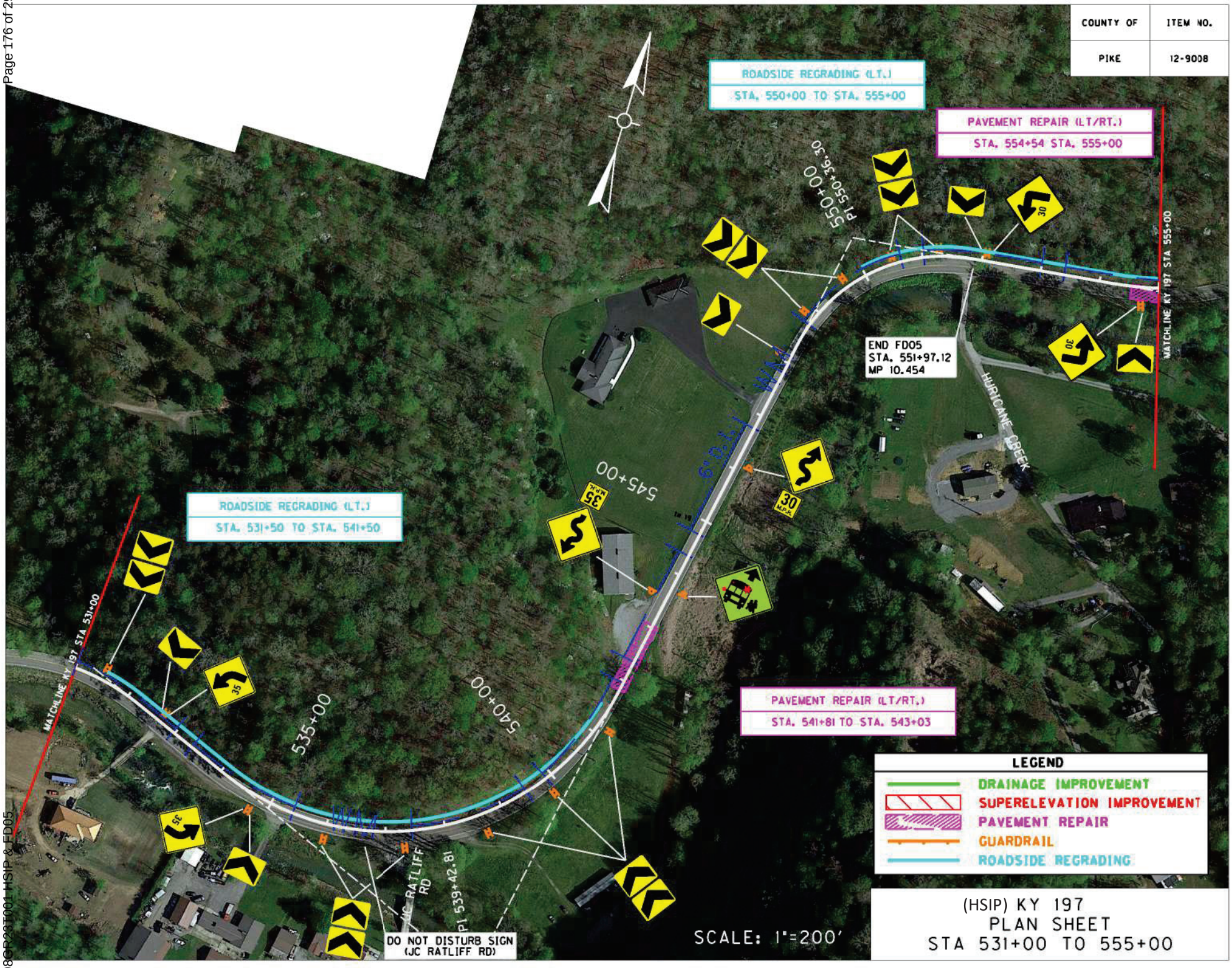
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COUNTY OF	ITEM NO.
PIKE	12-9008



PIKE COUNTY
098D2025204 HSIP 5D05

COUNTY OF	ITEM NO.
PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 531+00 TO 555+00

PIKE COUNTY
098CR23T001 HSIP & FD05

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COUNTY OF	ITEM NO.
PIKE	12-9008

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
574+64	--	TYP 2A	578+00	--	--	336'

REMOVE GUARDRAIL (RT.)
STA. 574+64 TO STA. 578+00
REMOVE 336 LF OF GUARDRAIL

JACKSON BRANCH RD

STA. 576+11 CONST. 6 L.F. OF DBL 7.7'X8' STONE CULVERT EXTENSION & HDWL.

SEE KY 197 ELKHORN CREEK WATERLINE RELOCATION

PAVEMENT REPAIR (LT/RT.)
STA. 574+69 STA. 575+64

575+00

Prop. Perm. Esmt. For Utilities

REMOVE, STORE & REINSTALL SIGN (KEEP PIKE COUNTY CLEAN)

MATCHLINE KY 197 STA 578+00

ROADSIDE REGRADING (LT.)
STA. 555+00 TO STA. 560+00

ROADSIDE REGRADING (LT.)
STA. 566+00 TO STA. 570+50

PI 561+77.74

560+00

565+00

570+00

GM

MATCHLINE KY 197 STA 555+00

PI 556+20.70

PAVEMENT REPAIR (LT/RT.)
STA. 555+00 TO STA. 556+04

ROADSIDE REGRADING (RT.)
STA. 562+00 TO STA. 566+00

PI 569+69.65

REMOVE GUARDRAIL (RT.)
STA. 569+90 TO STA. 571+70
REMOVE 180 LF OF GUARDRAIL

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
568+50	--	TYP 2A	571+70	--	TYP 7	275'

LEGEND
- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

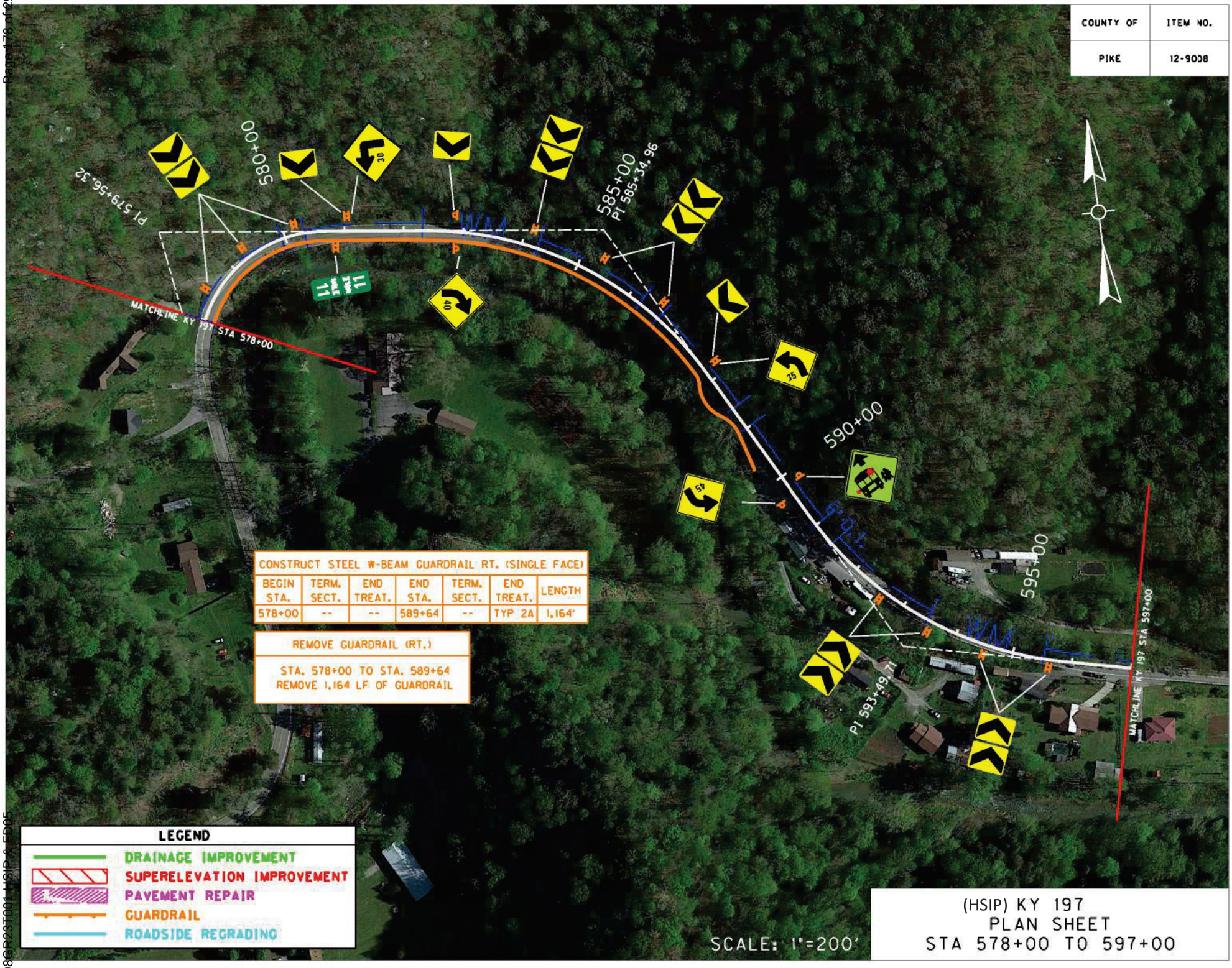
SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 555+00 TO 578+00

PIKE COUNTY
0986D23T001 HSIP & FD25

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008



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

BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
578+00	--	--	589+64	--	TYP 2A	1,164'

REMOVE GUARDRAIL (RT.)

STA. 578+00 TO STA. 589+64
REMOVE 1,164 LF OF GUARDRAIL

LEGEND

- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 578+00 TO 597+00

PIKE COUNTY
0984R23T001 HSIP & FD05

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
621+49	--	TYP 4A	623+00	--	--	113.50'

REMOVE GUARDRAIL (RT.)

STA. 621+49 TO STA. 623+00
REMOVE 151 LF OF GUARDRAIL

MATCHLINE KY 197 STA 623+00

620+00

PI 619+18.08

RT. CONST. 11 LF OF 24" PIPE W/ 1 - 24" SLOPED & MITERED HDWL.

615+00

HACK DR

DO NOT DISTURB SIGN (HACK DR)

610+00

PI 612+21.57

SPA ST

DO NOT DISTURB SIGN (SPA ST)

605+00

PI 605+81.32

600+00

MATCHLINE KY 197 STA 597+00

PAVEMENT REPAIR (RT.)

STA. 602+74 TO STA. 603+24

PAVEMENT REPAIR (RT.)

STA. 608+25 TO STA. 608+75

LEGEND

- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

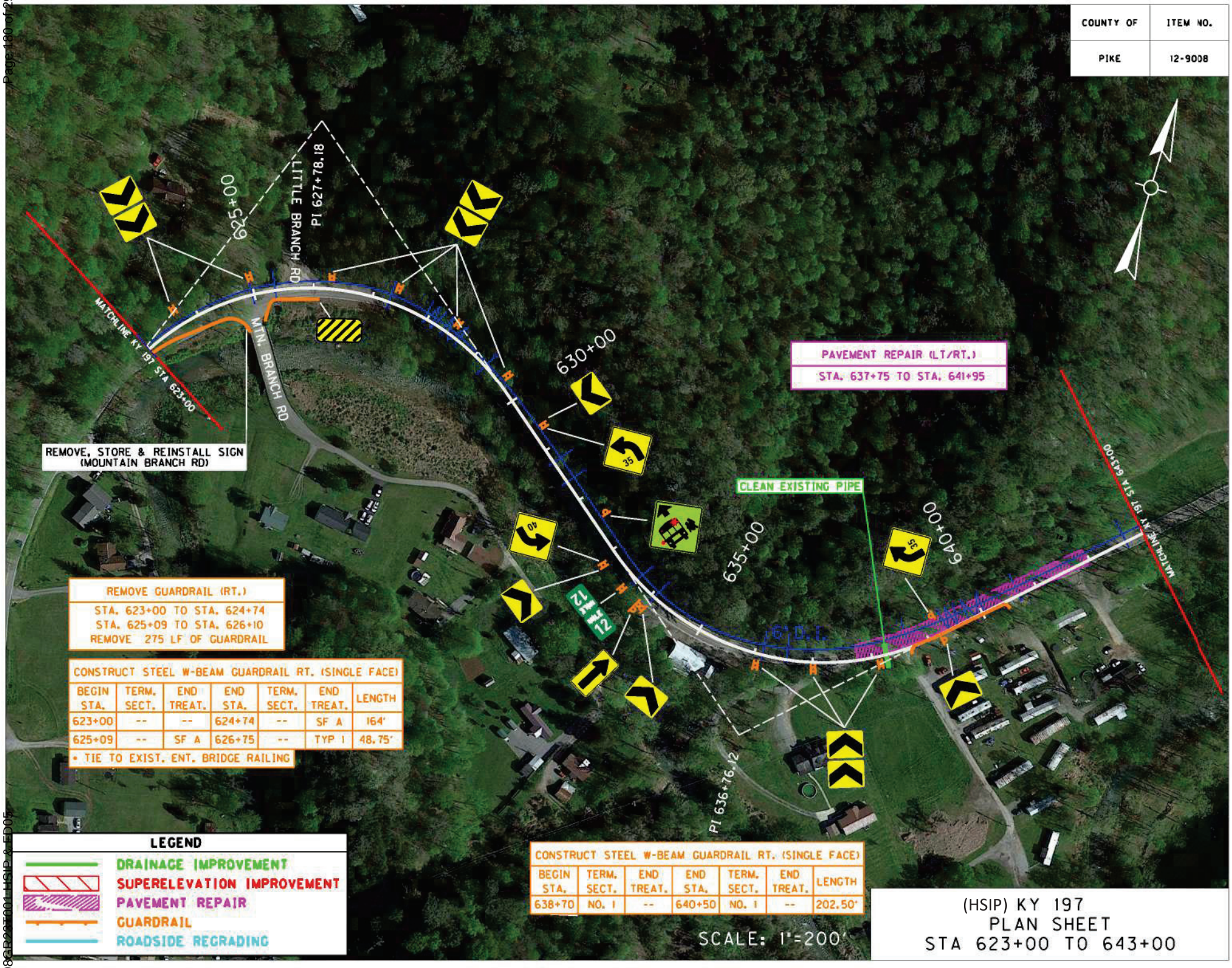
SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 597+00 TO 623+00

PIKE COUNTY
098GR097004 HSIP 3 ED05

Contract ID: 234100
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PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 623+00 TO 643+00

PIKE COUNTY
0983R23500I HSIP & ED05

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008



LEGEND

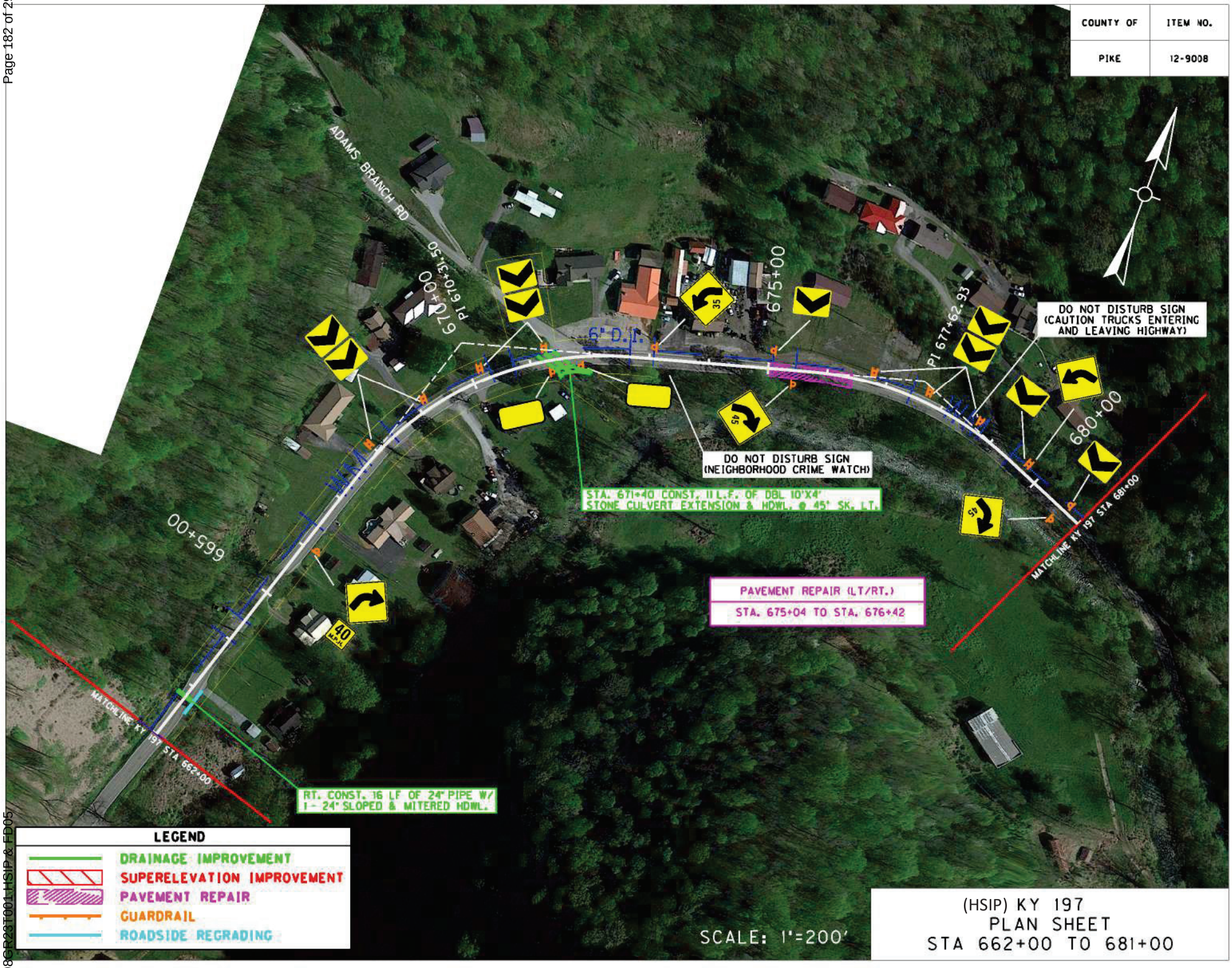
- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 643+00 TO 662+00

PIKE COUNTY
098D00057004 HSIP 2 ED05

COUNTY OF	ITEM NO.
PIKE	12-9008



LEGEND

- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 662+00 TO 681+00

PIKE COUNTY
09BCR23T001 HSIP & FD05

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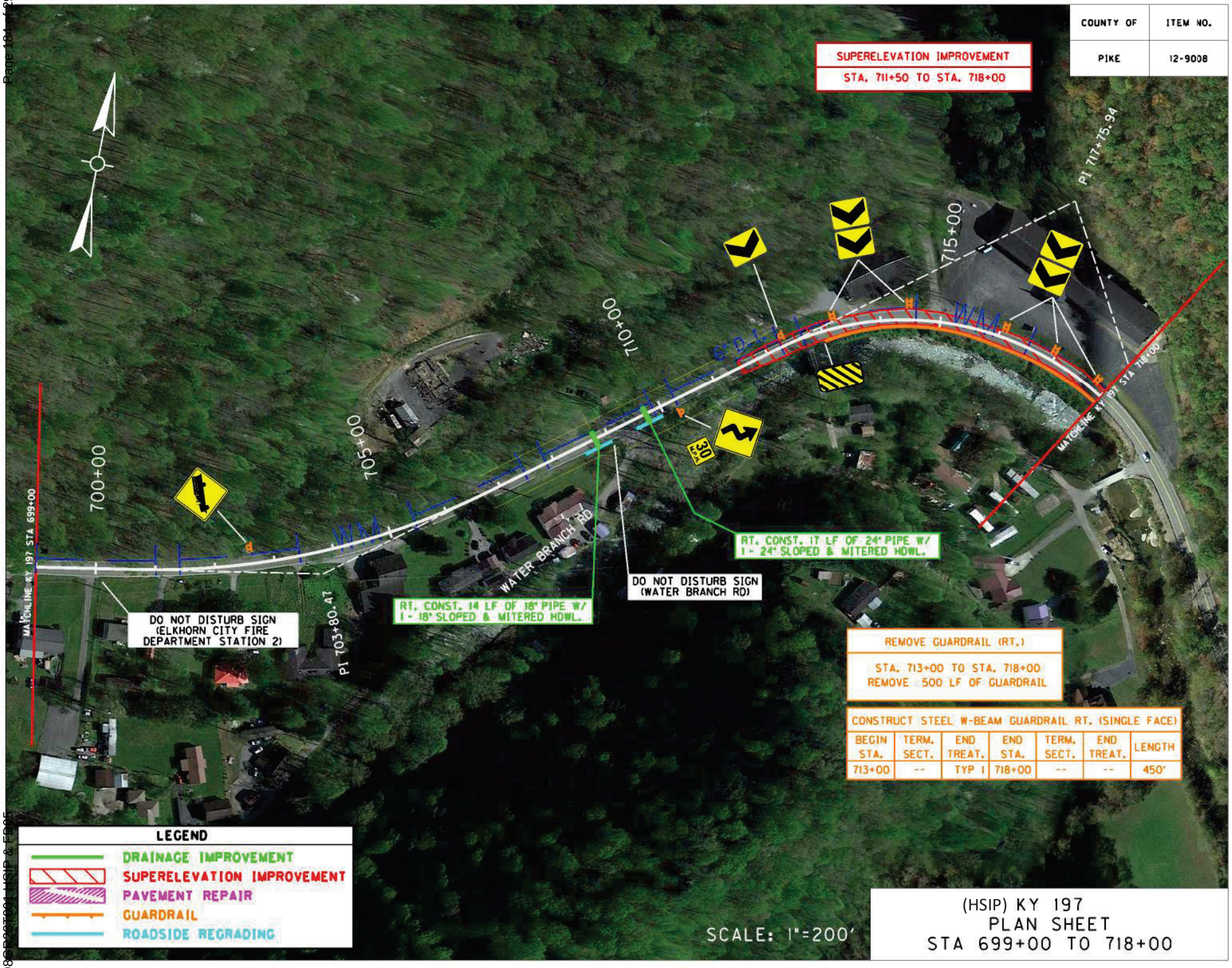
COUNTY OF	ITEM NO.
PIKE	12-9008



(HSIP) KY 197
PLAN SHEET
STA 681+00 TO 699+00

PIKE COUNTY
098D2025004 HSIP 8 ED05

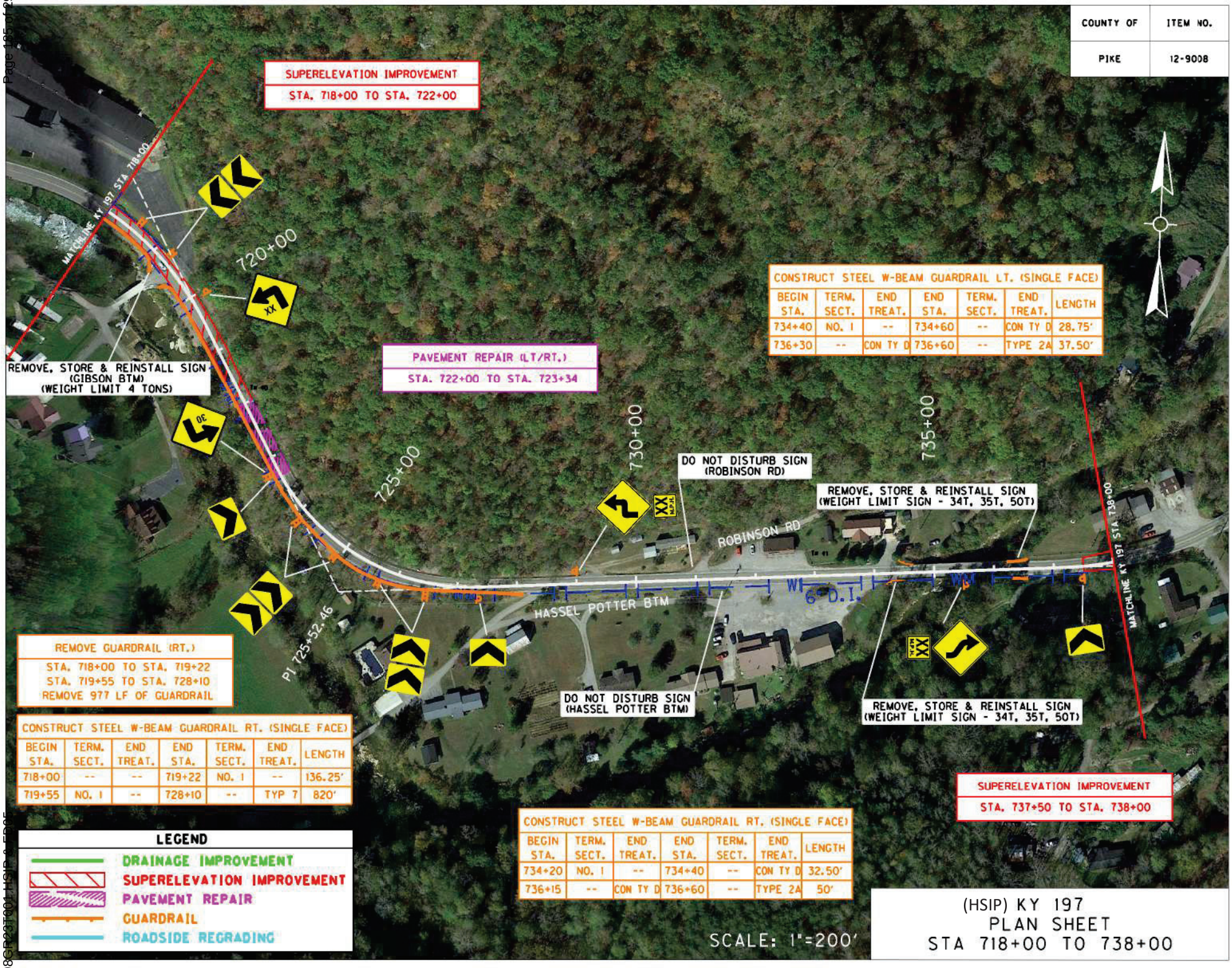
Contract ID: 234100
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PIKE COUNTY
0980D2057004 HSIP & ED05

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008



CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
734+40	NO. 1	--	734+60	--	CON TY D	28.75'
736+30	--	CON TY D	736+60	--	TYPE 2A	37.50'

REMOVE GUARDRAIL (RT.)
STA. 718+00 TO STA. 719+22
STA. 719+55 TO STA. 728+10
REMOVE 977 LF OF GUARDRAIL

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
718+00	--	--	719+22	NO. 1	--	136.25'
719+55	NO. 1	--	728+10	--	TYP 7	820'

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)						
BEGIN STA.	TERM. SECT.	END TREAT.	END STA.	TERM. SECT.	END TREAT.	LENGTH
734+20	NO. 1	--	734+40	--	CON TY D	32.50'
736+15	--	CON TY D	736+60	--	TYPE 2A	50'

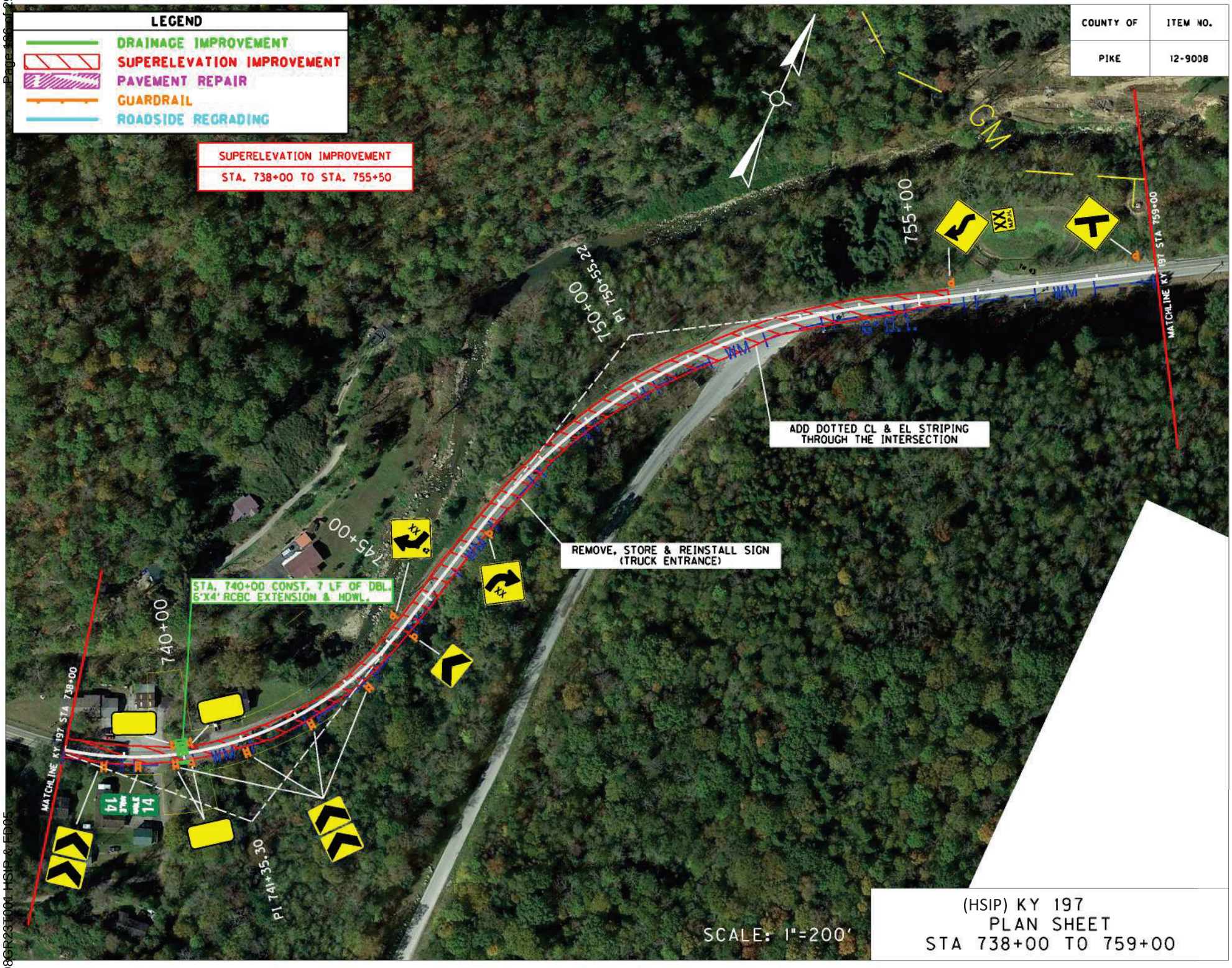
LEGEND

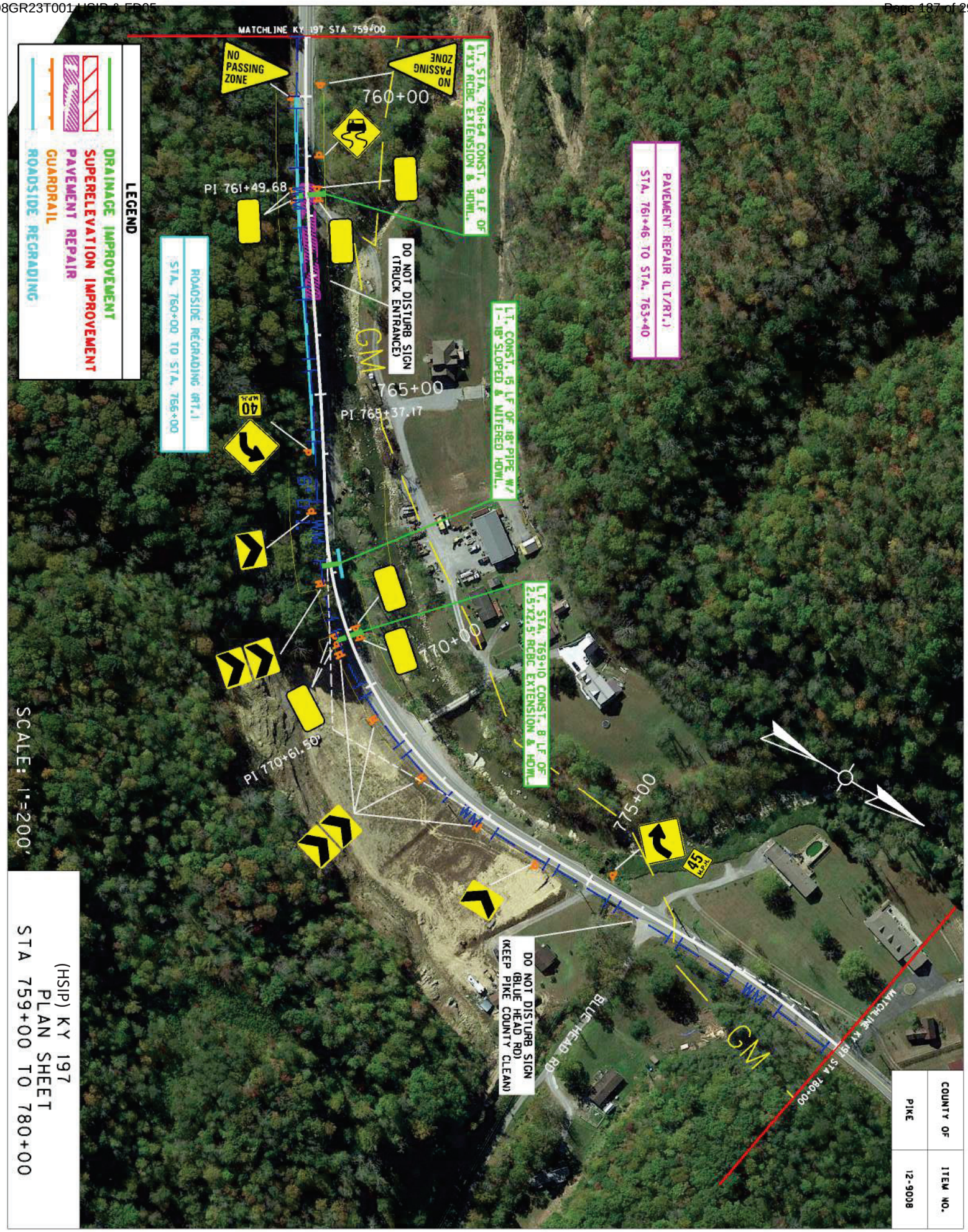
- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 718+00 TO 738+00

PIKE COUNTY
098GR23T004 HSIP 3 FD05


LEGEND
DRAINAGE IMPROVEMENT
SUPERELEVATION IMPROVEMENT
PAVEMENT REPAIR
GUARDRAIL
ROADSIDE REGRADING
SUPERELEVATION IMPROVEMENT
STA. 738+00 TO STA. 755+50
COUNTY OF
PIKE
ITEM NO.
12-9008
CM
755+00
PI 750+55.22
750+00
745+00
740+00
MATCHLINE KY 197 STA 759+00
MATCHLINE KY 197 STA 738+00
WM
ADD DOTTED CL & EL STRIPING THROUGH THE INTERSECTION
REMOVE, STORE & REINSTALL SIGN (TRUCK ENTRANCE)
STA. 740+00 CONST. 7 LF OF DBL. 6'X4' RCBC EXTENSION & HDWL.
PI 741+35.30
SCALE: 1"=200'
(HSIP) KY 197
PLAN SHEET
STA 738+00 TO 759+00


MATCHLINE KY 197 STA 759+00
NO PASSING ZONE
NO PASSING ZONE
760+00
LT. STA. 761+64 CONST. 9 LF OF 4'X3' RCBC EXTENSION & HDWL.
PI 761+49.68
DO NOT DISTURB SIGN (TRUCK ENTRANCE)
765+00
PI 765+37.17
LT. CONST. 15 LF OF 18" PIPE W/ 1 - 18" SLOPED & MITERED HDWL.
40 MPH
ROADSIDE REGRADING (RT.) STA. 760+00 TO STA. 766+00
PAVEMENT REPAIR (LT/RT.) STA. 761+46 TO STA. 763+40
LT. STA. 769+10 CONST. 8 LF OF 2.5'X2.5' RCBC EXTENSION & HDWL.
770+00
PI 770+61.50'
775+00
45 MPH
DO NOT DISTURB SIGN (BLUE HEAD RD) (KEEP PIKE COUNTY CLEAN)
BLUE HEAD RD
MATCHLINE KY 197 STA 780+00
LEGEND
DRAINAGE IMPROVEMENT
SUPERELEVATION IMPROVEMENT
PAVEMENT REPAIR
GUARDRAIL
ROADSIDE REGRADING
SCALE: 1"=200'
(HSIP) KY 197
PLAN SHEET
STA 759+00 TO 780+00
COUNTY OF
PIKE
ITEM NO.
12-9008

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008

SUPERELEVATION IMPROVEMENT
STA. 787+75 TO STA. 795+50

PI 780+37.29

MATCHLINE KY 197 STA 780+00

785+00

DO NOT DISTURB SIGN
(FISH POND BTM)

790+00

795+00

PI 797+10.36

NEXT 8 MILES

MATCHLINE KY 197 STA 799+00

SPEED LIMIT 35

2% D.L.

GM

PI 791+83.24

15 MAX 15

GM

LEGEND

- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

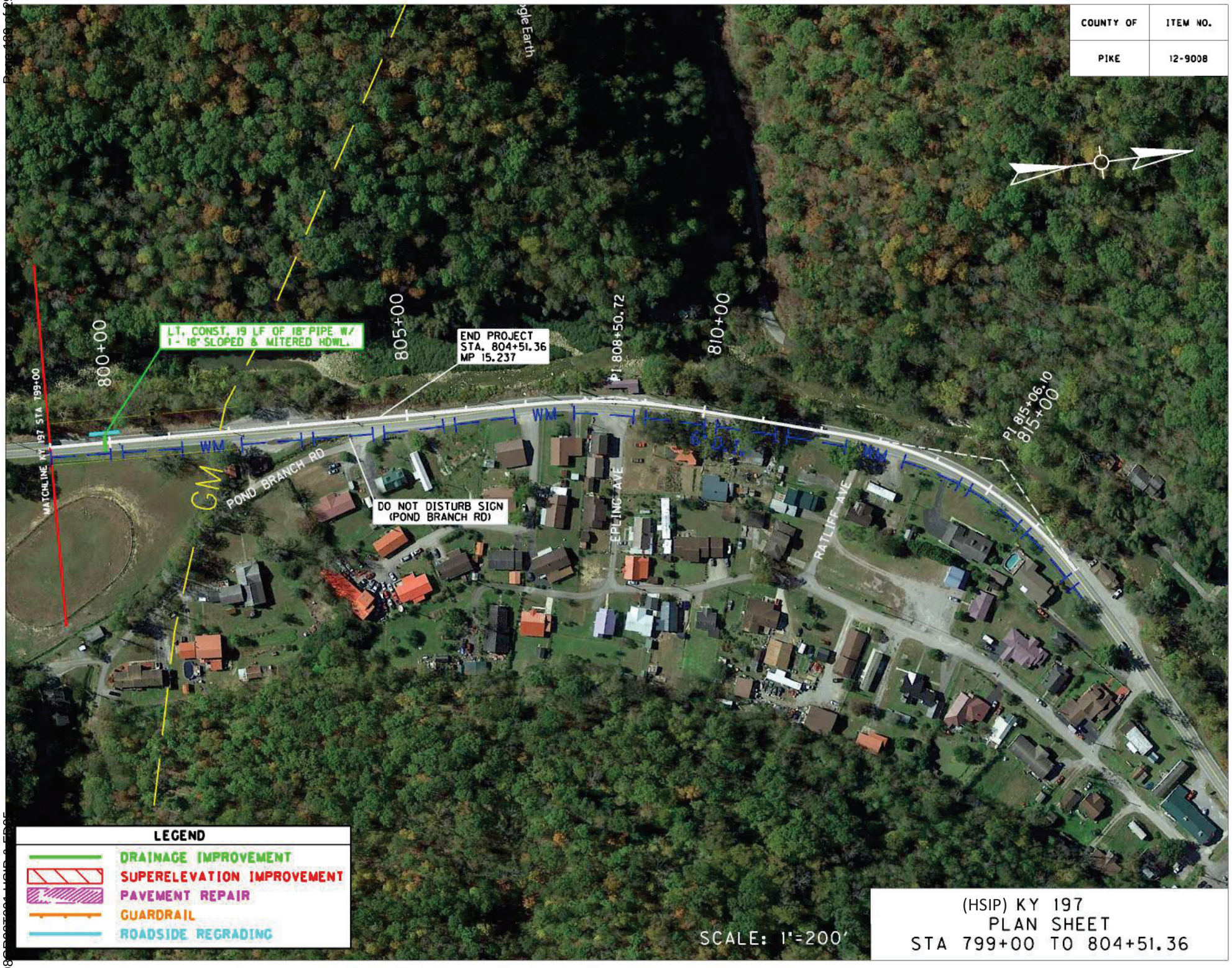
SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 780+00 TO 799+00

PIKE COUNTY
09BCR23T001 HSIP & FD05

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COUNTY OF	ITEM NO.
PIKE	12-9008



LEGEND

- DRAINAGE IMPROVEMENT
- SUPERELEVATION IMPROVEMENT
- PAVEMENT REPAIR
- GUARDRAIL
- ROADSIDE REGRADING

SCALE: 1"=200'

(HSIP) KY 197
PLAN SHEET
STA 799+00 TO 804+51.36

PIKE COUNTY
098D00257004 HSIP 5 FD05

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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-9008.00	R1

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
R1	LAYOUT SHEET
R2	PLAN SHEET
R3	RIGHT OF WAY SUMMARY SHEET

SHEETS NOT INCLUDED IN TOTAL SHEETS

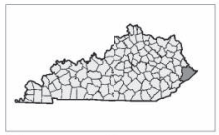
STANDARD DRAWINGS

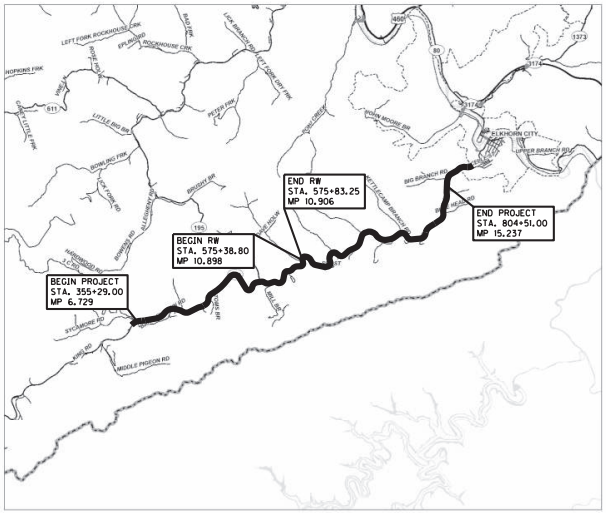
NUMBER

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT

HSIP ROADWAY DEPARTURE CORRIDOR
KY 197 FROM BARTLEYTOWN ROAD TO POND BRANCH ROAD





RIGHT OF WAY PLANS

LAYOUT MAP

DESIGN CRITERIA

CLASS OF HIGHWAY _____
TYPE OF TERRAIN _____
DESIGN SPEED _____
REQUIRED NPSD _____
REQUIRED PSD _____
LEVEL OF SERVICE _____
ADT PRESENT ( ) _____
ADT FUTURE ( ) _____
DHV _____
D % _____
T % _____

GEOGRAPHIC COORDINATES

LATITUDE ___ DEGREES ___ MINUTES ___ SECONDS NORTH
LONGITUDE ___ DEGREES ___ MINUTES ___ SECONDS WEST

DESIGNED

% RESTRICTED SD _____
LEVEL OF SERVICE _____
MAX. DISTANCE W/O PASSING _____

LENGTH 44.922 LIN. FT. 8.508 MILES	LENGTH ___ LIN. FT. ___ MILES	LENGTH ___ LIN. FT. ___ MILES	LENGTH ___ LIN. FT. ___ MILES
ADDED / DEDUCTED — FOR EQUALITIES ___ LIN. FT. NOT INCLUDED	ADDED / DEDUCTED — FOR EQUALITIES ___ LIN. FT. NOT INCLUDED	ADDED / DEDUCTED — FOR EQUALITIES ___ LIN. FT. NOT INCLUDED	ADDED / DEDUCTED — FOR EQUALITIES ___ LIN. FT. NOT INCLUDED
RAILROAD CROSSINGS NO. ___ LIN. FT.	RAILROAD CROSSINGS NO. ___ LIN. FT.	RAILROAD CROSSINGS NO. ___ LIN. FT.	RAILROAD CROSSINGS NO. ___ LIN. FT.
BRIDGES ___ LIN. FT.	BRIDGES ___ LIN. FT.	BRIDGES ___ LIN. FT.	BRIDGES ___ LIN. FT.

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

PIKE

ITEM NO. 12-9008.00
PROJECT NUMBER: 5344 (009)
FD52 1550 C098 E197
LETTING DATE: _____

RECOMMENDED BY: _____ PROJECT MANAGER DATE:

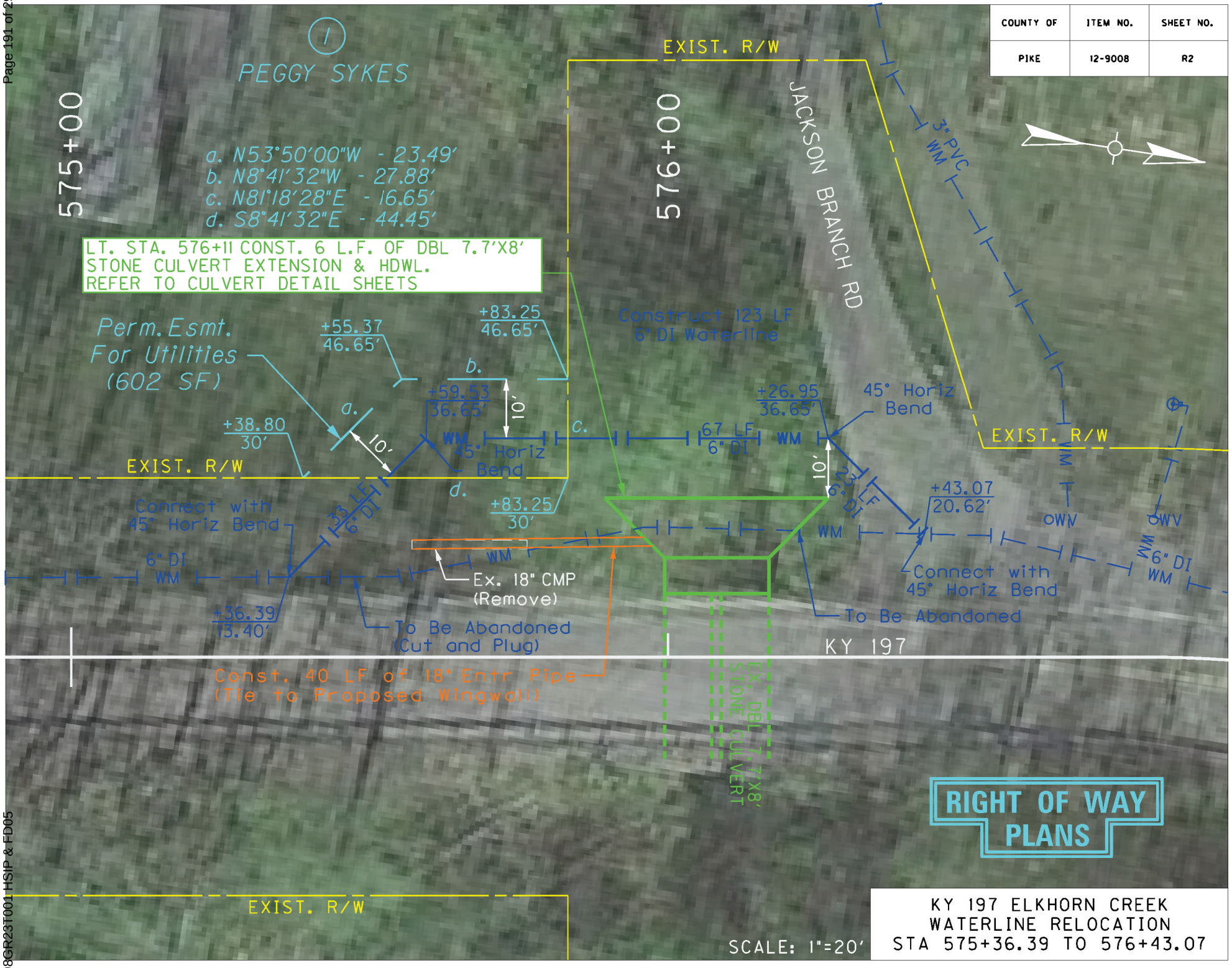
PLAN APPROVED BY: _____ STATE HIGHWAY ENGINEER DATE:

USER: ekt
DATE PLOTTED: October 27, 2022
E-SHEET NAME:
DATE PLOTTED: October 27, 2022
TIME PLOTTED: 08:57

PIKE COUNTY
098GR23T001 HSIP & FD05

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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-9008	R2



PIKE COUNTY
098GR23T001 HSIP & FD05

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COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-9008.00	R3

RIGHT OF WAY SUMMARY

PARCEL NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				SOURCE OF TITLE	REMARKS*
						PERMANENT	TEMPORARY	LEFT		RIGHT														
		ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.		YES	NO	C	R	F	S		
1	PEGGY SYKES	1.000	43,560	0	0	602	0	1.0000	43,560					1.000	43,560	5		X					DB 620, PG 167 DB 778, PG 681 WB 00 PG 296	

NOTE: PERMANENT R/W ACQUIRED + AREA SEVERED = TOTAL AREA OF TRACT.

RIGHT OF WAY PLANS

TYPE SEWER SYSTEM
1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE
C - COMMERICAL
R - RESIDENTIAL
F - FARM
S - STORAGE

*INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)

KY 197
RIGHT OF WAY SUMMARY SHEET
SHEET 1 OF 1

USER: gall
DATE PLOTTED: October 27 2022
E-SHEET NAME:
DATE PLOTTED: October 27 2022
PIKE COUNTY
098GR23T001 HSIP & FD05

PARCEL NO. 1 TRACT A

Being a tract of land located in Pike County, Kentucky along KY 197, the point of beginning being approximately 115 feet south of the intersection of KY 197 and Jackson Branch Road, and more particularly described as follows:

Beginning at a point 30.00 feet left of KY 197 Station 575+38.80; thence North 53 Degrees 50 Minutes 00 Seconds West, 23.49 feet to a point 46.65 feet left of KY 197 Station 575+55.37; thence North 8 Degrees 41 Minutes 32 Seconds West, 27.88 feet to a point 46.65 feet left of KY 197 Station 575+83.25; thence North 81 Degrees 18 Minutes 28 Seconds East, 16.65 feet to a point 30.00 feet left of KY 197 Station 575+83.25; thence South 8 Degrees 41 Minutes 32 Seconds East, 44.45 feet to the point of beginning.

The above described parcel contains 0.014 acres (602 square feet).

It is the specific intention of the grantor(s) herein to convey a permanent easement to the property described above and designated as Parcel 1 Tract A for the purposes of constructing and perpetually maintaining utilities.

Project Name: KY 197 Pike County
Item No. 12-9008

Description: Perm Esmt for Utilities

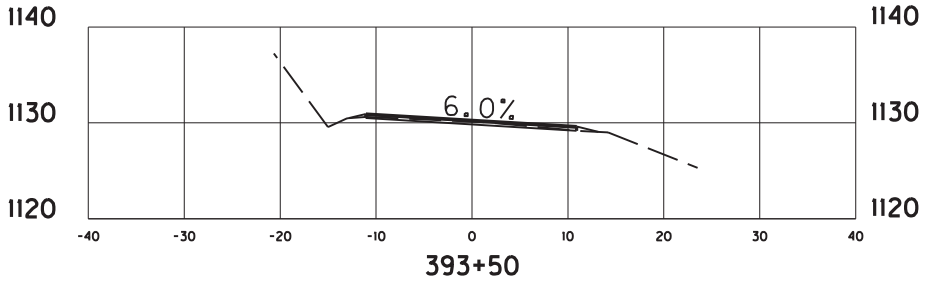
Northing/Easting Corners of Proposed Permanent Easement for Utilities

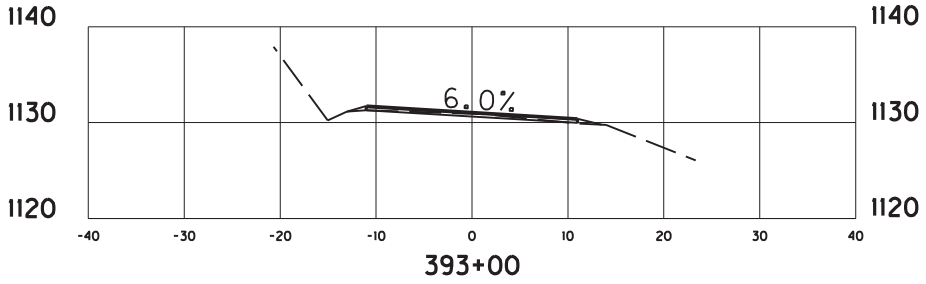
STATION	OFFSET	NORTHING	EASTING
575+38.80	30.00' LT	3639764.7098	5890281.9925
575+55.37	46.65' LT	3639778.5719	5890263.0292
575+83.25	46.65' LT	3639806.1314	5890258.8158
575+83.25	30.00' LT	3639808.6478	5890275.2750

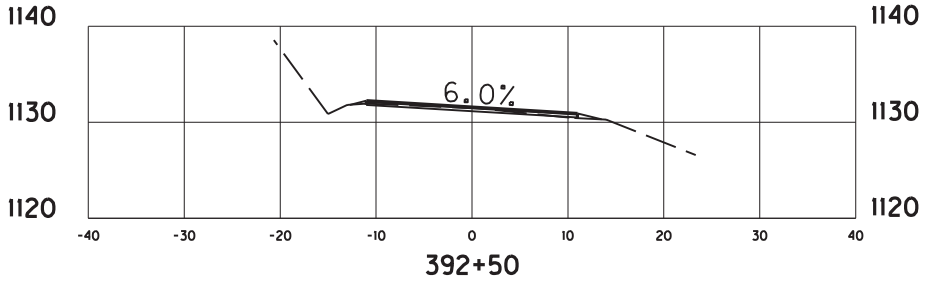
1A		3639893	5890271	1017.968	POINT	FROM OPUS
	1000	3639904	5890265	1018.057	FH	
	1001	3639889	5890270	1017.921	WV	
	1002	3639944	5890270	1020.066	WV	
	1003	3639845	5890289	1018.345	TOS ST	EDGE OF CULVERT
	1004	3639837	5890290	1018.315	TOS	EDGE OF CULVERT
	1005	3639835	5890291	1018.648	TOS ST	EDGE OF CULVERT
	1006	3639828	5890292	1018.711	TOS	EDGE OF CULVERT
	1007	3639827	5890281	1006.621	WL ST	

COUNTY OF	ITEM NO.
PIKE	12-9008.00

SUPERELEVATION TRANSITION		
STA.	CROSS-SLOPE	
	WB LANE	EB LANE
386+00	EXISTING	EXISTING
386+12.76	2.0% (→)	-4.0% (→)
386+63.76	4.0% (→)	-4.0% (→)
387+14.76	6.0% (→)	-6.0% (→)
397+74.97	6.0% (→)	-6.0% (→)
398+25.97	4.0% (→)	-4.0% (→)
398+76.97	2.0% (→)	-2.0% (→)
399+27.97	FLAT	-2.0% (→)
399+60	EXISTING	EXISTING





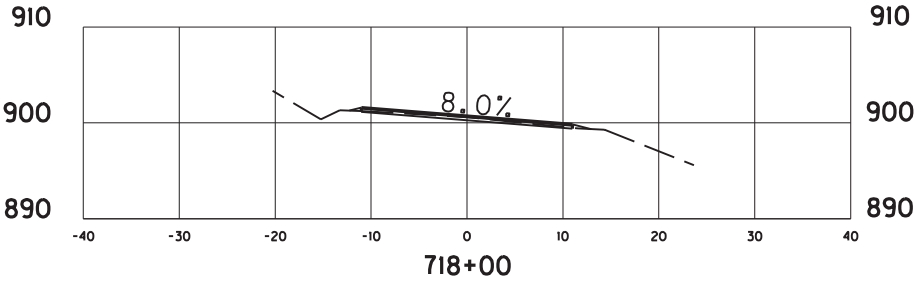


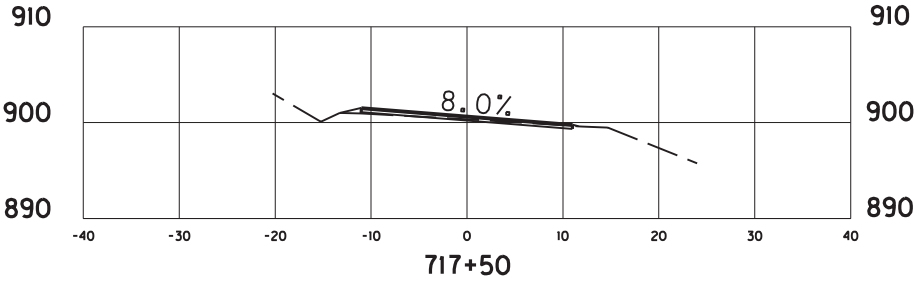
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

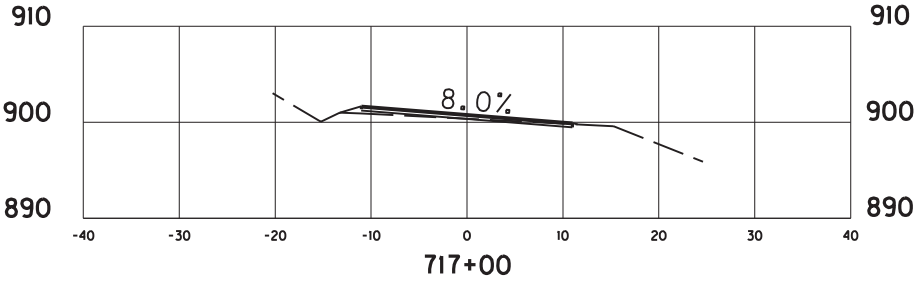
(HSIP) KY 197
SUPERELEVATION DETAIL
PI STA 393+11.04

COUNTY OF	ITEM NO.
PIKE	12-9008.00

SUPERELEVATION TRANSITION		
STA.	CROSS-SLOPE	
	WB LANE	EB LANE
711+50	EXISTING	EXISTING
711+81.27	4.0% (→)	-4.0% (→)
712+83.27	8.0% (→)	-8.0% (→)
719+79.18	8.0% (→)	-8.0% (→)
720+81.18	4.0% (→)	-4.0% (→)
721+32.18	2.0% (→)	-2.0% (→)
721+83.18	FLAT	-2.0% (→)
722+00	EXISTING	EXISTING





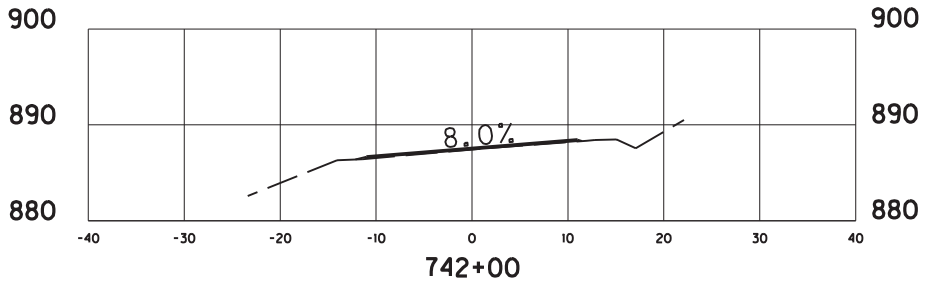


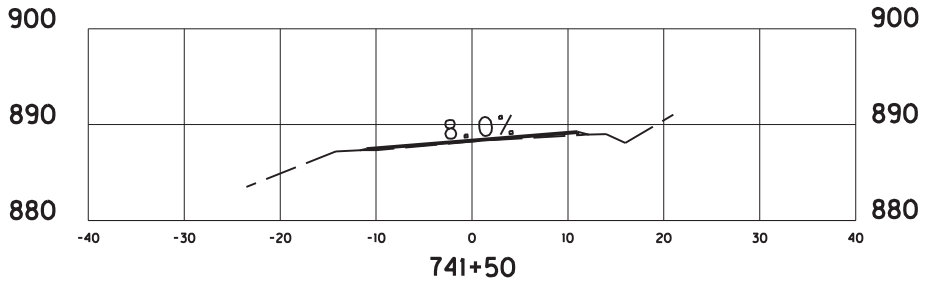
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

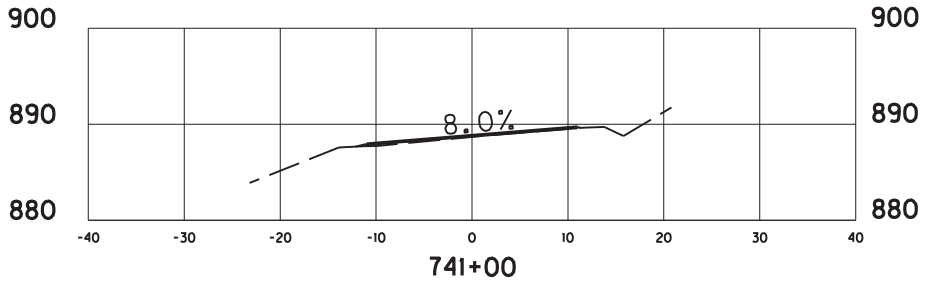
(HSIP) KY 197
SUPERELEVATION DETAIL
PI STA 717+75.94

COUNTY OF	ITEM NO.
PIKE	12-9008.00

SUPERELEVATION TRANSITION		
STA.	CROSS-SLOPE	
	WB LANE	EB LANE
737+50	EXISTING	EXISTING
737+83.97	-8.0% (◄—)	8.0% (—►)
743+72.59	-8.0% (◄—)	8.0% (—►)
744+74.59	-4.0% (◄—)	4.0% (—►)
745+25.59	-2.0% (◄—)	2.0% (—►)
745+45	FLAT	FLAT





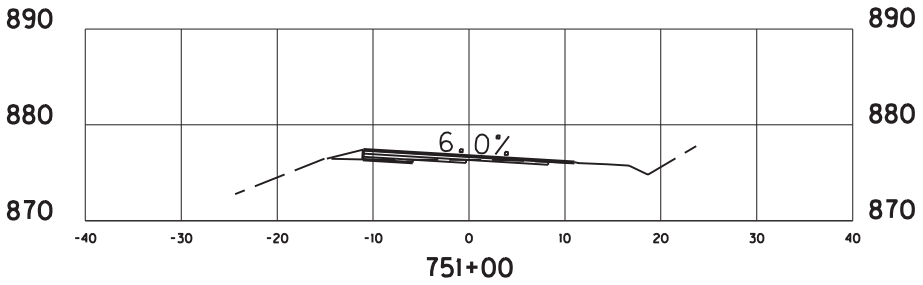


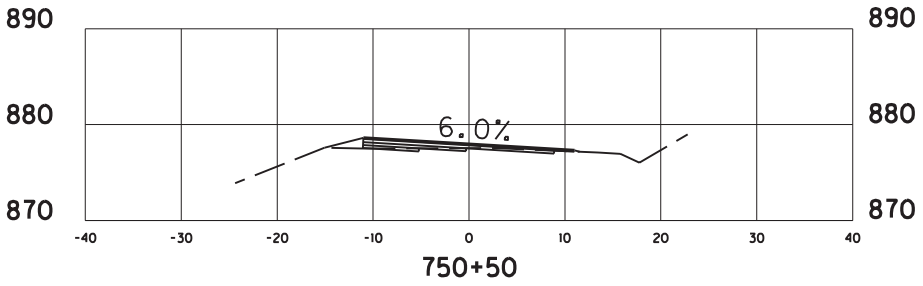
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1" = 20' VERTICAL

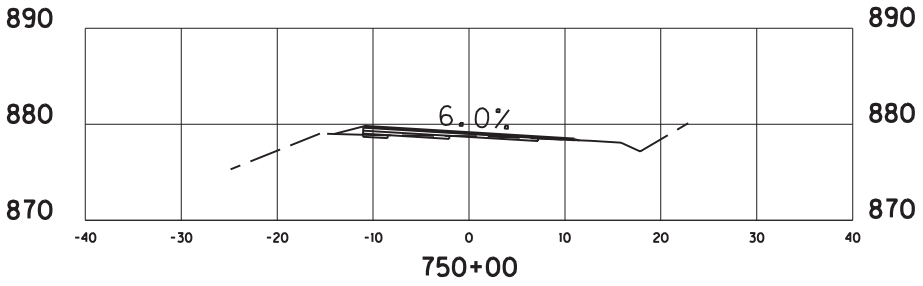
(HSIP) KY 197
SUPERELEVATION DETAIL
PI STA 741+35.30

COUNTY OF	ITEM NO.
PIKE	12-9008.00

SUPERELEVATION TRANSITION		
STA.	CROSS-SLOPE	
	WB LANE	EB LANE
745+45	FLAT	FLAT
745+98.18	2.0% (→)	-2.0% (→)
746+49.18	4.0% (→)	-4.0% (→)
747+00.18	6.0% (→)	-6.0% (→)
753+67.67	6.0% (→)	-6.0% (→)
754+18.67	4.0% (→)	-4.0% (→)
754+69.67	2.0% (→)	-2.0% (→)
755+20.67	FLAT	-2.0% (→)
755+50	EXISTING	EXISTING





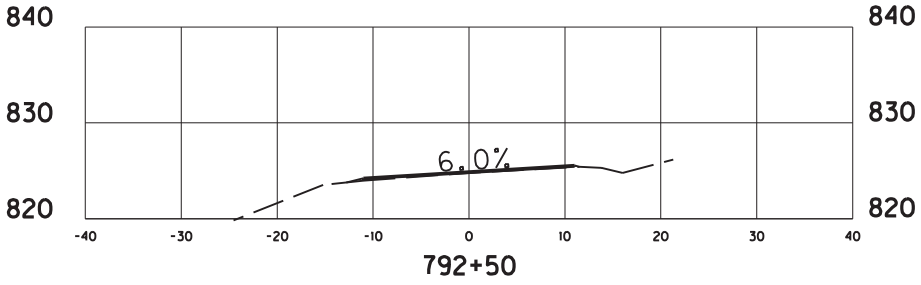


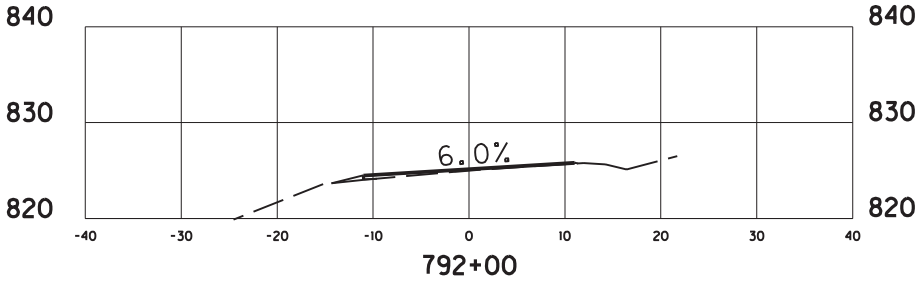
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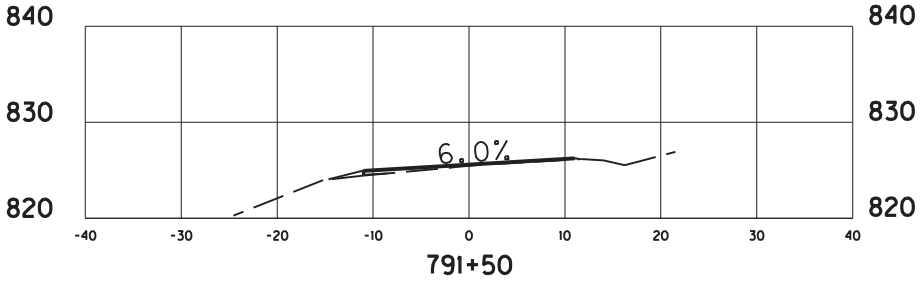
(HSIP) KY 197
SUPERELEVATION DETAIL
PI STA 750+55.22

COUNTY OF	ITEM NO.
PIKE	12-9008.00

SUPERELEVATION TRANSITION		
STA.	CROSS-SLOPE	
	WB LANE	EB LANE
787+75	EXISTING	EXISTING
788+25.91	-6.0% (◄—)	6.0% (◄—)
789+78.91	-6.0% (◄—)	6.0% (◄—)
793+78.69	-6.0% (◄—)	6.0% (◄—)
794+29.69	-4.0% (◄—)	4.0% (—►)
794+80.69	-2.0% (◄—)	2.0% (—►)
795+31.69	-2.0% (◄—)	FLAT
795+50	EXISTING	EXISTING



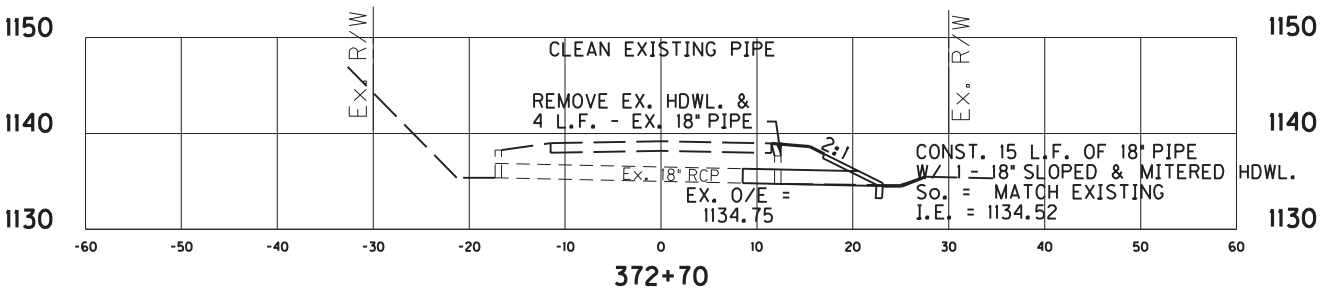




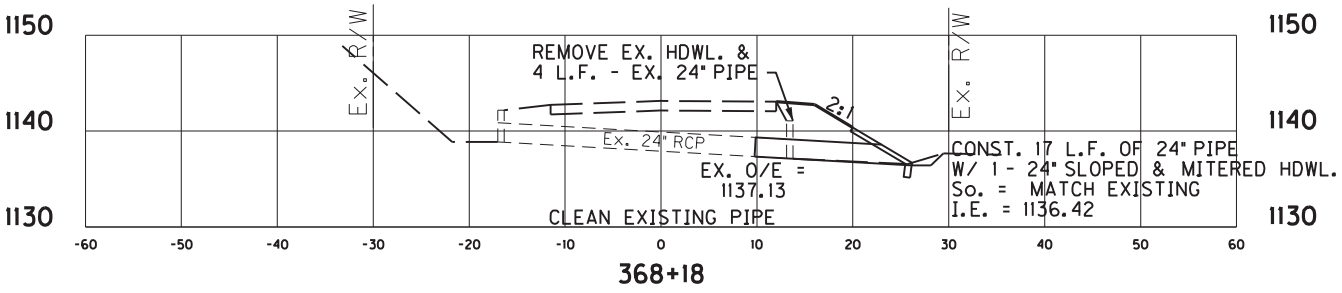
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1" = 20' VERTICAL

(HSIP) KY 197
SUPERELEVATION DETAIL
PI STA 791+83.24

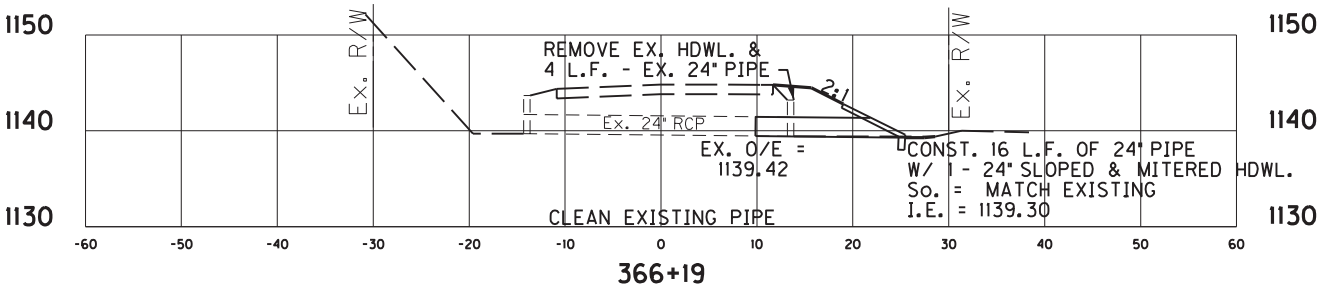
COUNTY OF	ITEM NO.
PIKE	12-9008.00



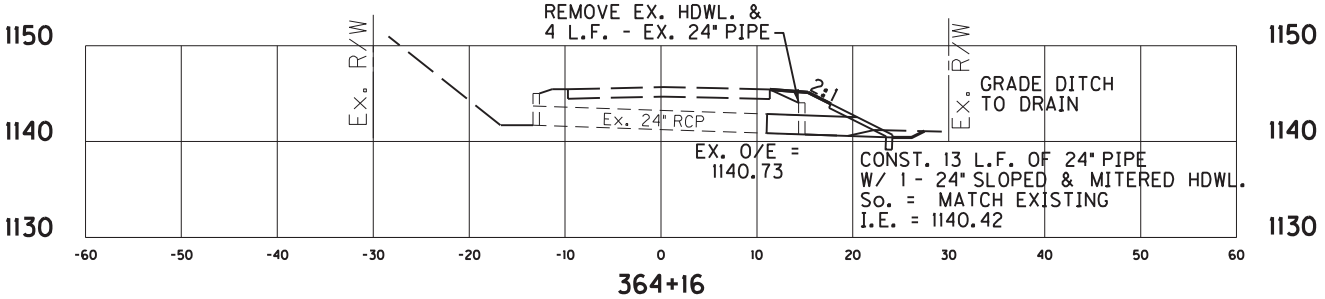
372+70



368+18



366+19

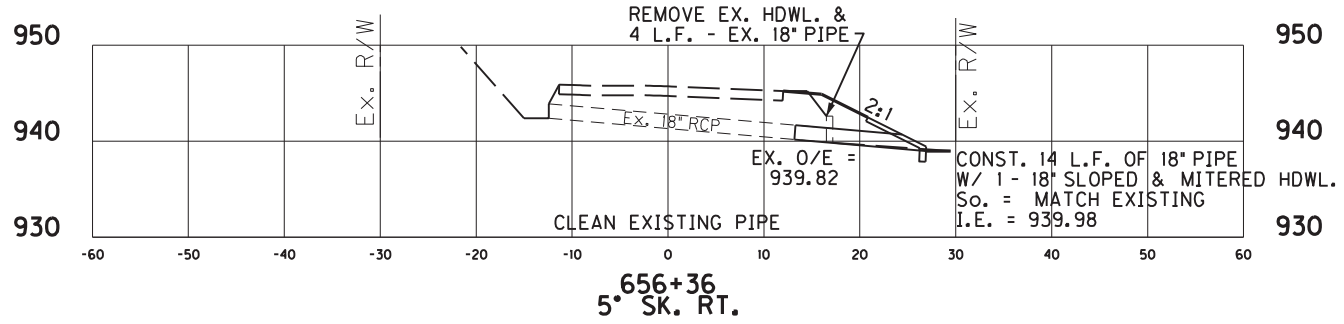


364+16

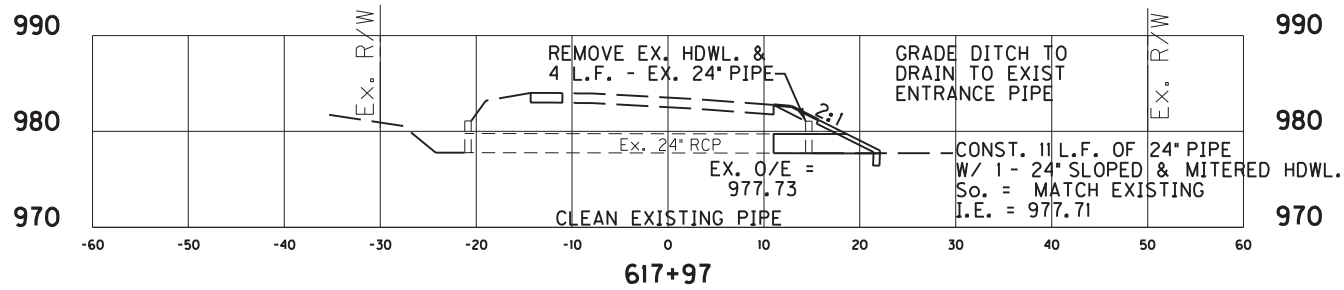
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1" = 20' VERTICAL

(HSIP) KY 197
STA. 364+16 TO STA. 372+70
PIPE SECTIONS

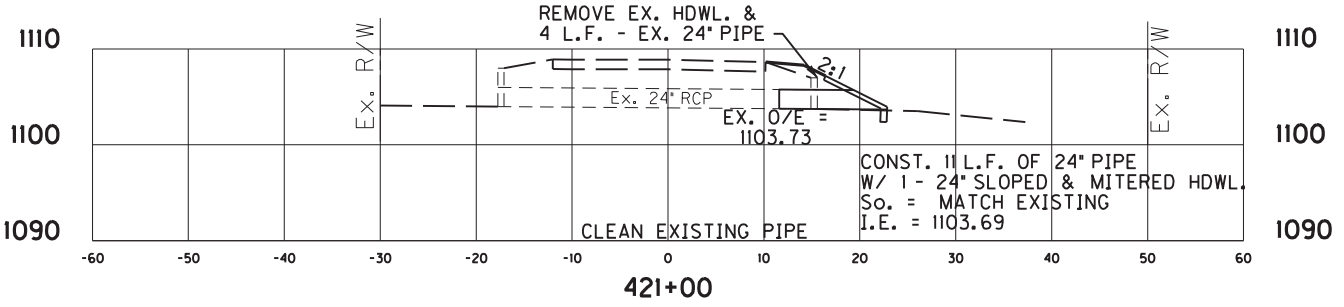
COUNTY OF	ITEM NO.
PIKE	12-9008.00



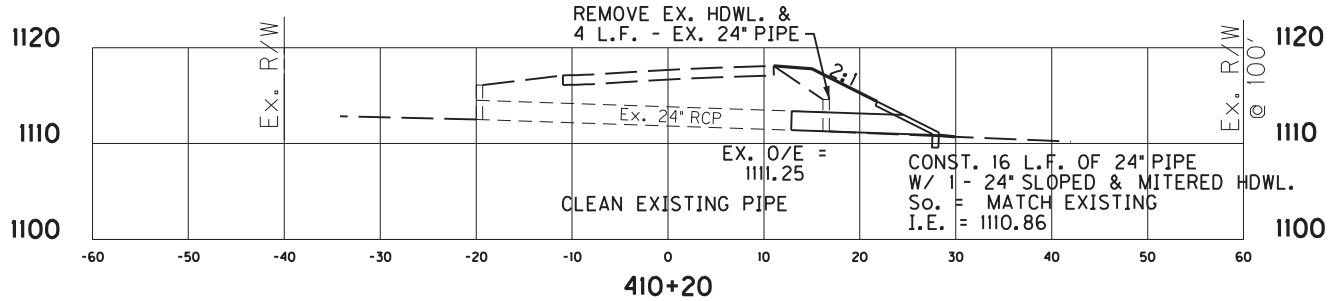
656+36
5° SK. RT.



617+97



421+00

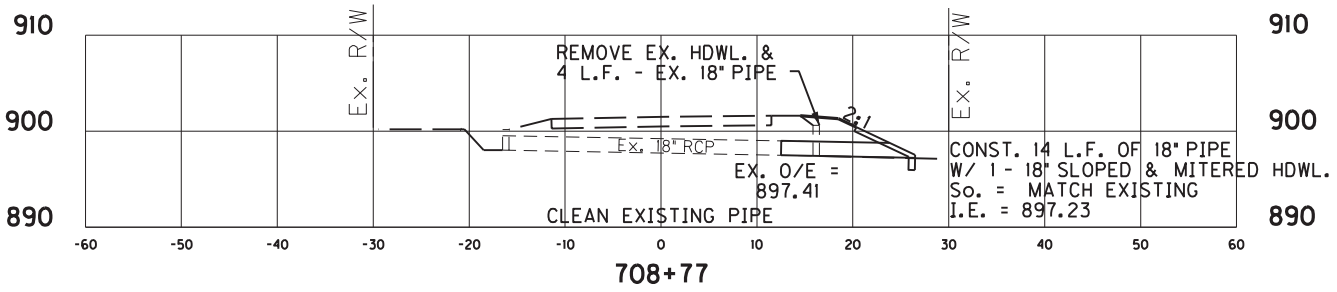


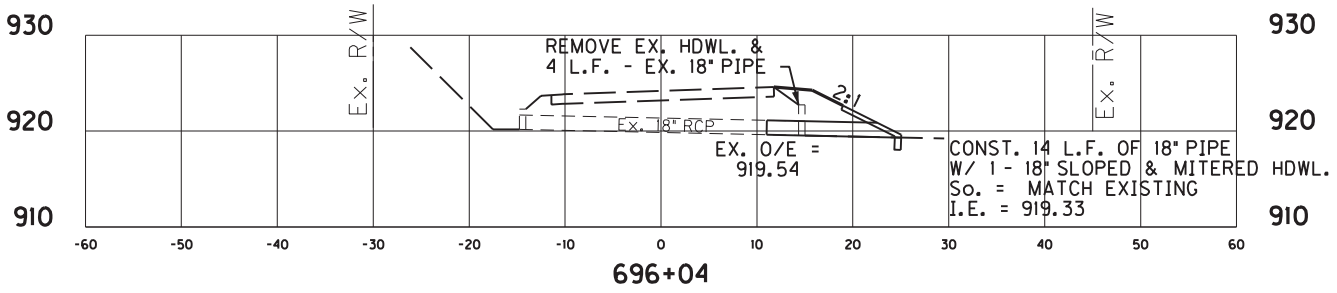
410+20

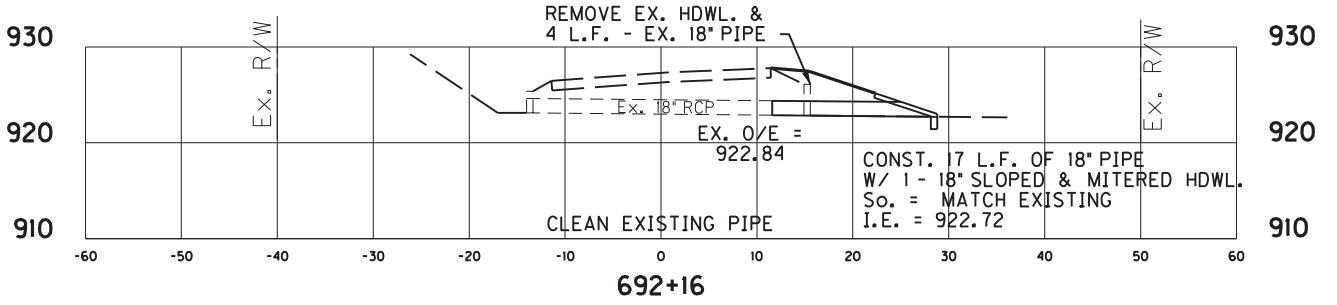
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1" = 20' VERTICAL

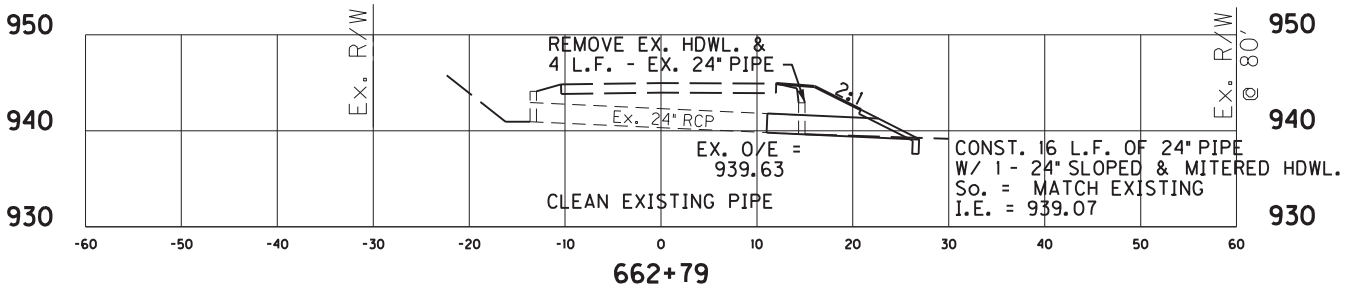
(HSIP) KY 197
STA. 410+20 TO STA. 656+36
PIPE SECTIONS

COUNTY OF	ITEM NO.
PIKE	12-9008.00





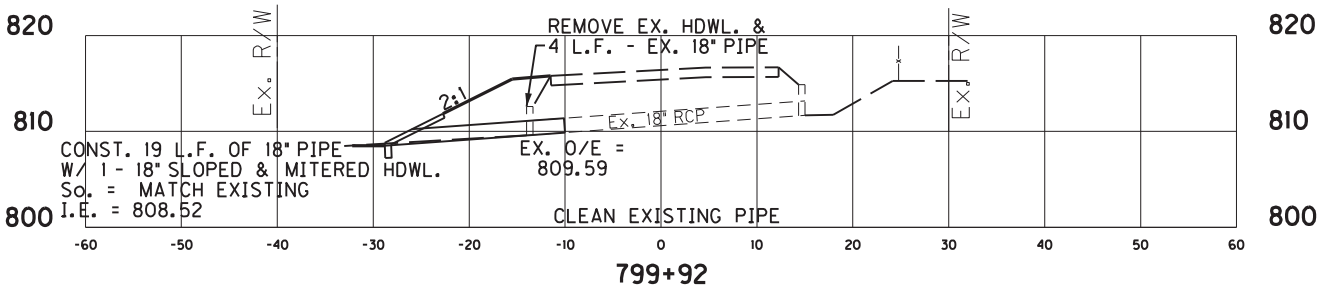


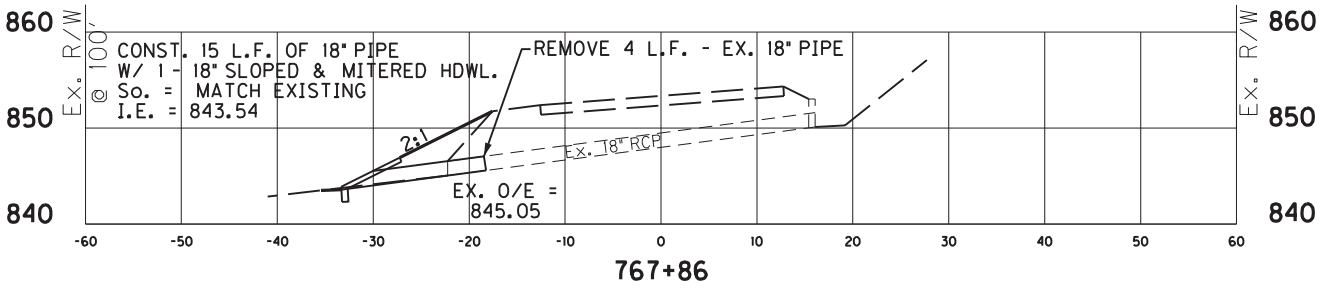


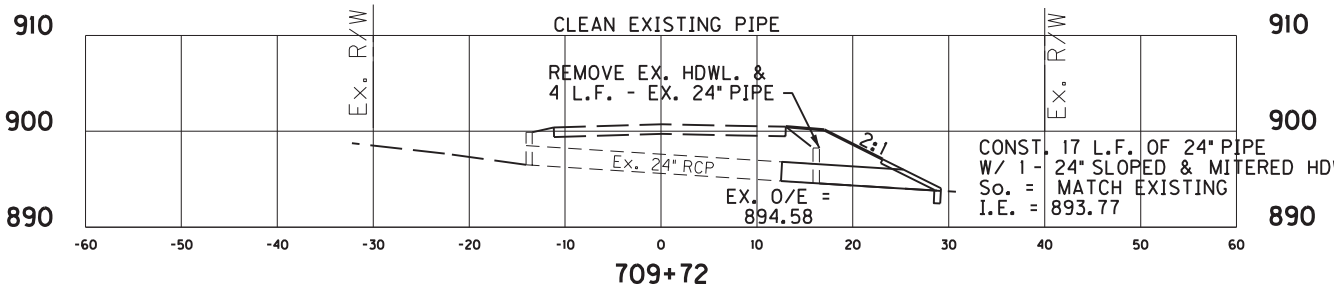
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

(HSIP) KY 197
STA. 662+79 TO STA. 708+77
PIPE SECTIONS

COUNTY OF	ITEM NO.
PIKE	12-9008.00



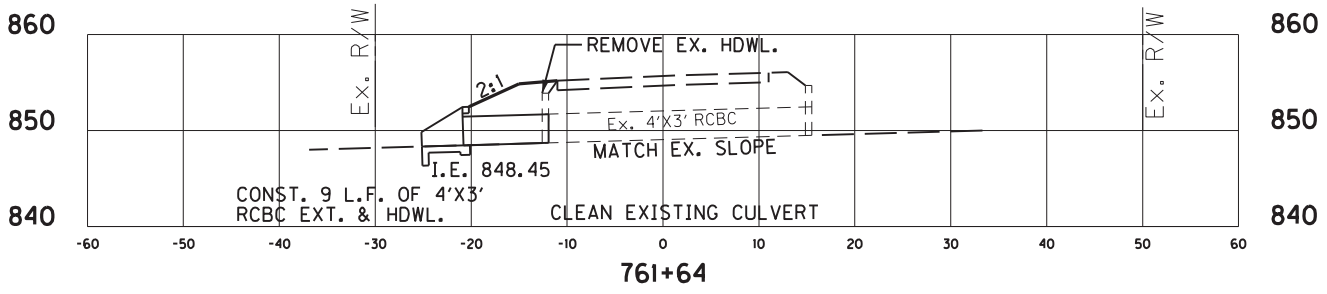




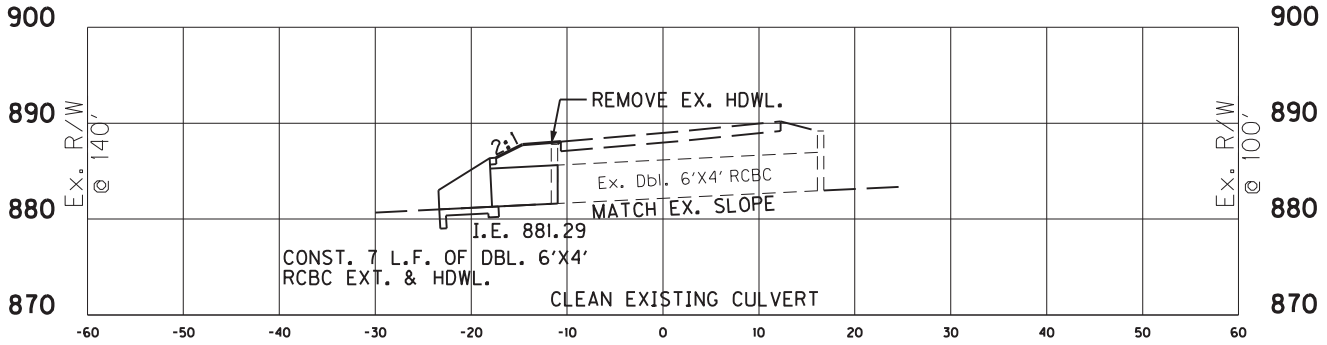
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

(HSIP) KY 197
STA. 709+72 TO STA. 799+92
PIPE SECTIONS

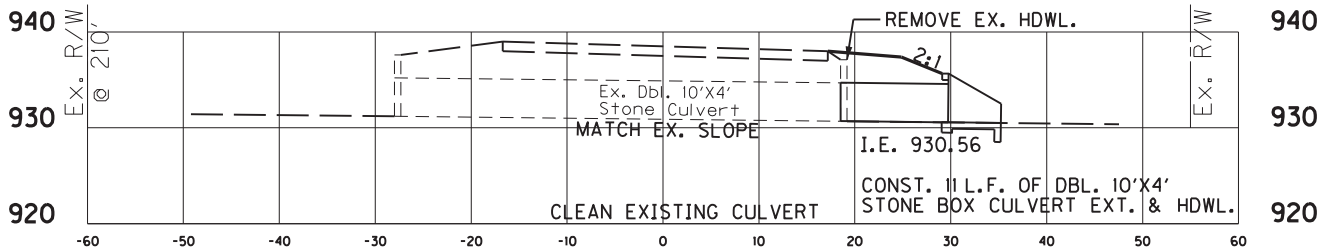
COUNTY OF	ITEM NO.
PIKE	12-9008.00



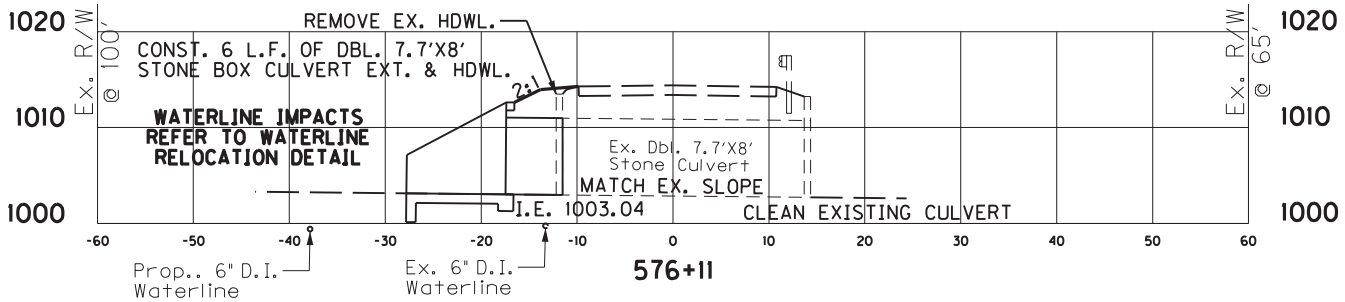
761+64



740+00



671+40
45° Sk. Lt.

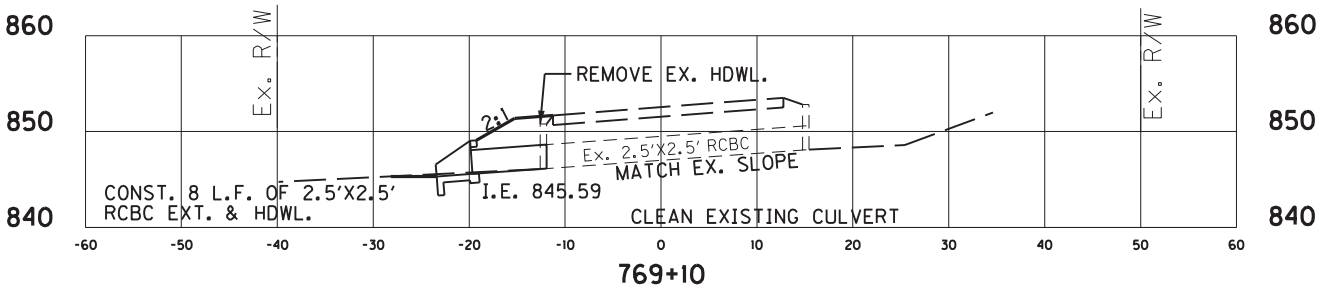


576+11

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

(HSIP) KY 197
STA. 576+11 TO STA. 761+64
BOX CULVERT SECTIONS

COUNTY OF	ITEM NO.
PIKE	12-9008.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

(HSIP) KY 197
STA. 769+10
BOX CULVERT SECTIONS

Contract ID: 234100
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COUNTY OF	ITEM NO.
PIKE	12-9008.00

GENERAL NOTE:

SPECIFICATIONS: ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPERATMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

DESIGN LOAD: THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE CURRENT AASHTO SPECIFICATIONS. THE EFFECTIVE WEIGHT OF FILL MATERIAL IS 120LBS/CF & THE LIVE LOAD IS KYHL – 93 TRUCK OR TANDEM. THE LIVE LOADS ARE CALCULATED BY INCREASING THE HL-93 DESIGN TRUCK OR TANDEM BY 25%.

DESIGN METHOD: ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD RESISTANCE FACTOR METHOD AS SPECIFIED IN THE AASHTO SPECIFICATIONS.

DESIGN STRESSES: FOR CLASS 'A' CONCRETE, F'C = 3,500 P.S.I

FOR STEEL REINFORCEMENT. FY = 60,000 P.S.I., N = 9

CONCRETE: CLASS 'A' SHALL BE USED THROUGHOUT.

BEVELED EDGES: ALL EXPOSED EDGES SHALL BE BEVELED ¾" UNLESS OTHERWISE NOTED.

REINFORCEMENT: DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BARS UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS, CLEAR DISTANCE TO FACE OF CONCRETE IS 2" UNLESS OTHERWISE NOTED. BARS DESIGNATED BY SUFFIX (E) SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 811.10 OF THE SPECS. BARS DESIGNATED BY SUFFIX (S) SHALL BE CONSIDERED STIRRUPS FOR THE PURPOSE OF BEND DIAMETERS. DUE TO THE GENERIC NATURE OF SOME EXTENSIONS AND LIMITED DETAILS SHOWN HEREIN, FIELD CUT BARS TO FACILITATE PLACEMENT WHENEVER REQUIRED. THIS INCLUDES, BUT IS NOT LIMITED TO, TRANSVERSE AND LONGITUDINAL BARREL BARS NEAR SKEWED ENDS AND VERTICAL & HORIZONTAL WINGWALL BARS.

BONDING TO EXISTING CONCRETE USING STRUCTURAL ADHESIVES: BOND PROPOSED PLASTIC CONCRETE TO EXISTING HARDENED CONCRETE IN ALL LOCATIONS USING A TYPE V EPOXY RESIN OR OTHER APPROVED STRUCTURAL ADHESIVE AS PRESCRIBED IN SECTION 826 OF THE SPECIFICATIONS. FOLLOW THE MANUFACTURER'S APPLICATION INSTRUCTIONS. THE WORK & MATERIAL IS INCIDENTAL TO THE UNIT PRICE FOR CLASS "A" CONCRETE.

CONSTRUCTION NOTE: REMOVE PORTIONS OF THE EXISTING CULVERT TO THE LIMITS SHOWN HEREIN. EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED OF CONCRETE AND STRAIGHTENED FOR USE TO BOND THE NEW CONCRETE WITH A MINIMUM PROJECTION OF 1'-9". AS AN ALTERNATE, CENTER 3'-0' LONG, 6" DOWEL BARS @ 12' SPACING INTO THE EXISTING SLABS AND WALLS. EMBEDDED 1'-6' INTO EXISTING CULVERT CONCRETE AND SET WITH AN ADHESIVE ANCHORAGE SYSTEM TO PROVIDE A PULLOUT STRENGTH OF EQUAL OR GREATER CAPACITY THAN THE CORRESPONDING REINFORCING STEEL. THE COST OF THE ALTERNATE SHALL BE INCIDENTAL TO THE UNIT PRICE FOR CLASS 'A' CONCRETE.

COMPLETION OF STRUCTURE: THE CONTRACTOR IS REQUIRED TO COMPLETE THE STRUCTURE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. MATERIAL, LABOR OR CONSTRUCTION OPERATIONS. NOT OTHERWISE SPECIFIED, ARE TO BE INCLUDED IN THE BID ITEM MOST APPROPRIATE TO THE WORK INVOLVED. THIS MAY INCLUDE COFFERDAMS, SHORING, EXCAVATIONS, BACKFILILING, REMOVAL OF ALL OR PART OF EXISTING STRUCTURES, PHASED CONSTRUCTION, INCIDENTAL MATERIALS, LABOR OR ANY OTHER ITEMS REQUIRED TO COMPLETE THE STRUCTURE.

CULVERTS WITH YIELDING FOUNDATIONS: DURING CONSTRUCTION OF THE YIELDING FOUNDATION, ANY POOR SOILS ENCOUNTERED SHOULD BE UNDERCUT TO A MINIMUM OF TWO (2) FEET BELOW THE BOTTOM SLAB OF THE CULVERT OR WINGWALL FOOTINGS, AS APPLICABLE, THE RESULTING EXCAVATED AREAS SHOULD THEN BE BACKFILLED WITH 'GRANULAR EMBANKMENT'. NON-ERODIBLE ONLY, MEETING THE MATERIAL REQUIREMENTS OF SECTION 805 IN THE CURRENT EDITION OF THE KENTUCKY STANDARD SPECIFICATIONS.

CULVERTS WITH UNYIELDING FOUNDATIONS: IF SOLID ROCK IS NOT ENCOUNTERED AT THE DESIGN FOOTING ELEVATION. SOIL MUST BE EXCAVATED AND BACKFILLED WITH 'GRANULAR EMBANKMENT'. NON-ERODIBLE ONLY. MEETING THE MATERIAL REQUIREMENTS OF SECTION 805 IN THE CURRENT EDITION OF THE KENTUCKY STANDARD SPECIFICATIONS WITH THE EXCEPTION THAT THE MAX. SIZ IS 4 INCHES.

RCBC EXTENSION TABULATION

Milepoint	Station	Skew	Size	Extension Length (FT)	Extension End	Remove Headwall (EACH)	Foundation Preparation (LS)	Concrete Class A (CU YD)	Steel Reinforcement (LB)	Clean Culvert (EACH)
10.911	576+11	0°	DBL 7.7'x8'	6	INLET/LT	1	1	27.27	5,830	1
12.716	671+40	45° LT	DBL 10'x4'	11	OUTLET/RT	1	1	36.33	10,870	1
14.015	740+00	0°	DBL 6'x4'	7	OUTLET/LT	1	1	13.70	3,463	1
14.425	761+64	0°	4'x3'	9	OUTLET/LT	1	1	7.40	2,231	1
14.566	769+10	0°	2.5'x2.5'	8	OUTLET/LT	1	1	5.42	1,725	1
TOTALS						5	5	90.12	24,119	5

ITEM	DESCRIPTION	UNIT	QUANTITY
2625	REMOVE HEADWALL	EACH	5
8003	FOUNDATION PREPARATION	LS	5
8100	CONCRETE - CLASS A	CU YD	90.12
8150	STEEL REINFORCEMENT	LB	24,119
20465SEC	CLEAN CULVERT	LS	5

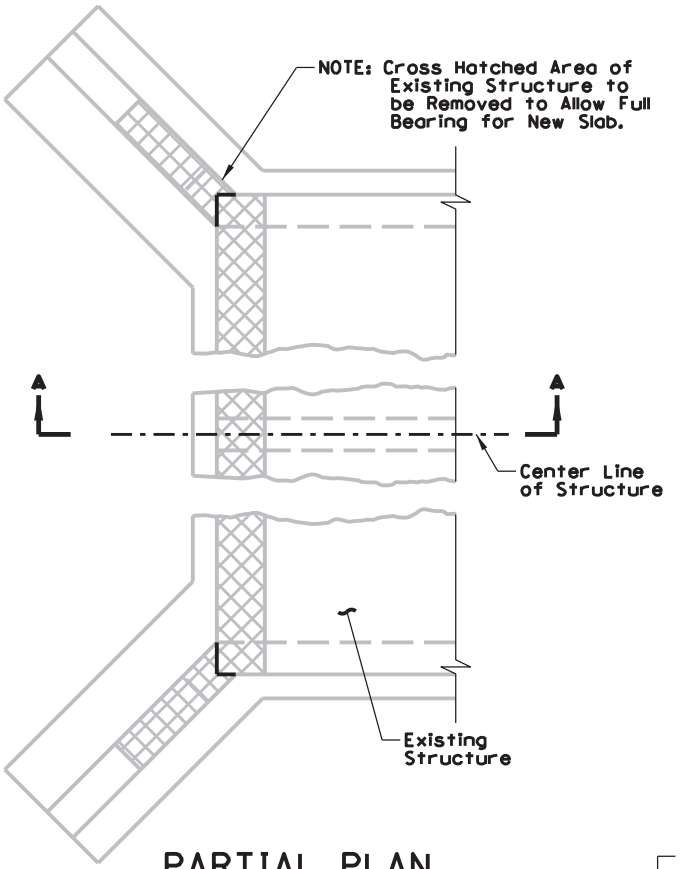
Note: 1) These Numbers are for Estimate Purposes Only. Final Location and Quantities will be Determined by the Engineer in the Field.
2) See Culvert Sheets.
3) Embankment to be used Backfilling Culvert Extensions and Adjusting Sideslopes Around Culvert and Wingwalls shall be Incidental.

(HSIP) KY 197
STA. 576+11 THRU 769+10
BOX CULVERT DETAILS

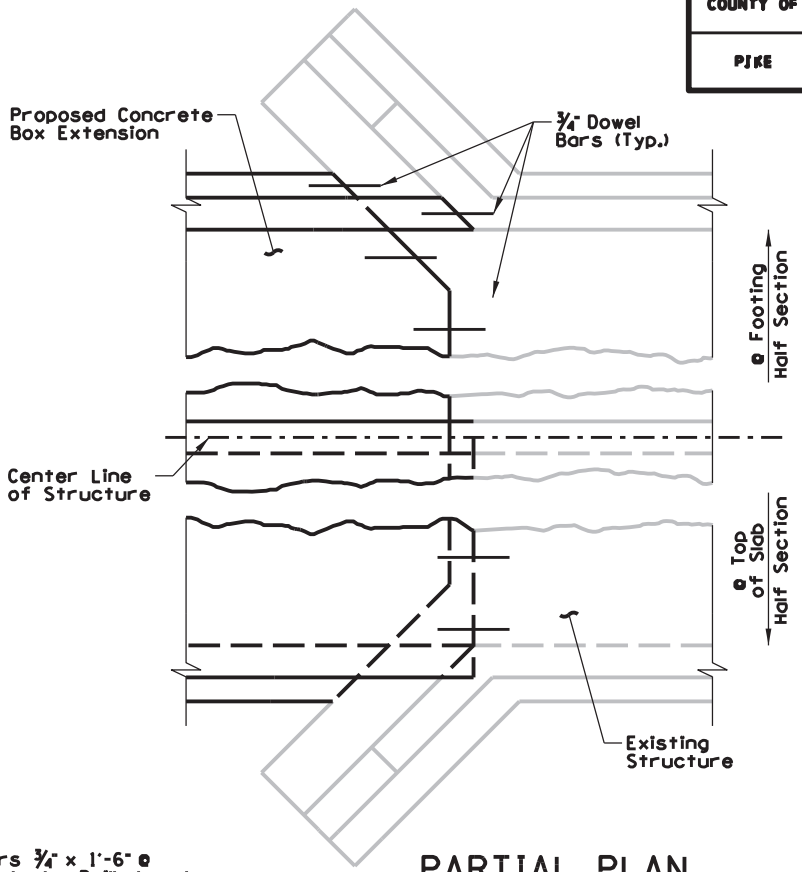
PIKE COUNTY
098SR23T001HSIP & FD05

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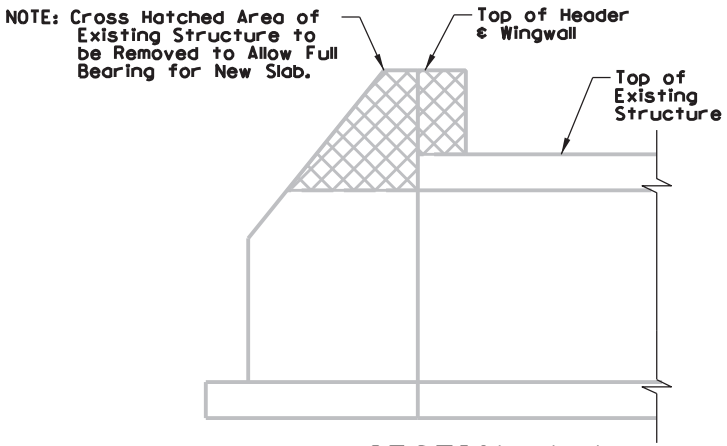
COUNTY OF	ITEM NO.
PIKE	12-9008.00



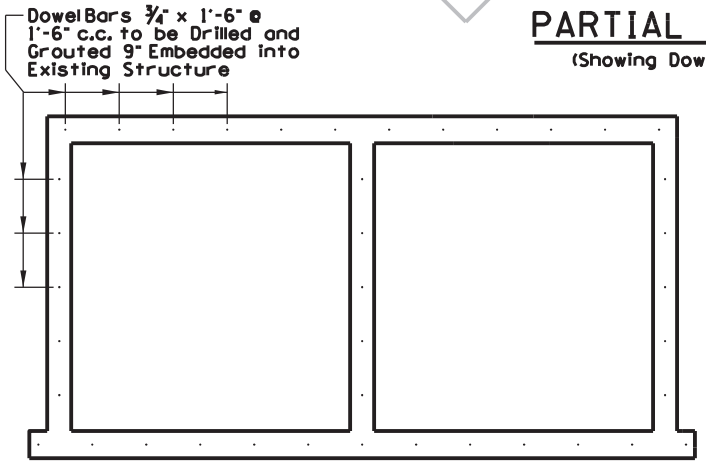
PARTIAL PLAN
(Showing Demolition)



PARTIAL PLAN
(Showing Doweling)



SECTION A-A
(Showing Demolition)



CROSS-SECTION
(Showing Doweling)

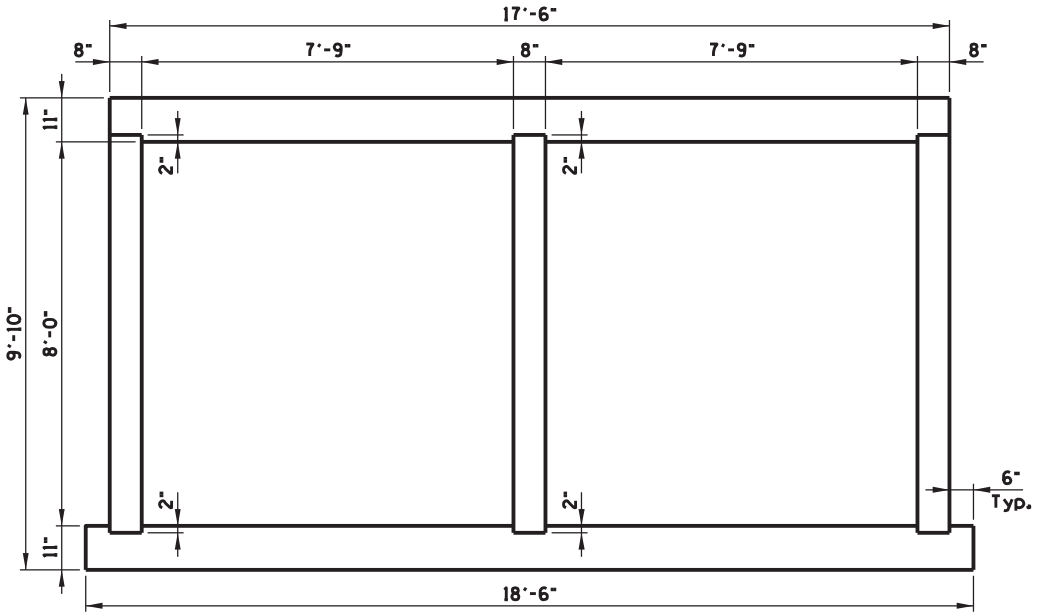
Sheet 1 of 6

(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

PIKE COUNTY
098SR23001HSIP &FD05

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PIKE	12-9008.00

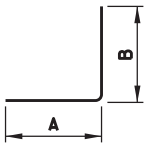


TYPICAL SECTION
(Showing Dimensions)

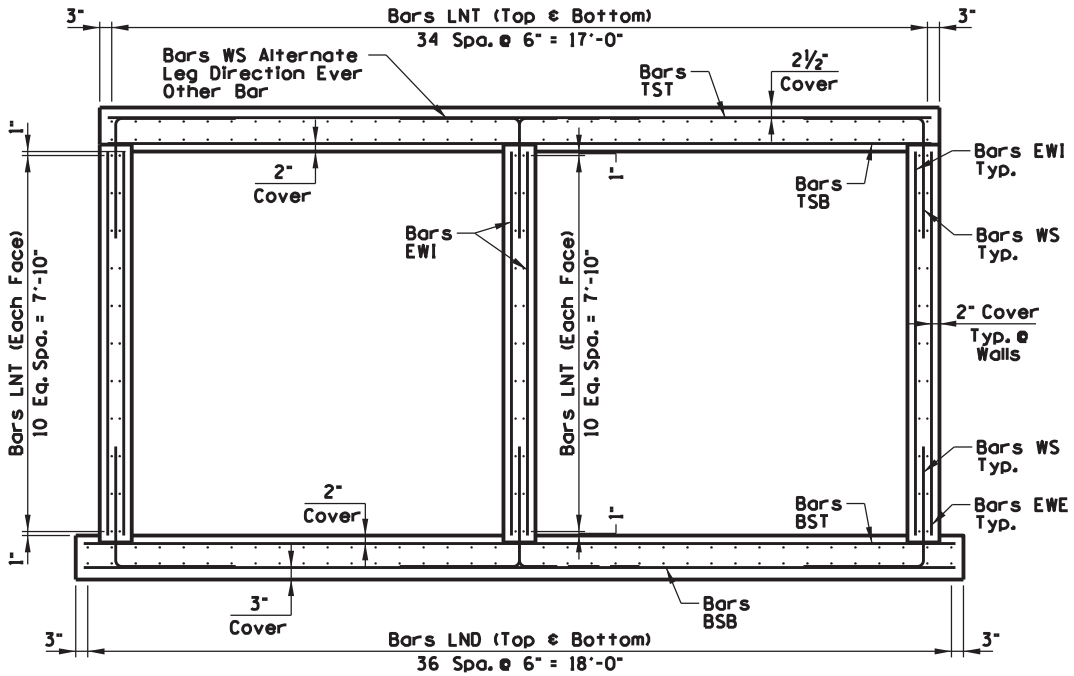
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
TST	STR	20	7	17'-2"	TOP SLAB				
TSB	STR	6	6	17'-2"	TOP SLAB				
LNT	STR	136	4	5'-9"	TOP SLAB/WALLS				
WS	5	36	8	5'-0"	ALL MEMBERS	2'-6"	2'-6"		
EWE	STR	12	4	8'-0"	WALLS				
EWI	STR	24	5	8'-0"	WALLS				
BST	STR	14	4	19'-2"	BOTTOM SLAB				
BSB	STR	14	8	19'-2"	BOTTOM SLAB				
LND	STR	74	5	6'-9"	BOTTOM SLAB				

Note: 40 - Dowel Bars ¾" x 1'-6" Joining Existing Structure and New Structure.



TYPE 5



TYPICAL SECTION
(Showing Reinforcement)

Special Note: Field Cut Bars in Bottom Slab as Needed to Match up to Existing Structure.

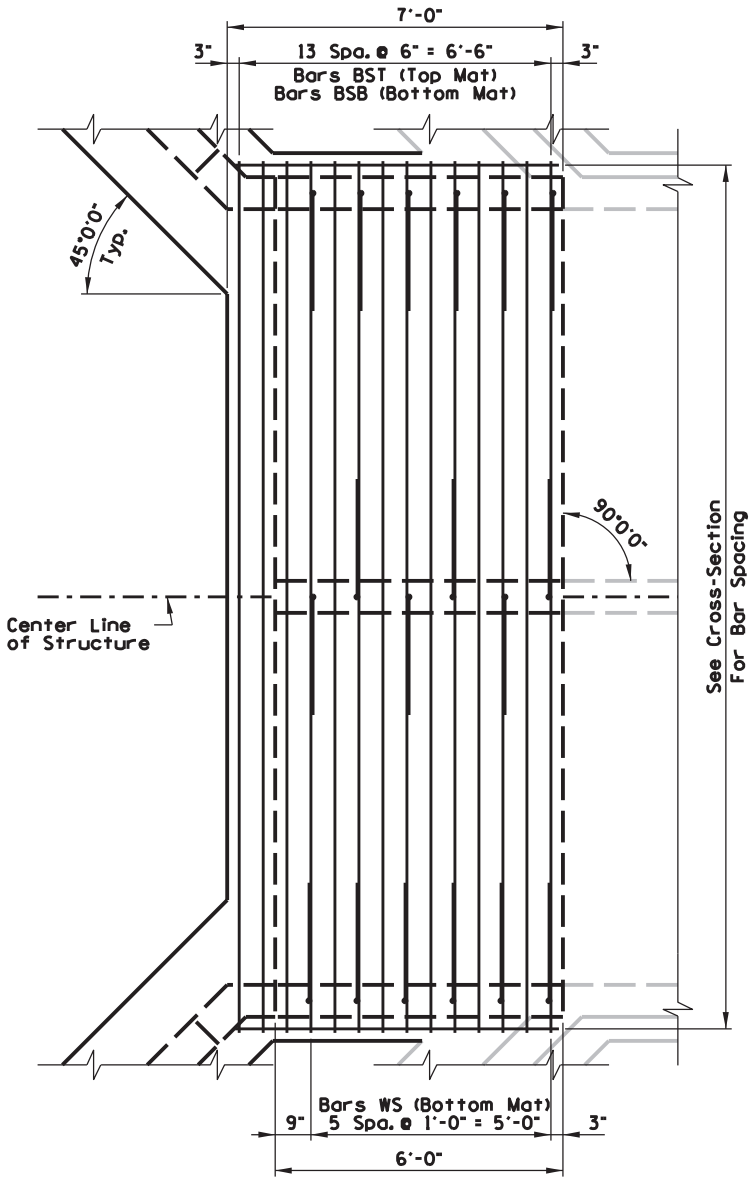
(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

Sheet 2 of 6

PIKE COUNTY
098-SR23-001-HSIP & FD05

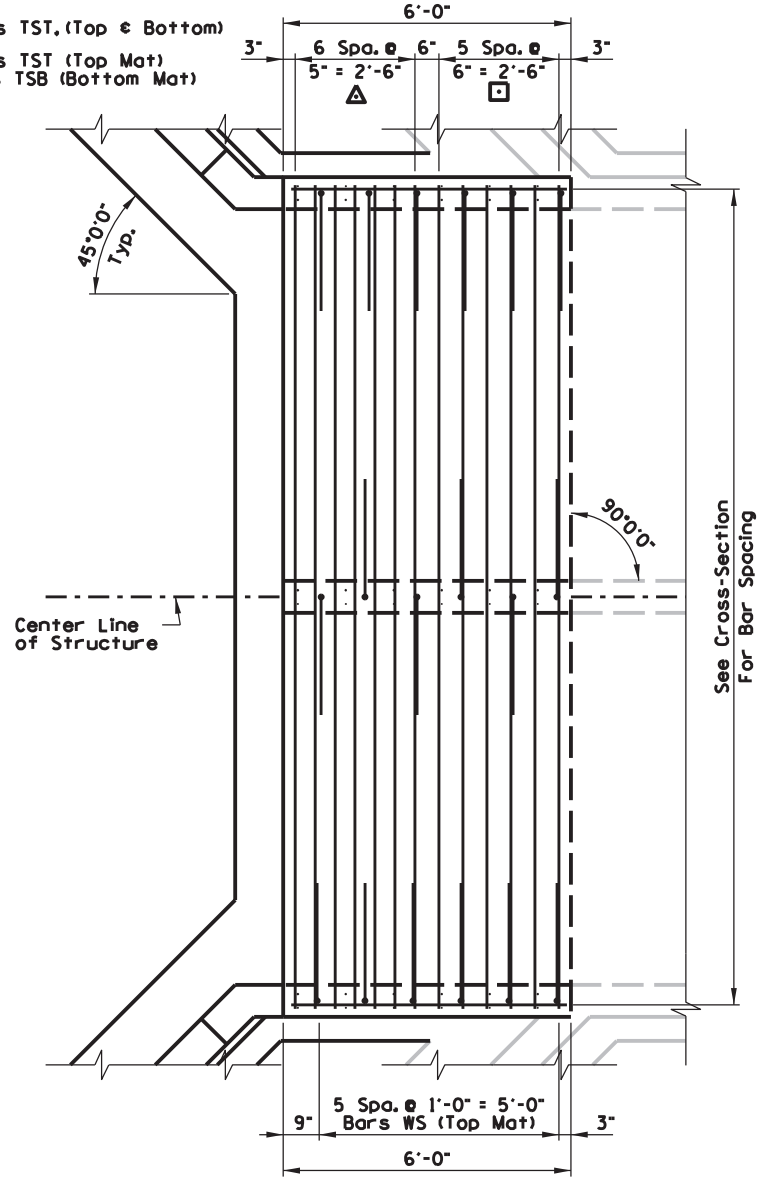
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PLAN VIEW
(Bottom Mat of Steel)

△ Denotes: Bars TST, (Top & Bottom)
⊡ Denotes: Bars TST (Top Mat)
Bars TSB (Bottom Mat)



PLAN VIEW
(Top Mat of Steel)

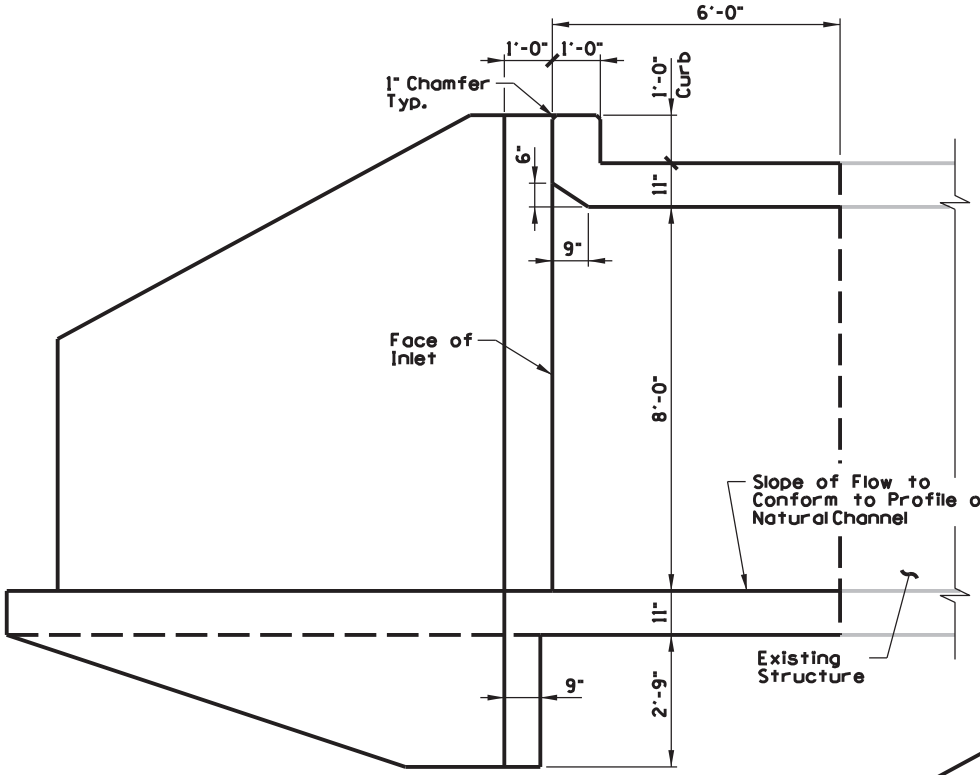
(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

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PIKE COUNTY
098SR23001HSIP &FD05

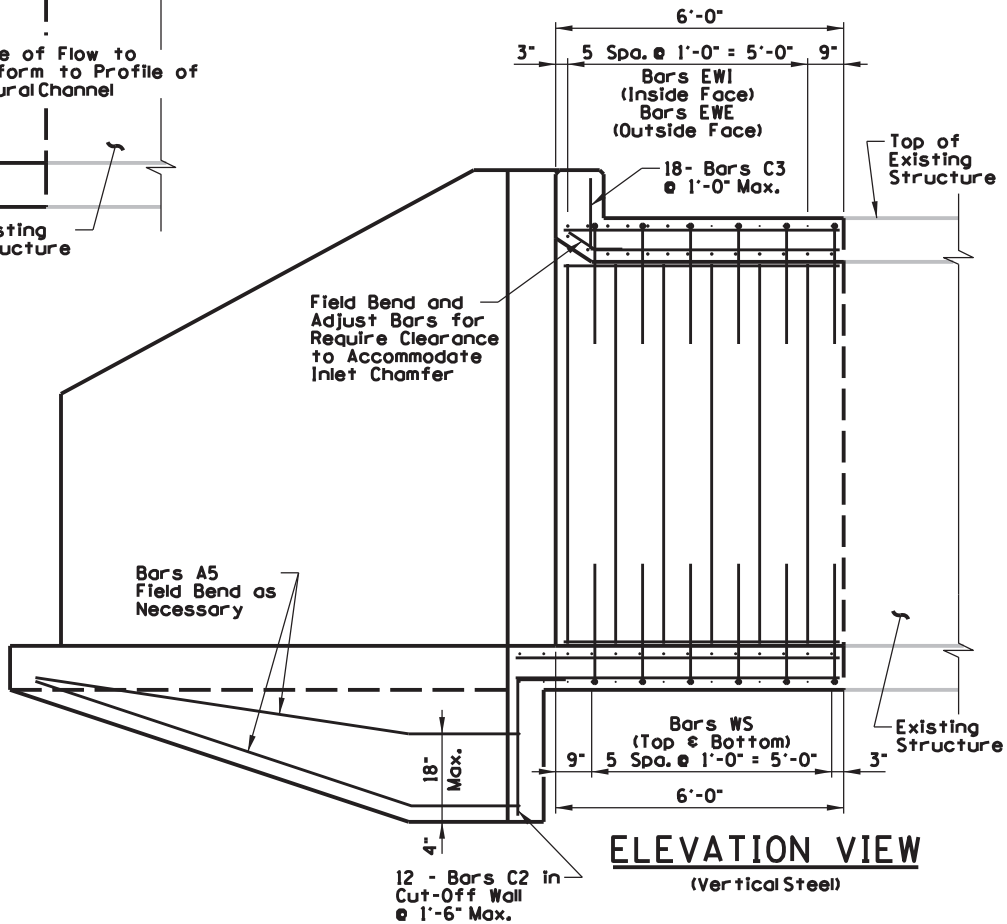
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ELEVATION VIEW

(Showing Structure Dimensions)



ELEVATION VIEW

(Vertical Steel)

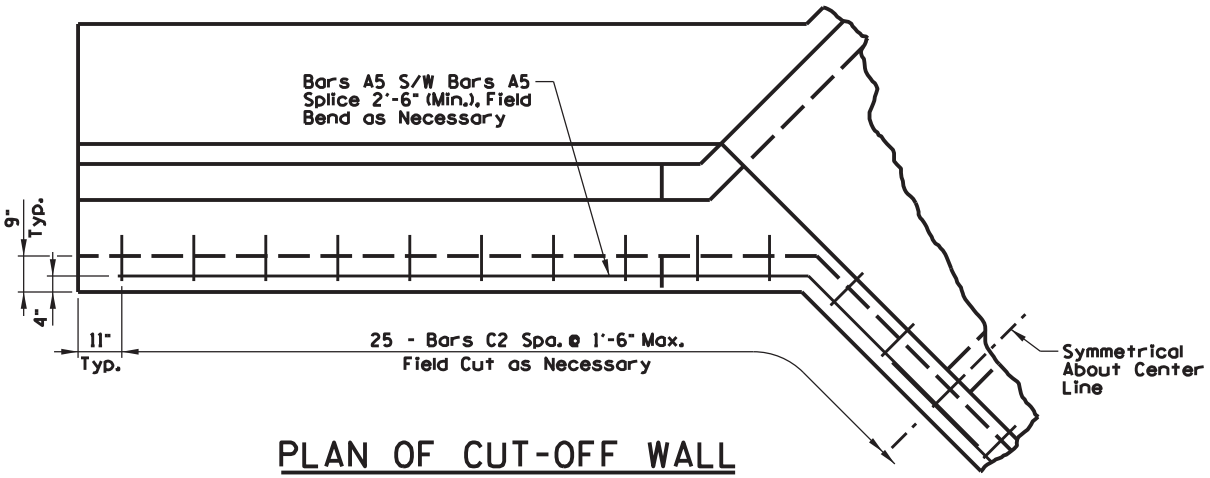
(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

Sheet 4 of 6

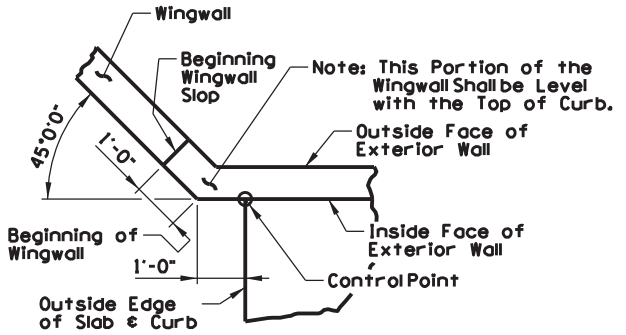
PIKE COUNTY
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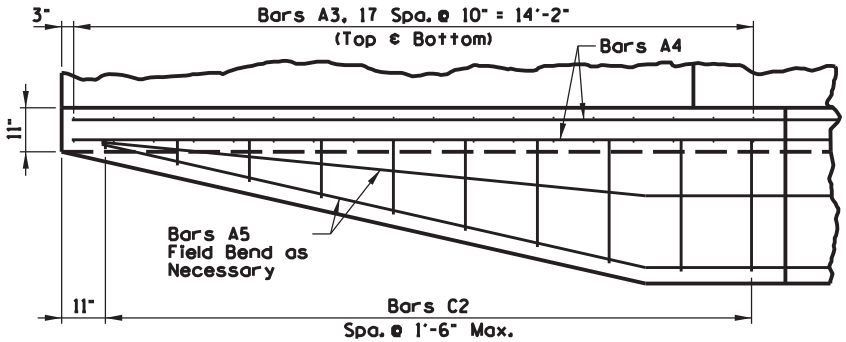
COUNTY OF	ITEM NO.
PIKE	12-9008.00



PLAN OF CUT-OFF WALL



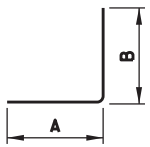
CORNER DETAIL



ELEVATION OF CUT-OFF WALL FOOTING

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
A1	STR	44	4	15'-0"	WINGWALLS				
A2	STR	34	4	10'-6"	WINGWALLS				
A3	STR	72	5	5'-3"	WING FOOTING				
A4	STR	28	4	18'-0"	WING FOOTING				
A5	STR	4	4	19'-8"	CUT OFF WALL				
A6	STR	34	4	7'-2"	WINGWALLS				
C1	5	60	5	7'-9"	WINGWALLS	2'-9"	5'-0"		
C2	5	25	4	3'-8½"	CUT OFF WALL	1'-0"	2'-8½"		
C3	5	18	4	2'-2"	CURB	8"	1'-6"		



TYPE 5

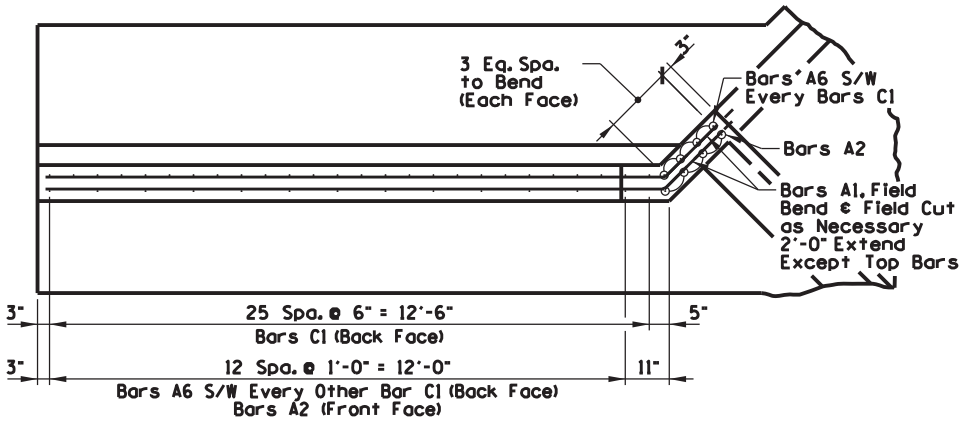
(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

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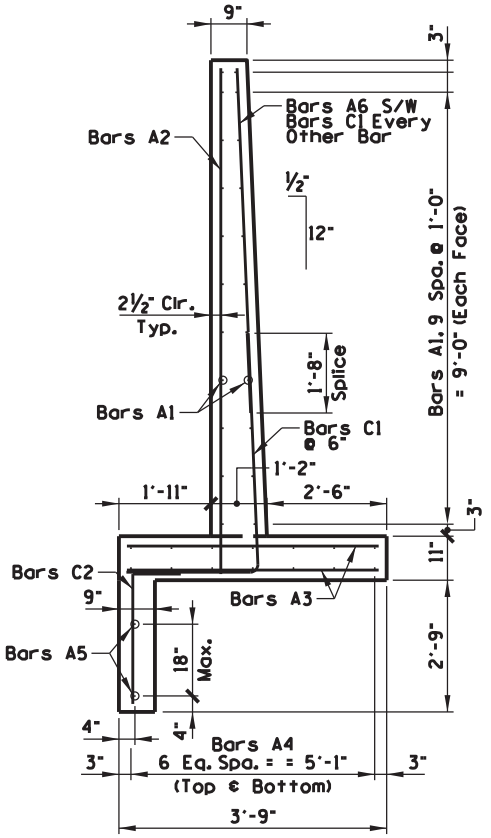
PIKE COUNTY
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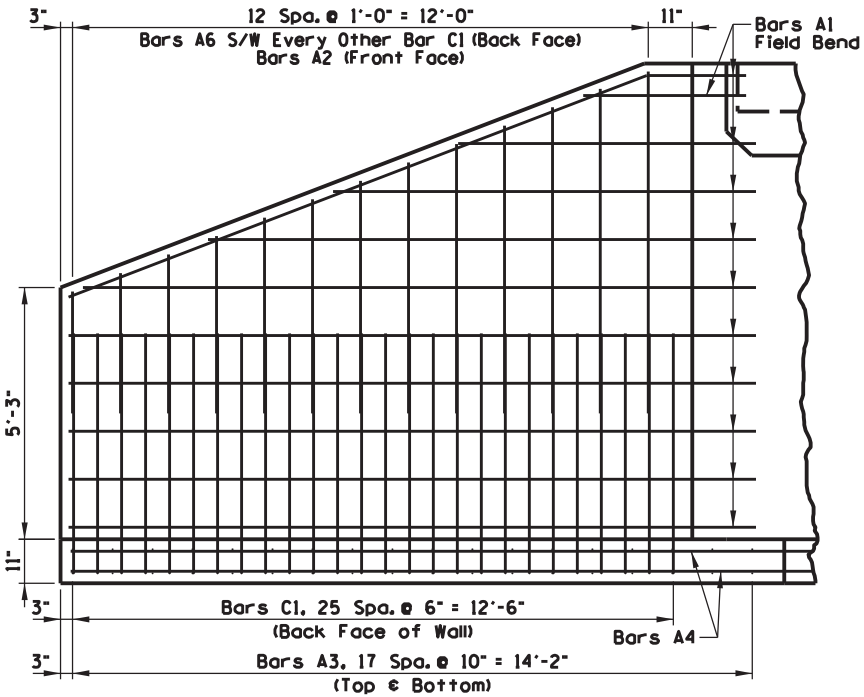
COUNTY OF	ITEM NO.
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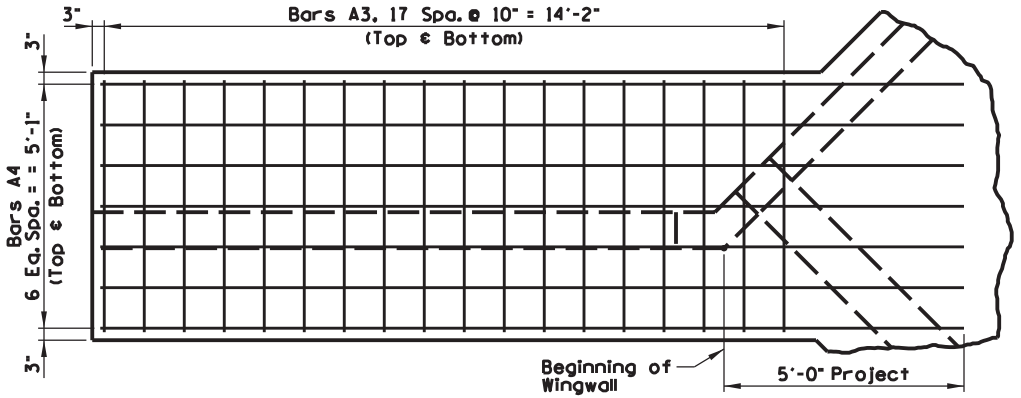
PLAN OF WINGWALL



SECTION A-A



ELEVATION OF WINGWALL



PLAN OF WING FOOTING

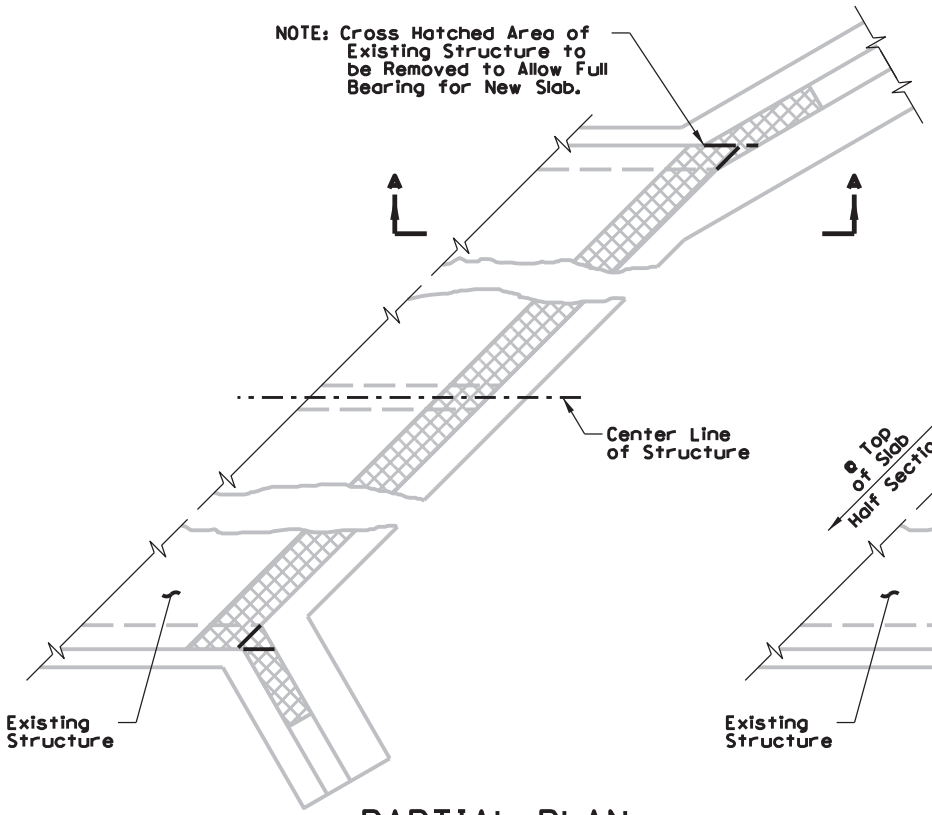
(HSIP) KY 197
STA. 576+11 LT
BOX CULVERT DETAILS

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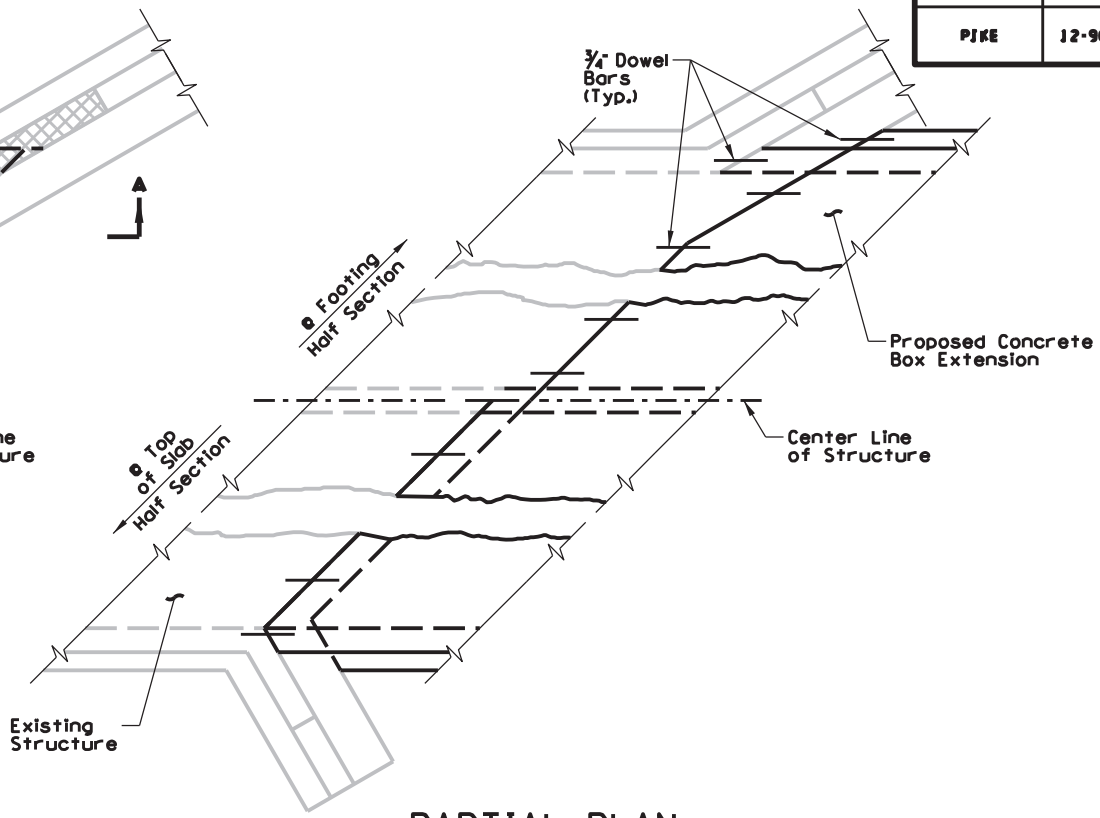
PIKE COUNTY
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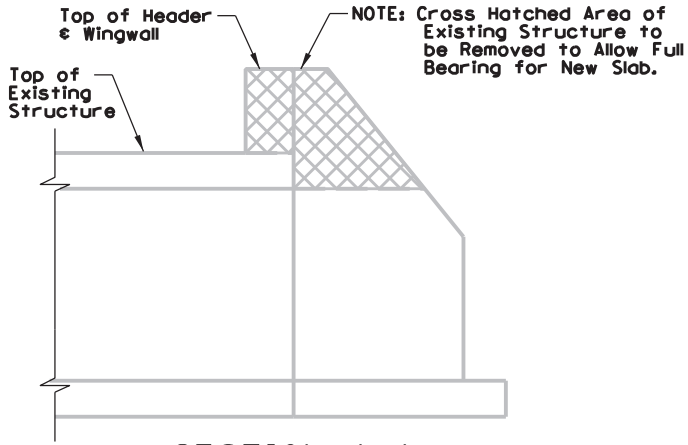
COUNTY OF	ITEM NO.
PIKE	12-9008.00



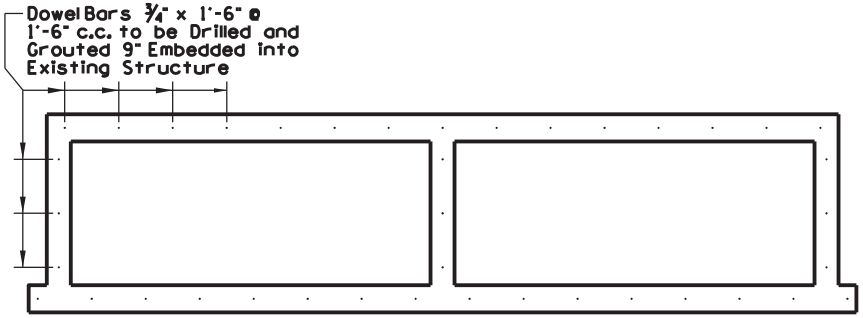
PARTIAL PLAN
(Showing Demolition)



PARTIAL PLAN
(Showing Doweling)



SECTION A-A
(Showing Demolition)



CROSS-SECTION
(Showing Doweling)

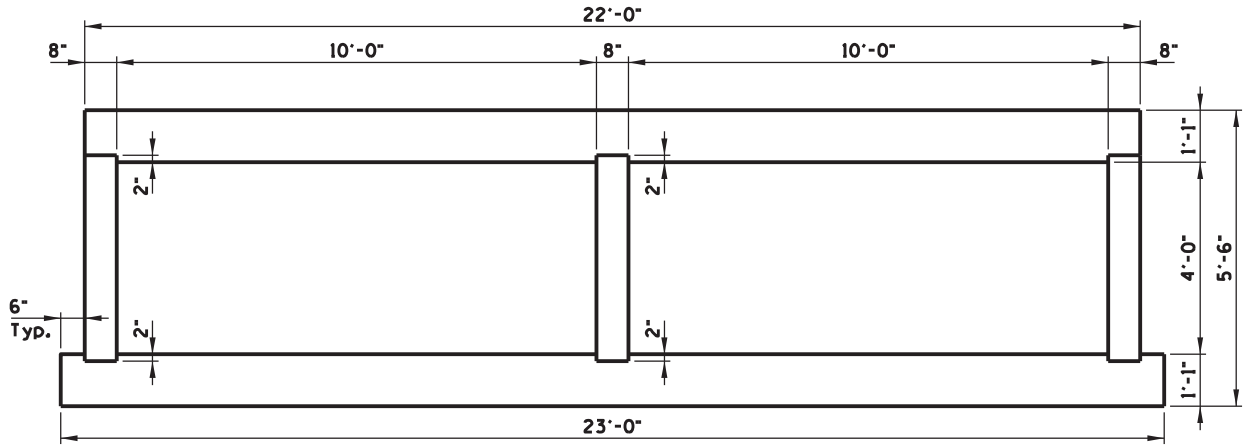
(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

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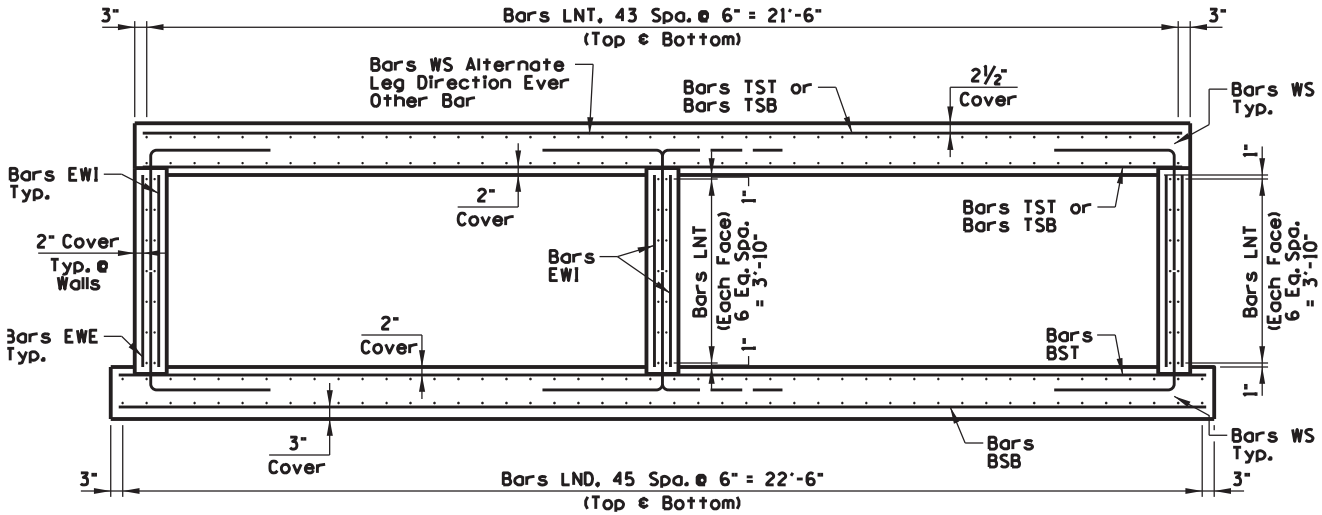
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TYPICAL SECTION
(Showing Dimensions)



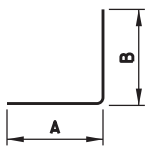
TYPICAL SECTION
(Showing Reinforcement)

Special Note: Field Cut Bars in Bottom Slab as Needed to Match up to Existing Structure.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
TST	STR	28	7	30'-7¾"	TOP SLAB				
TSB	STR	100	6	10'-8"	TOP SLAB				
LNT	STR	130	4	10'-8"	TOP SLAB/WALLS				
WS	5	66	8	5'-0"	ALL MEMBERS	2'-6"	2'-6"		
EWE	STR	22	4	4'-0"	WALLS				
EWI	STR	44	5	4'-0"	WALLS				
BST	STR	56	6	12'-1"	BOTTOM SLAB				
BSB	STR	56	8	12'-1"	BOTTOM SLAB				
LND	STR	92	5	12'-1"	BOTTOM SLAB				
LND	STR	24	5	7'-4"	BOTTOM SLAB				

Note: 40 - Dowel Bars ¾" x 1'-6" Joining Existing Structure and New Structure.



TYPE 5

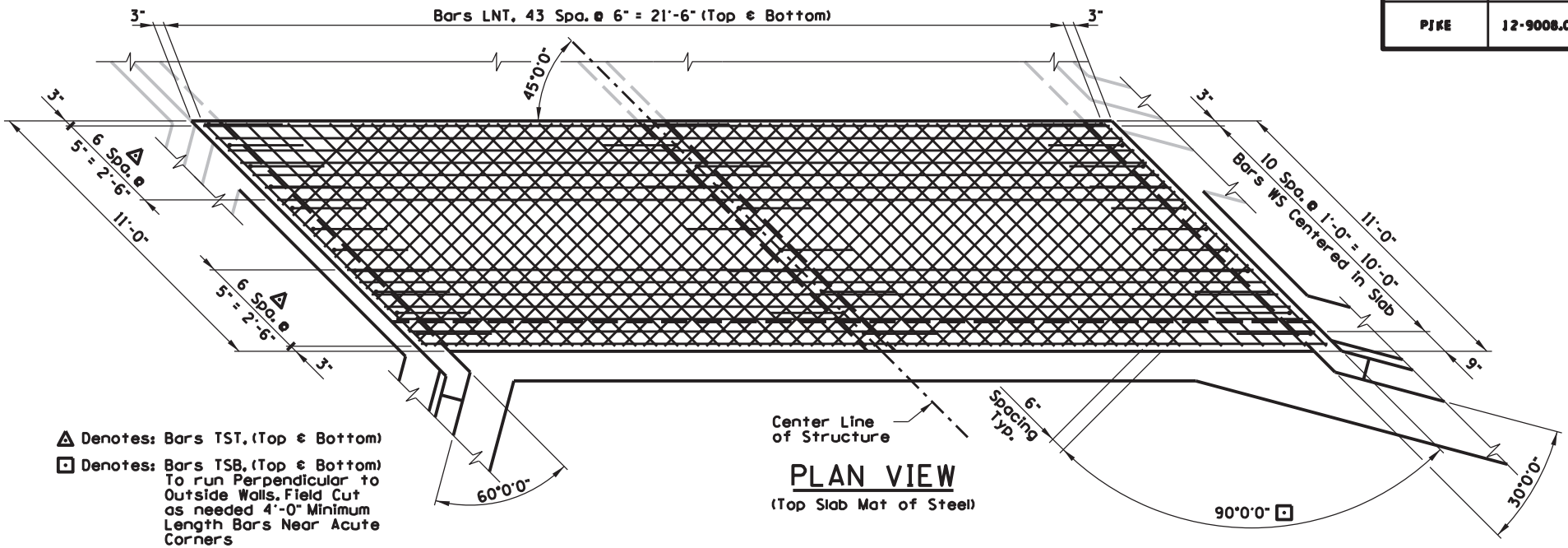
(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

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PIKE COUNTY
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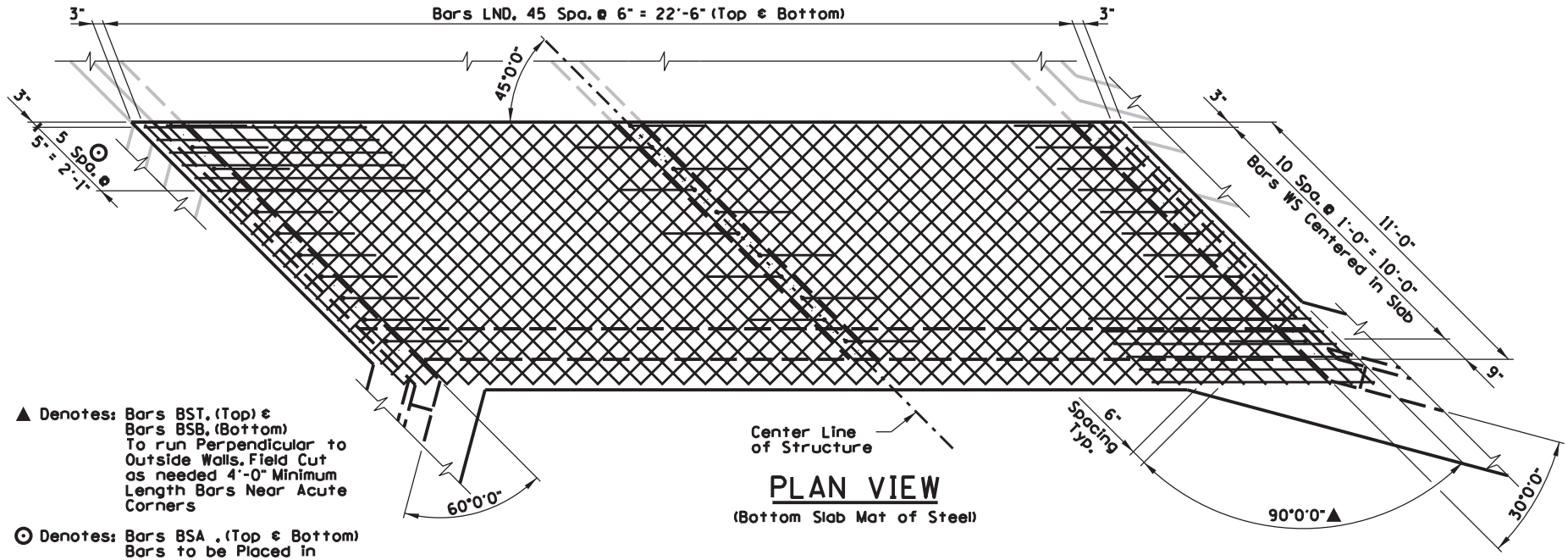
COUNTY OF	ITEM NO.
PIKE	12-9008.00



△ Denotes: Bars TST, (Top & Bottom)

⊡ Denotes: Bars TSB, (Top & Bottom) To run Perpendicular to Outside Walls. Field Cut as needed 4'-0" Minimum Length Bars Near Acute Corners

PLAN VIEW
(Top Slab Mat of Steel)



▲ Denotes: Bars BST, (Top) & Bars BSB, (Bottom) To run Perpendicular to Outside Walls. Field Cut as needed 4'-0" Minimum Length Bars Near Acute Corners

⊙ Denotes: Bars BSA , (Top & Bottom) Bars to be Placed in Acute Corners

PLAN VIEW
(Bottom Slab Mat of Steel)

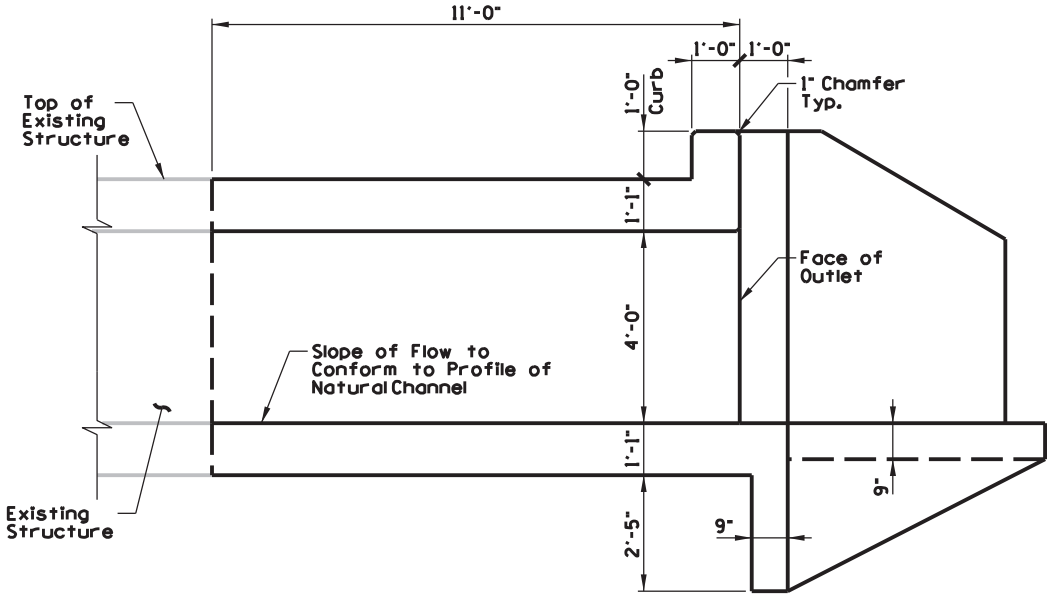
(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

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PIKE COUNTY
09850123001 HSIP & FD05

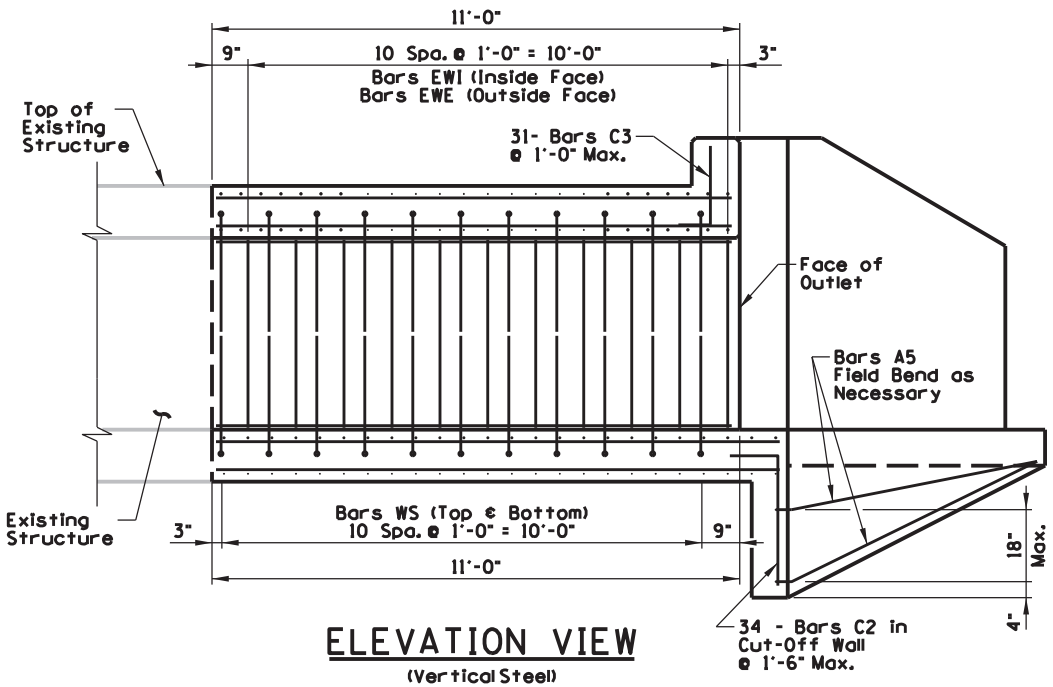
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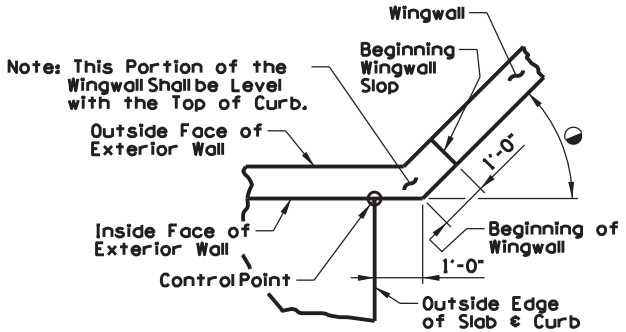
ELEVATION VIEW

(Showing Structure Dimensions)



ELEVATION VIEW

(Vertical Steel)



CORNER DETAIL

◑ Denotes: 30°0'0" on Long Wall
60°0'0" on Short Wall

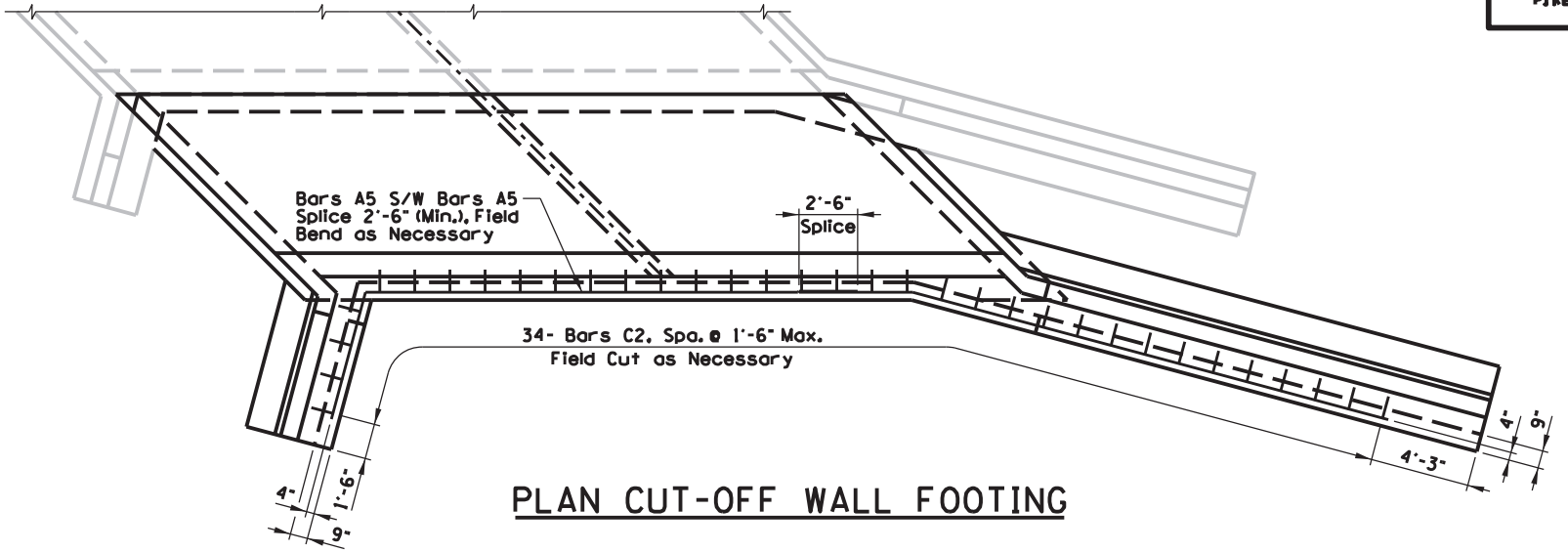
(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

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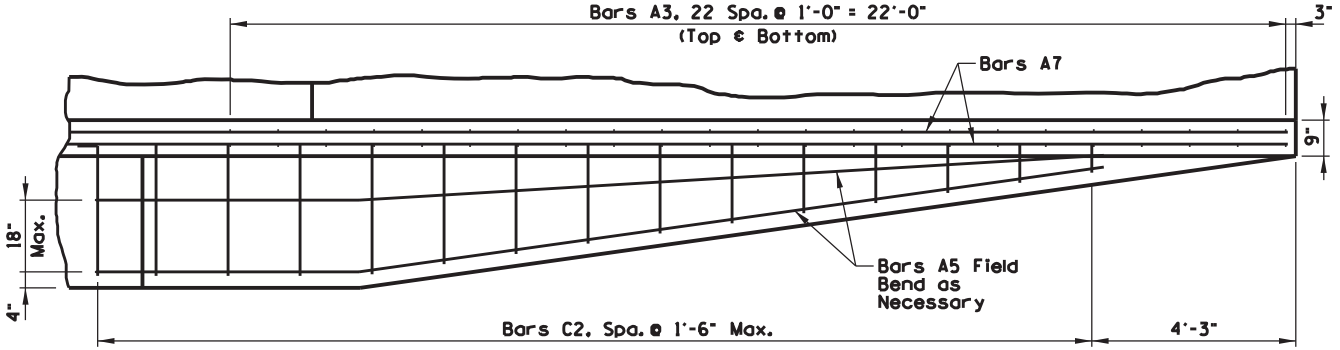
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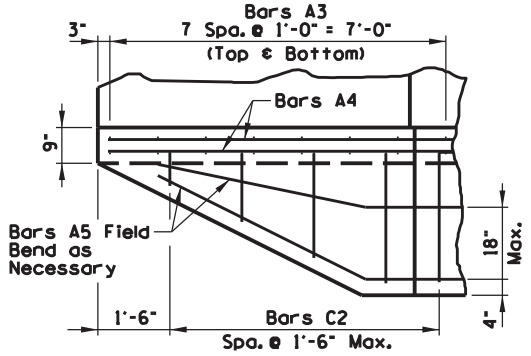
COUNTY OF	ITEM NO.
PIKE	12-9008.00



PLAN CUT-OFF WALL FOOTING



ELEVATION OF CUT-OFF WALL FOOTING



ELEVATION OF CUT-OFF WALL FOOTING

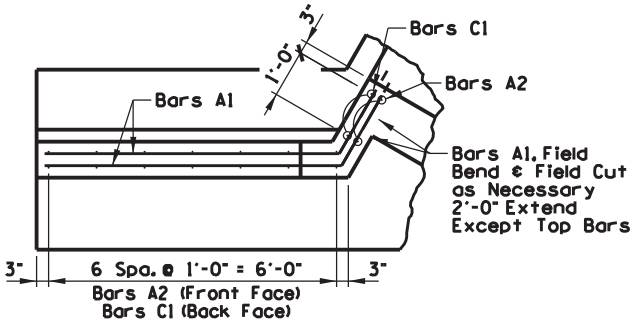
Sheet 5 of 7

(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

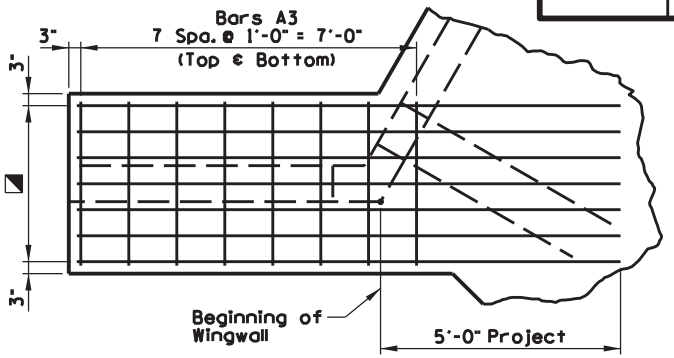
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PIKE	12-9008.00

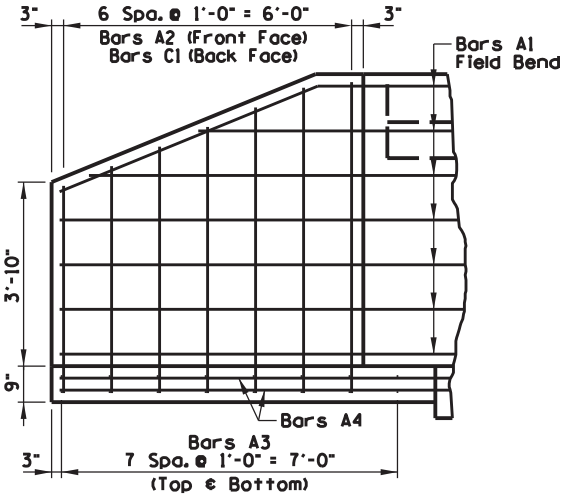


PLAN OF WINGWALL

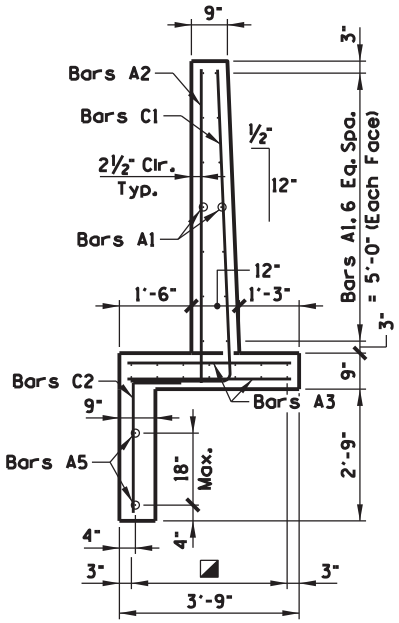


PLAN OF WING FOOTING

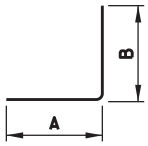
◪ Denote: Bars A4, 6 Eq. Spa. = 3'-3" (Top & Bottom)



ELEVATION OF WINGWALL



SECTION A-A



TYPE 5

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
A1	STR	14	4	8'-8"	WINGWALLS				
A2	STR	28	4	6'-6"	WINGWALLS				
A3	STR	62	4	3'-5"	Wing Footing				
A4	STR	14	4	11'-4"	Wing Footing				
A5	STR	4	4	26'-8"	CUT OFF WALL				
A6	STR	14	4	22'-6"	WINGWALLS				
A7	STR	14	4	25'-4"	Wing Footing				
C1	5	28	4	8'-3"	WINGWALLS	2'-1"	6'-6"		
C2	5	34	4	3'-8 1/2"	CUT OFF WALL	1'-0"	2'-8 1/2"		
C3	5	31	4	2'-0"	CURB	8"	1'-4"		

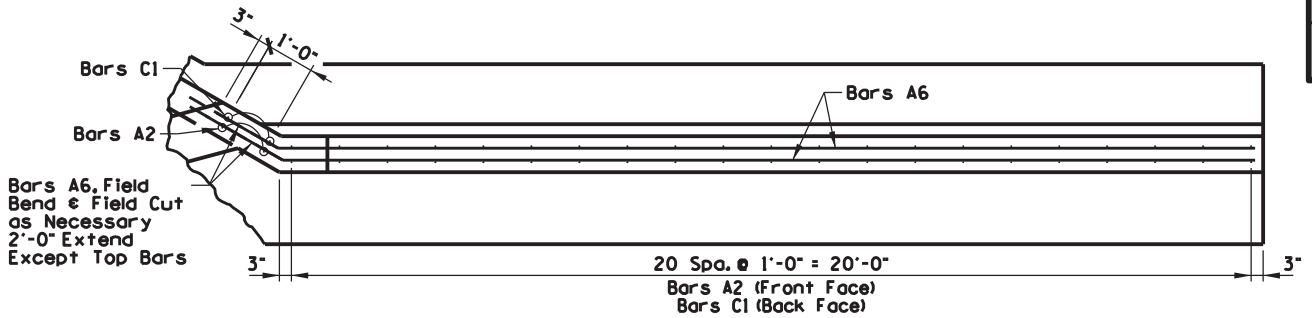
Sheet 6 of 7

(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

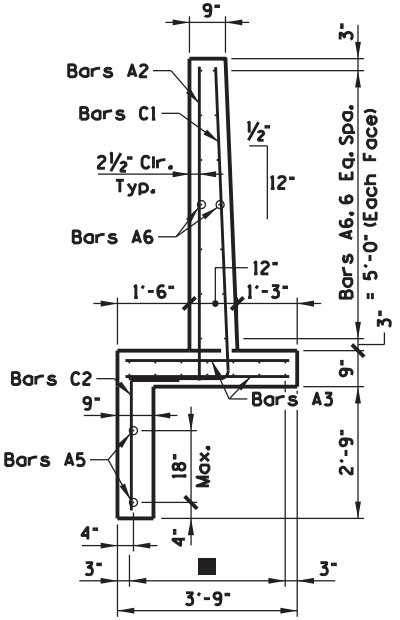
PIKE COUNTY
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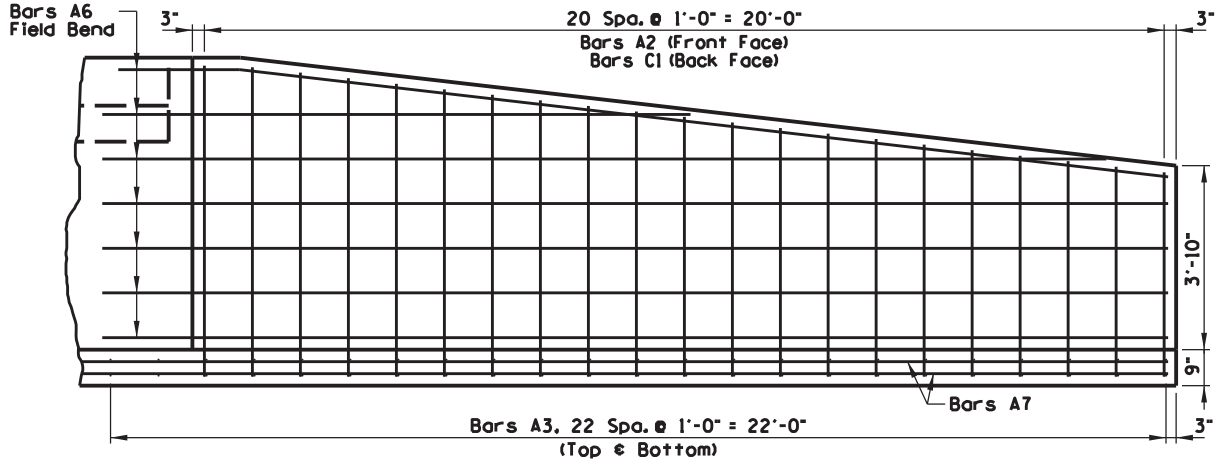
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PIKE	12-9008.00



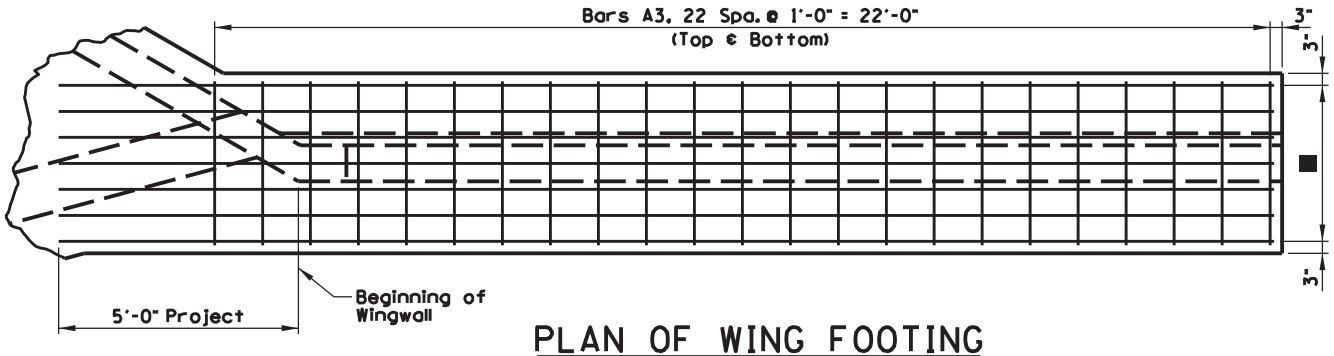
PLAN OF WINGWALL



SECTION A-A



ELEVATION OF WINGWALL



PLAN OF WING FOOTING

■ Denote: Bars A7, 6 Eq. Spa. = 3'-3" (Top & Bottom)

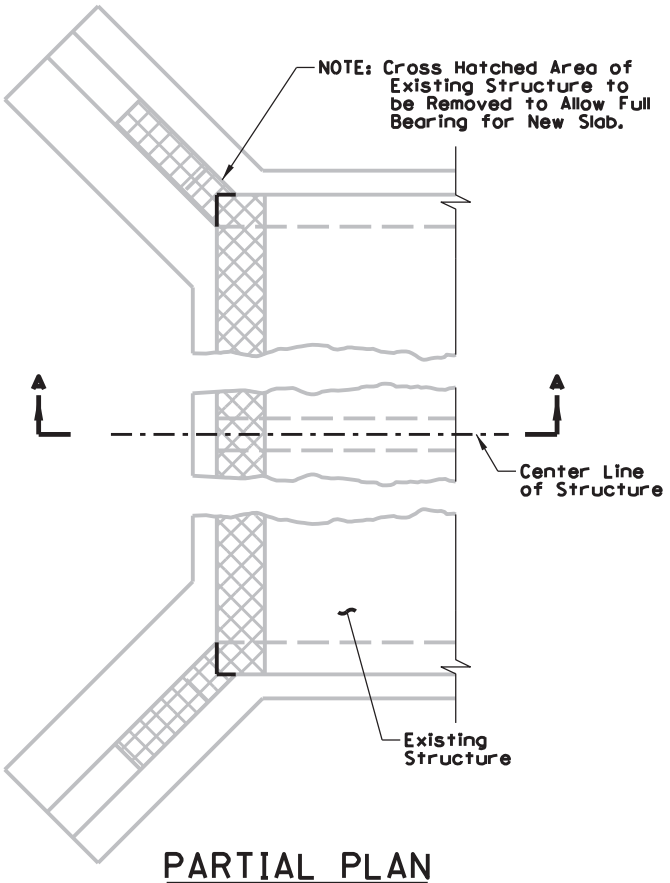
(HSIP) KY 197
STA. 671+40 RT
BOX CULVERT DETAILS

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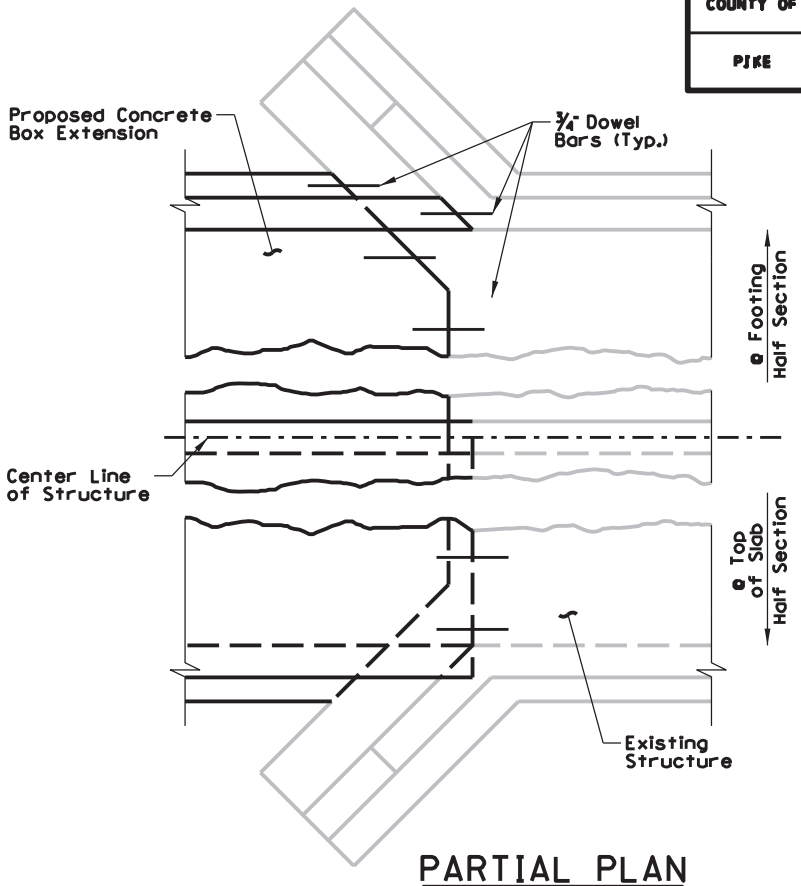
PIKE COUNTY
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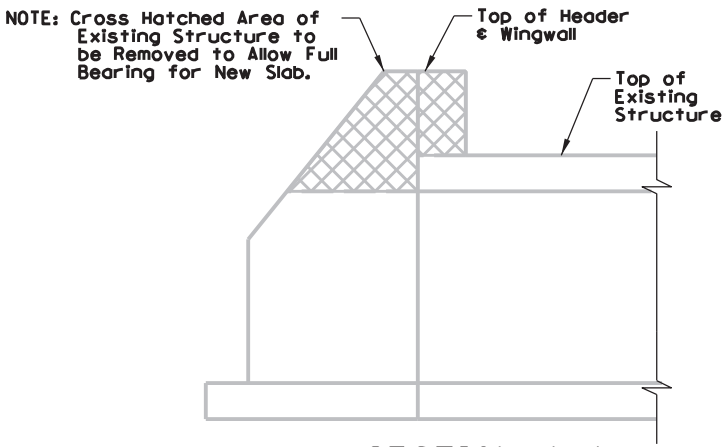
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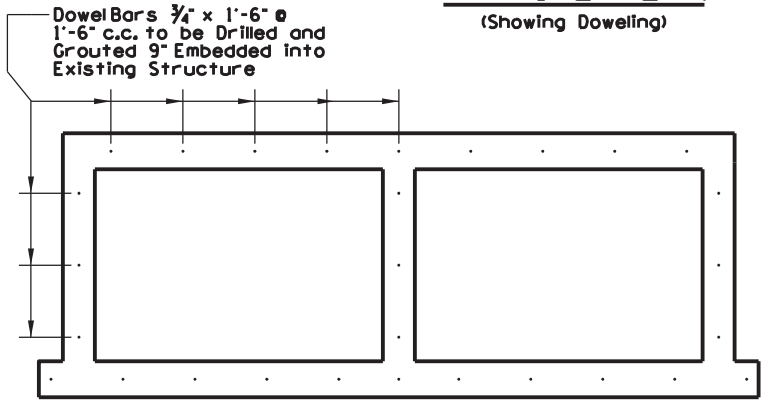
PARTIAL PLAN
(Showing Demolition)



PARTIAL PLAN
(Showing Doweling)



SECTION A-A
(Showing Demolition)



CROSS-SECTION
(Showing Doweling)

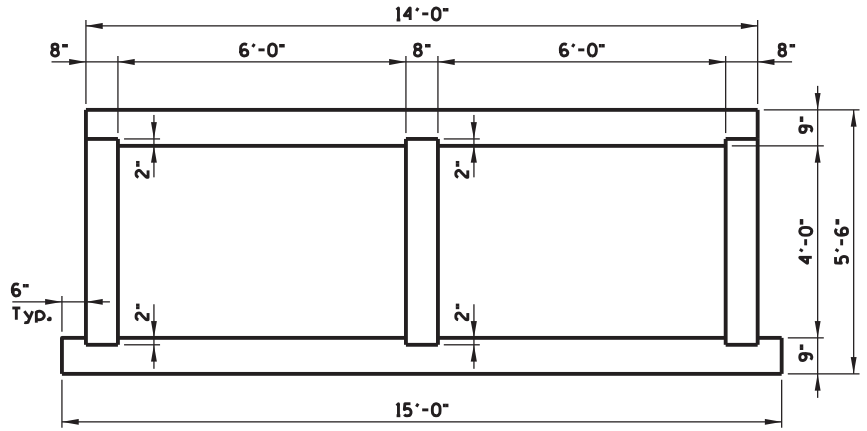
(HSIP) KY 197
STA. 740+00 LT
BOX CULVERT DETAILS

Sheet 1 of 5

PIKE COUNTY
098SR2301001HSIP & FD05

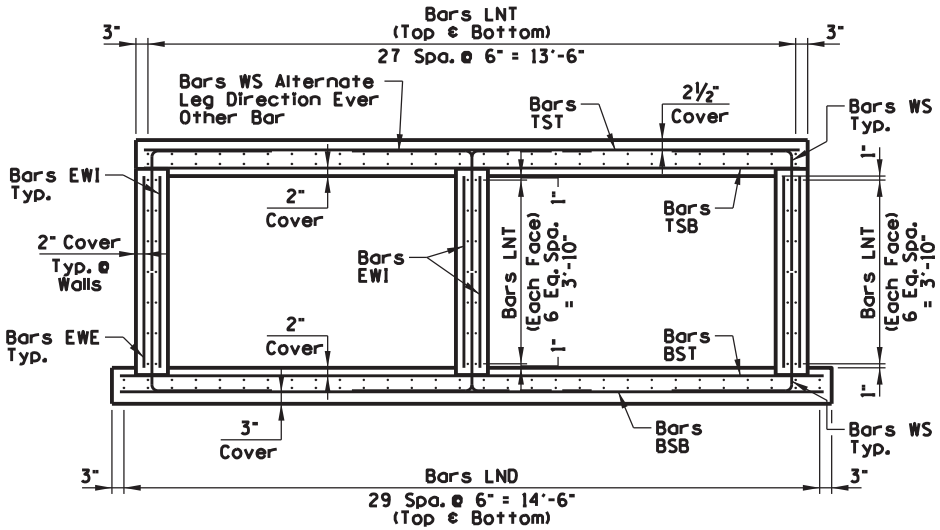
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TYPICAL SECTION

(Showing Dimensions)



TYPICAL SECTION

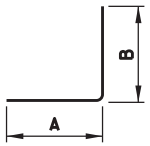
(Showing Reinforcement)

Special Note: Field Cut Bars in Bottom Slab as Needed to Match up to Existing Structure.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
TST	STR	8	4	13'-8"	TOP SLAB				
TSB	STR	22	7	13'-8"	TOP SLAB				
LNT	STR	70	4	6'-9"	TOP SLAB/WALLS				
WS	5	42	8	5'-0"	ALL MEMBERS	2'-6"	2'-6"		
EWE	STR	14	4	4'-0"	WALLS				
EWI	STR	28	5	4'-0"	WALLS				
BST	STR	16	6	14'-8"	BOTTOM SLAB				
BSB	STR	16	4	14'-8"	BOTTOM SLAB				
LND	STR	60	5	7'-9"	BOTTOM SLAB				

Note: 29 - Dowel Bars ¾" x 1'-6" Joining Existing Structure and New Structure.



TYPE 5

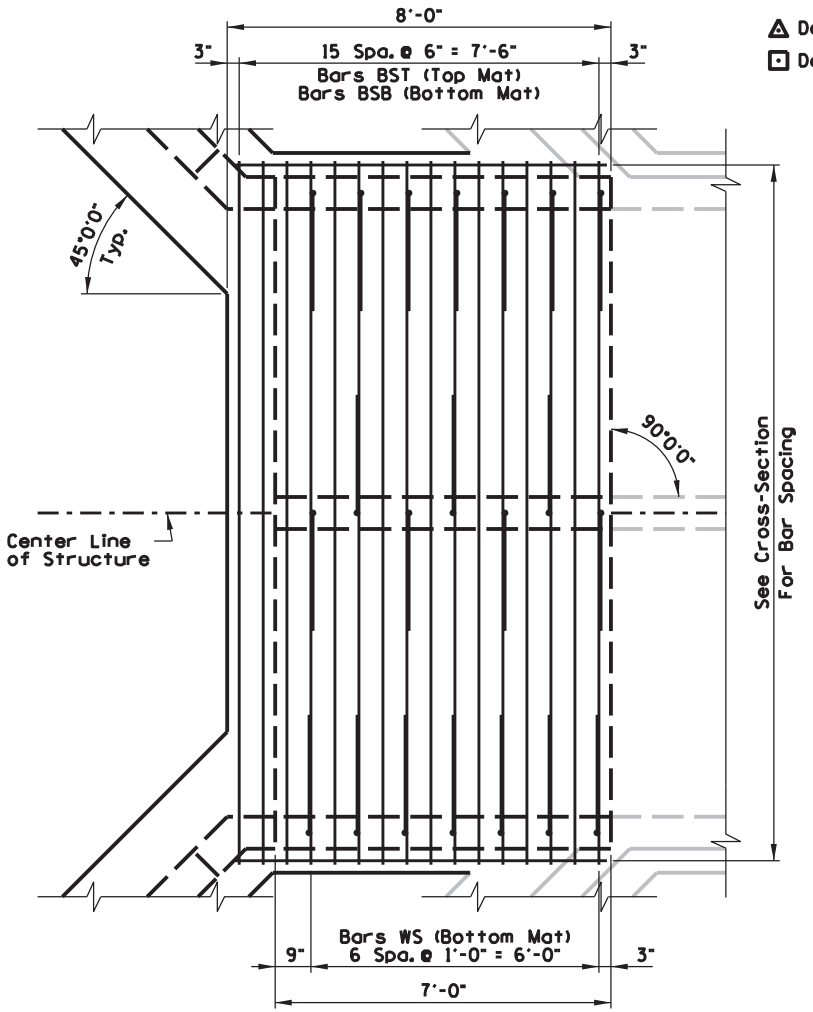
(HSIP) KY 197
STA. 740+00 LT
BOX CULVERT DETAILS

Sheet 2 of 5

PIKE COUNTY
098SR1231001HSIP & FD05

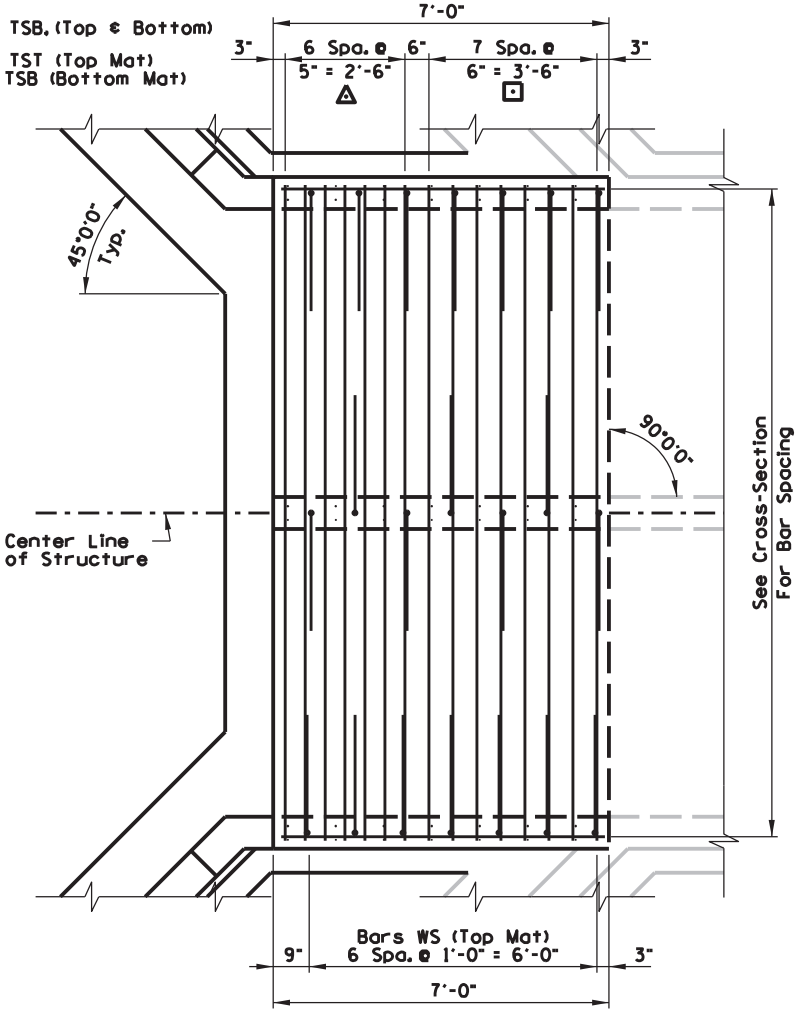
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PIKE	12-9008.00



PLAN VIEW
(Bottom Mat of Steel)

△ Denotes: Bars TSB. (Top & Bottom)
⊡ Denotes: Bars TST (Top Mat)
Bars TSB (Bottom Mat)



PLAN VIEW
(Top Mat of Steel)

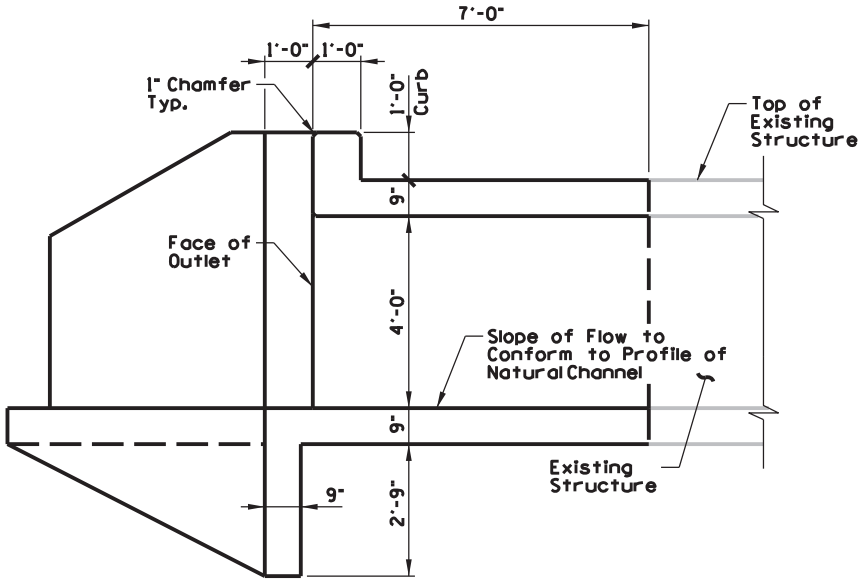
(HSIP) KY 197
STA. 740+00 LT
BOX CULVERT DETAILS

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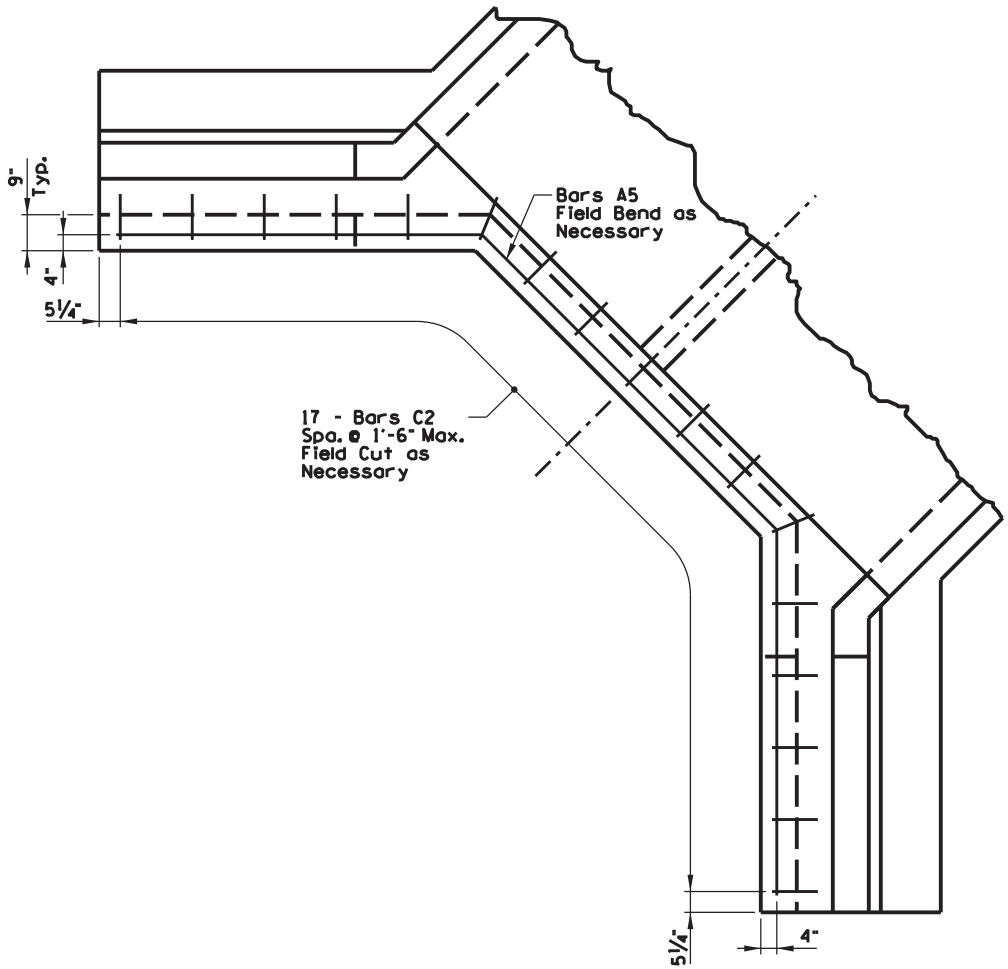
PIKE COUNTY
098SR23001HSIP &FD05

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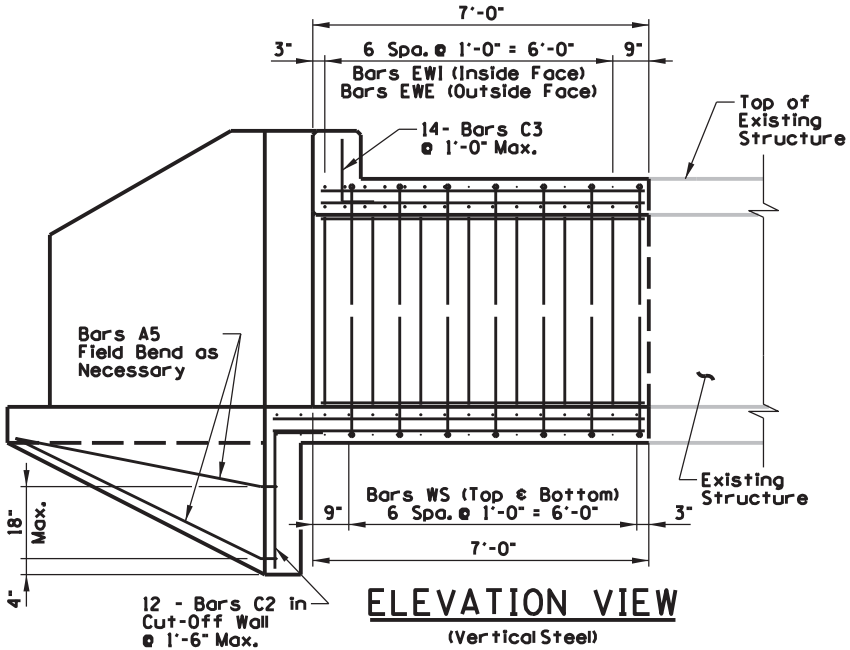
COUNTY OF	ITEM NO.
PIKE	12-9008.00



ELEVATION VIEW
(Showing Structure Dimensions)



PLAN OF CUT-OFF WALL



ELEVATION VIEW
(Vertical Steel)

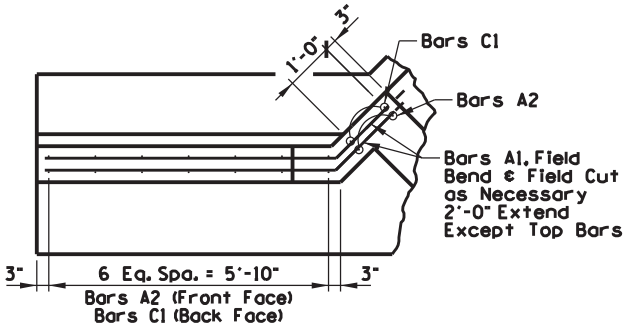
(HSIP) KY 197
STA. 740+00 LT
BOX CULVERT DETAILS

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PIKE COUNTY
09851231001 HSIP & FD05

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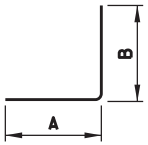
COUNTY OF	ITEM NO.
PIKE	12-9008.00



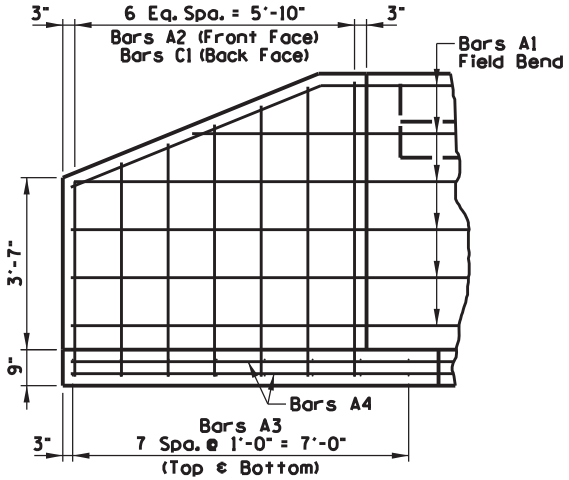
PLAN OF WINGWALL

BILL OF REINFORCEMENT

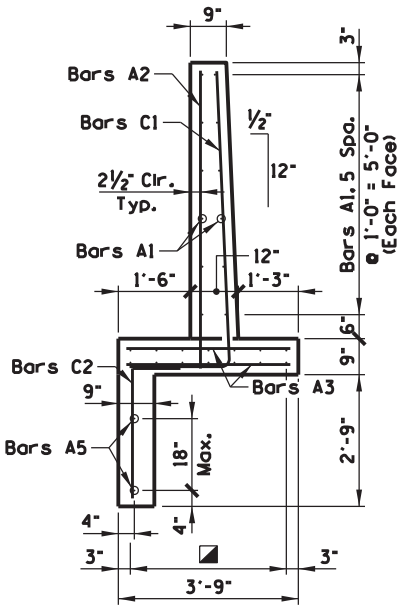
MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
A1	STR	24	4	8'-1"	WINGWALLS				
A2	STR	18	4	6'-2"	WINGWALLS				
A3	STR	32	4	3'-5"	Wing Footing				
A4	STR	28	4	11'-2"	Wing Footing				
A5	STR	2	4	25'-2"	CUT OFF WALL				
C1	5	18	4	8'-3"	WINGWALLS	2'-1"	6'-2"		
C2	5	17	4	3'-8½"	CUT OFF WALL	1'-0"	2'-8½"		
C3	5	14	4	2'-0"	CURB	8"	1'-4"		



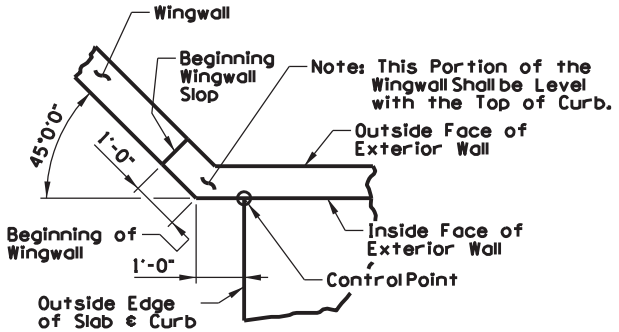
TYPE 5



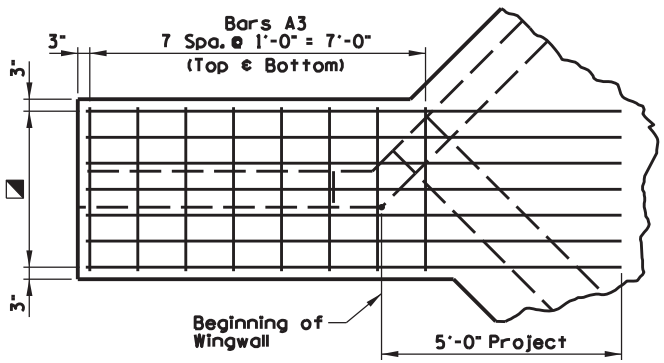
ELEVATION OF WINGWALL



SECTION A-A

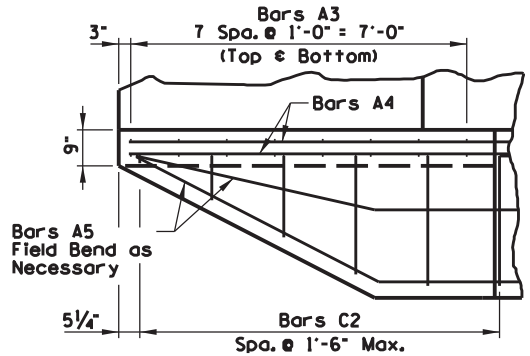


CORNER DETAIL



PLAN OF WING FOOTING

◪ Denote: Bars A4, 6 Eq. Spa. = 3'-3" (Top & Bottom)



ELEVATION OF CUT-OFF WALL FOOTING

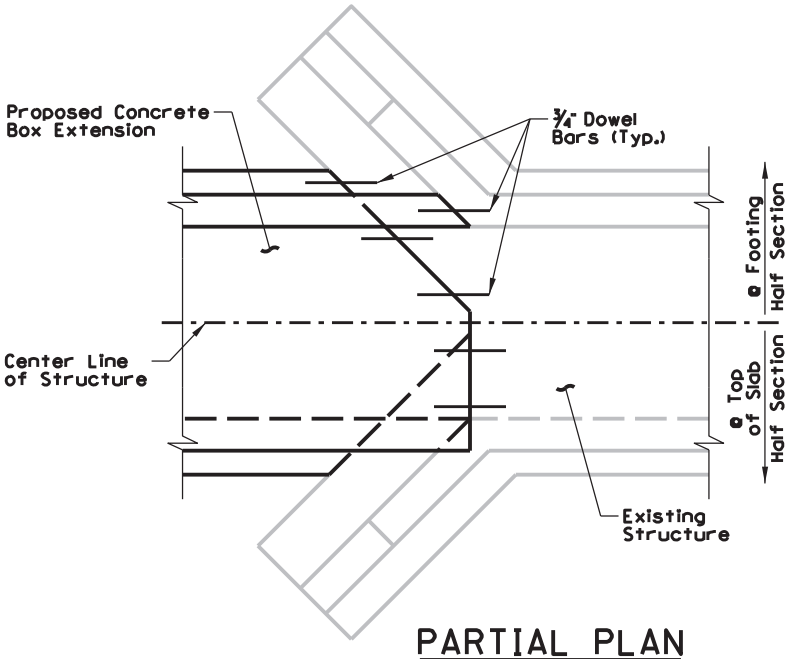
PIKE COUNTY
098SR23T001HSIP & FD05

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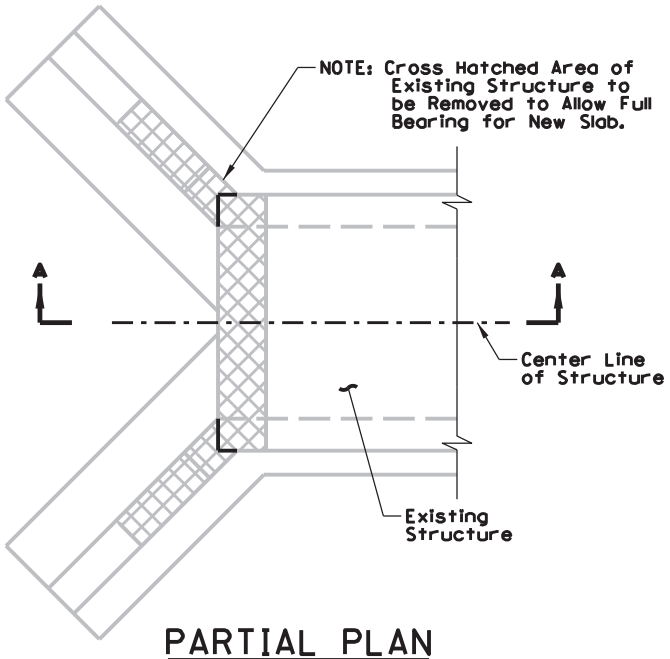
(HSIP) KY 197
STA. 740+00 LT
BOX CULVERT DETAILS

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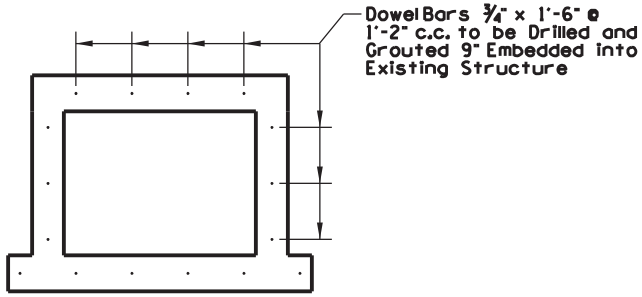
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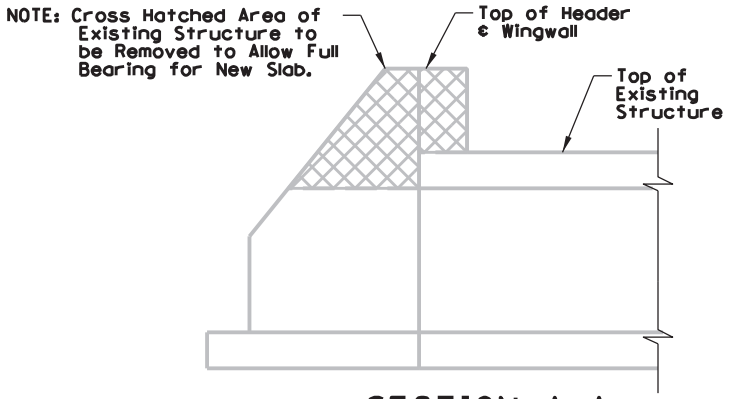
PARTIAL PLAN
(Showing Doweling)



PARTIAL PLAN
(Showing Demolition)



CROSS-SECTION
(Showing Doweling)



SECTION A-A
(Showing Demolition)

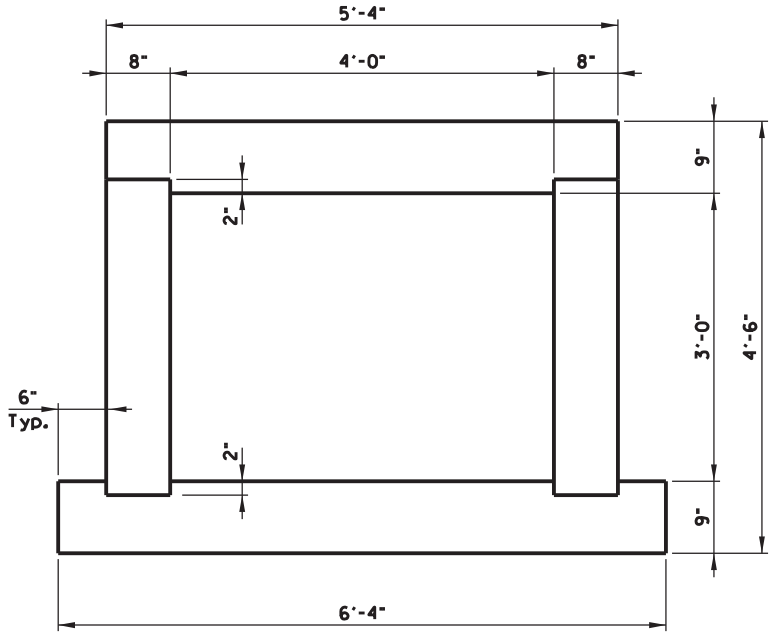
(HSIP) KY 197
STA. 761+64 LT
BOX CULVERT DETAILS

Sheet 1 of 4

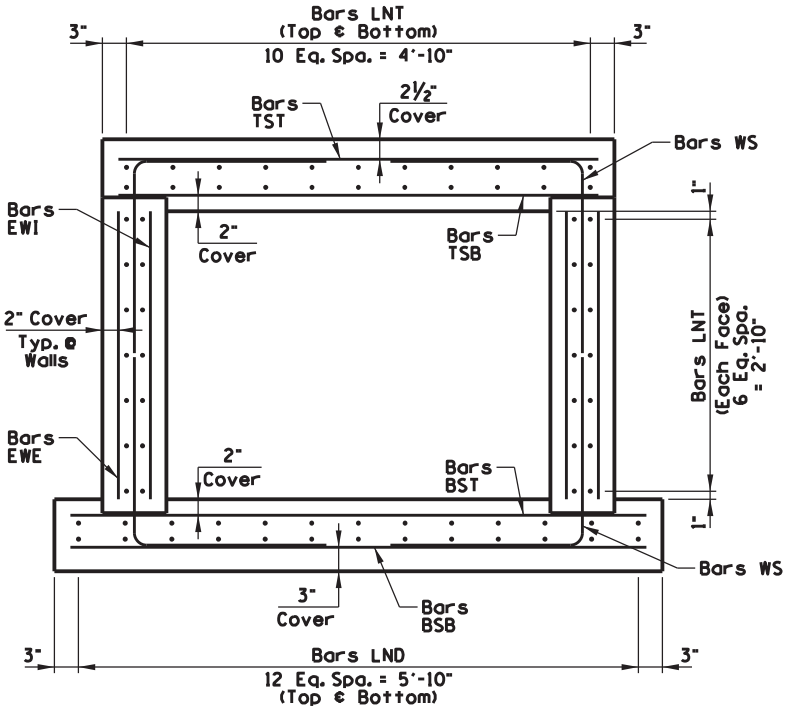
PIKE COUNTY
098SR23001HSIP &FD05

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TYPICAL SECTION
(Showing Structure Dimensions)



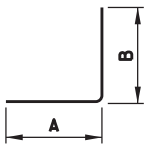
TYPICAL SECTION
(Showing Reinforcement)

Special Note: Field Cut Bars in Bottom Slab as Needed to Match up to Existing Structure.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
TST	STR	12	4	5'-0"	TOP SLAB				
TSB	STR	26	7	5'-0"	TOP SLAB				
LNT	STR	50	4	8'-9"	TOP SLAB/WALLS				
WS	5	36	8	5'-0"	ALL MEMBERS	2'-6"	2'-6"		
EWE	STR	18	4	3'-0"	WALLS				
EWI	STR	18	5	3'-0"	WALLS				
BST	STR	20	6	6'-0"	BOTTOM SLAB				
BSB	STR	20	4	6'-0"	BOTTOM SLAB				
LND	STR	26	5	9'-9"	BOTTOM SLAB				

Note: 16 - Dowel Bars ¾" x 1'-6" Joining Existing Structure and New Structure.



TYPE 5

(HSIP) KY 197
STA. 761+64 LT
BOX CULVERT DETAILS

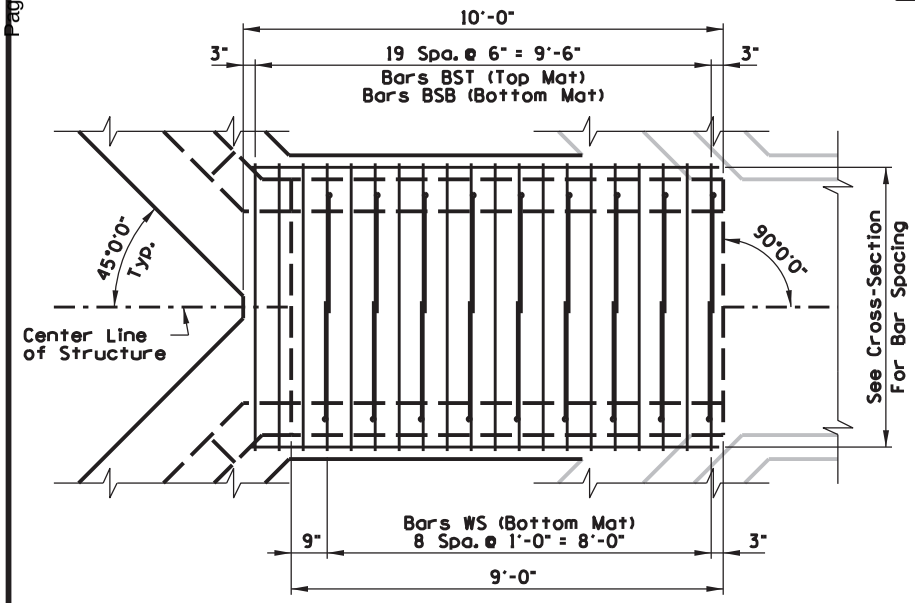
Sheet 2 of 4

PIKE COUNTY
098SR23T001HSIP & FD05

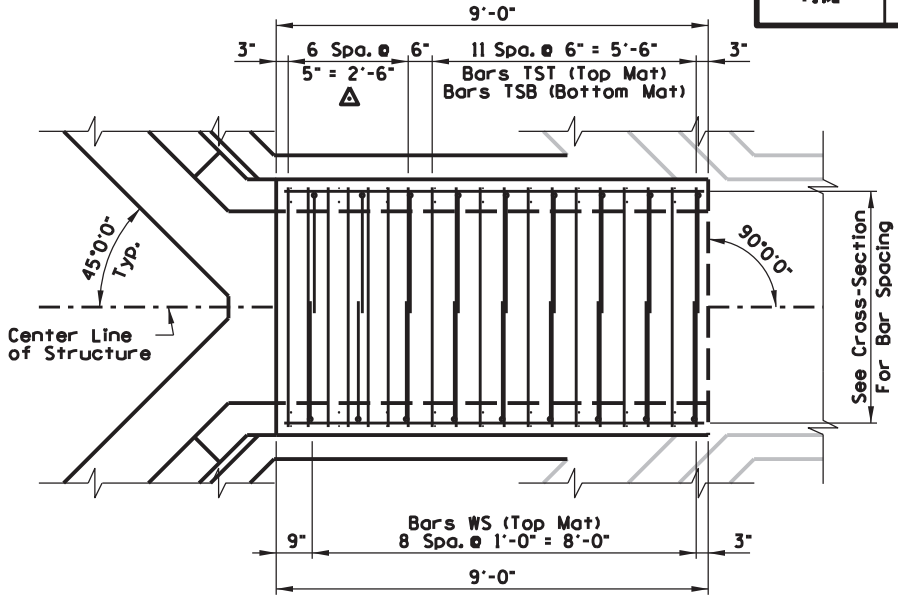
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PIKE	12-9008.00

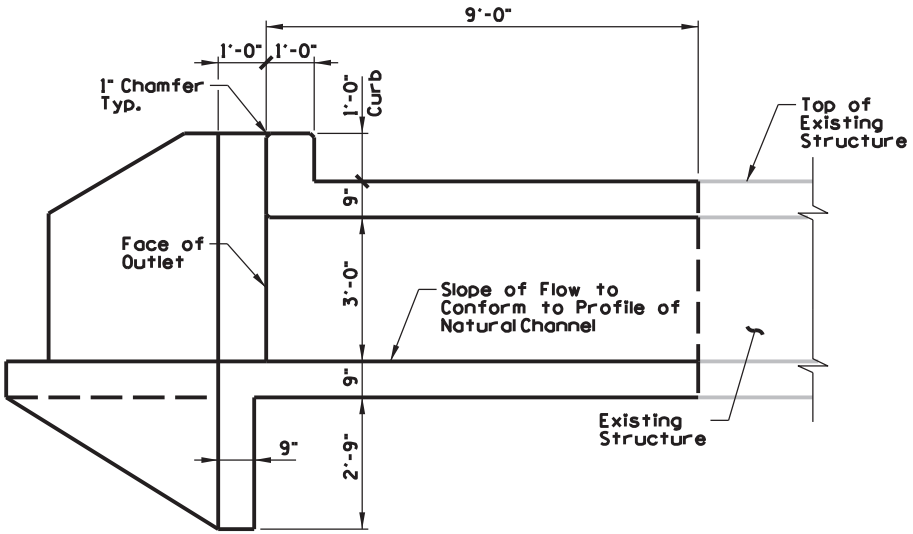
△ Denotes: Bars TSB, (Top & Bottom)



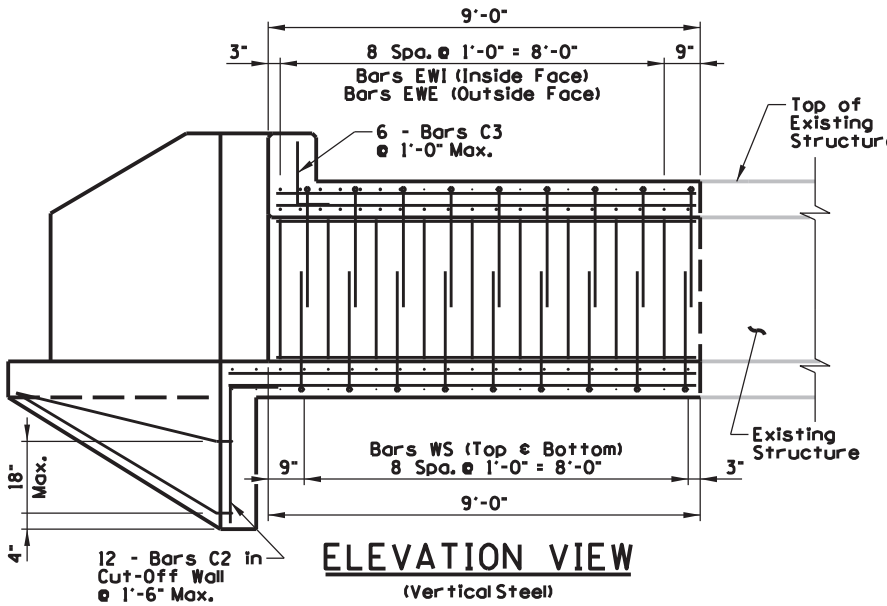
PLAN VIEW
(Bottom Mat of Steel)



PLAN VIEW
(Top Mat of Steel)



ELEVATION VIEW
(Showing Structure Dimensions)



ELEVATION VIEW
(Vertical Steel)

(HSIP) KY 197
STA. 761+64 LT
BOX CULVERT DETAILS

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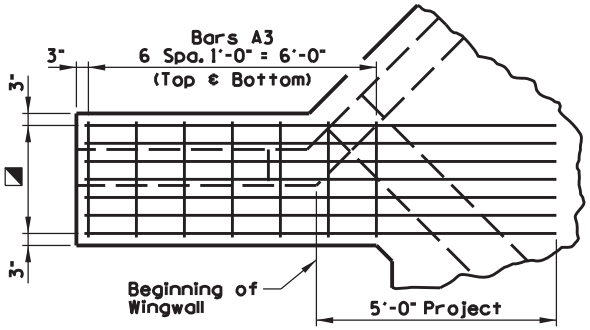
PIKE COUNTY
09851231001 HSIP & FD05

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PIKE	12-9008.00

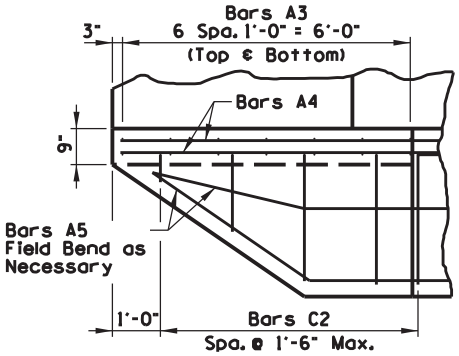
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
A1	STR	20	4	6'-9"	WINGWALLS				
A2	STR	16	4	5'-2"	WINGWALLS				
A3	STR	28	4	2'-5"	Wing Footing				
A4	STR	28	4	9'-10"	Wing Footing				
A5	STR	2	4	13'-3"	CUT OFF WALL				
C1	5	16	4	7'-0"	WINGWALLS	1'-10"	5'-2"		
C2	5	10	4	3'-8½"	CUT OFF WALL	1'-0"	2'-8½"		
C3	5	6	4	2'-0"	CURB	8"	1'-4"		

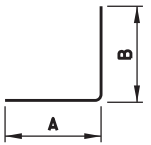


PLAN OF WING FOOTING

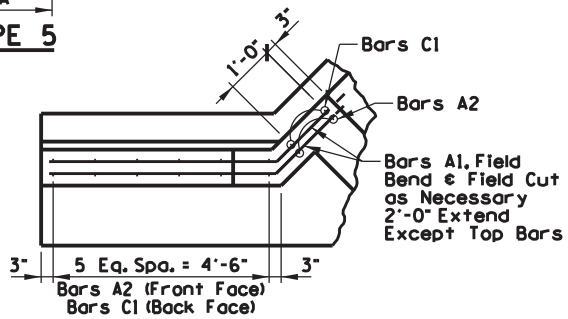
◪ Denote: Bars A4, 6 Eq. Spa. = 2'-3"
(Top & Bottom)



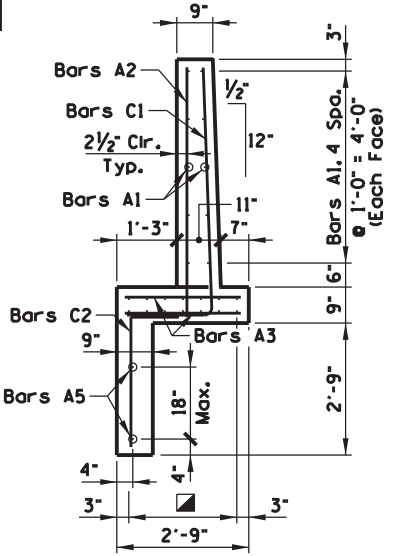
ELEVATION OF WING FOOTING



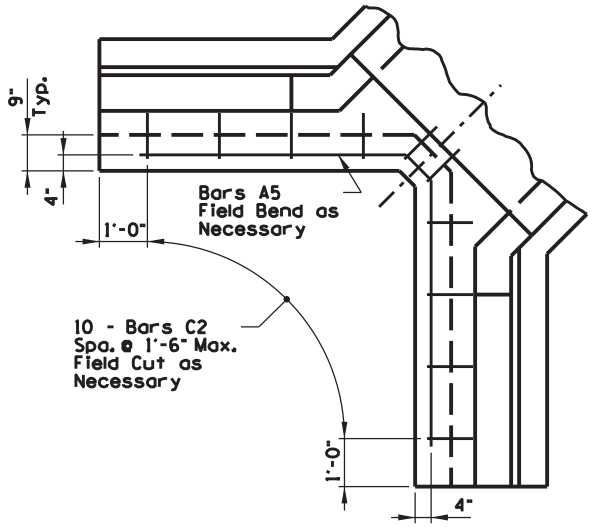
TYPE 5



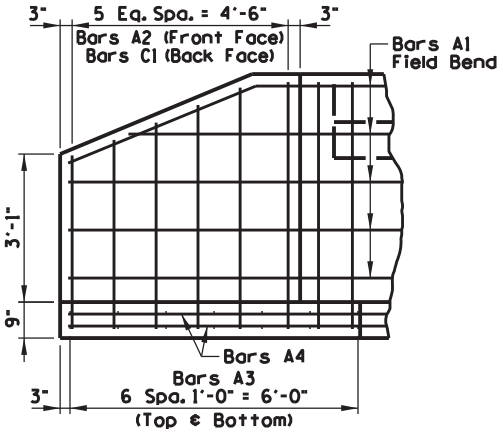
PLAN OF WING FOOTING



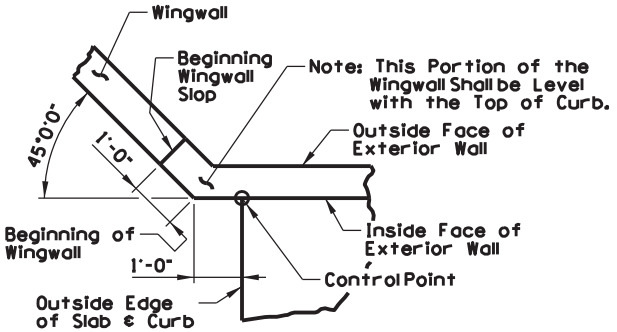
SECTION A-A



PLAN OF CUT-OFF WALL



ELEVATION OF WING FOOTING



CORNER DETAIL

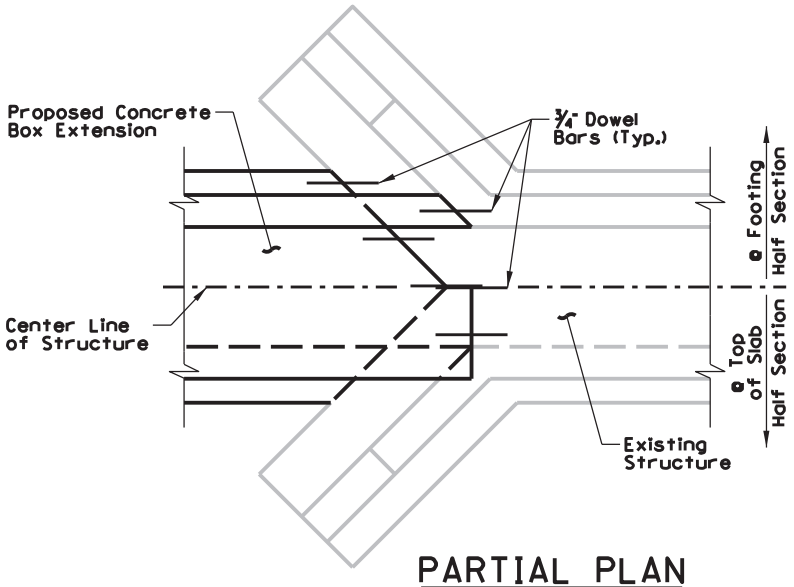
(HSIP) KY 197
STA. 761+64 LT
BOX CULVERT DETAILS

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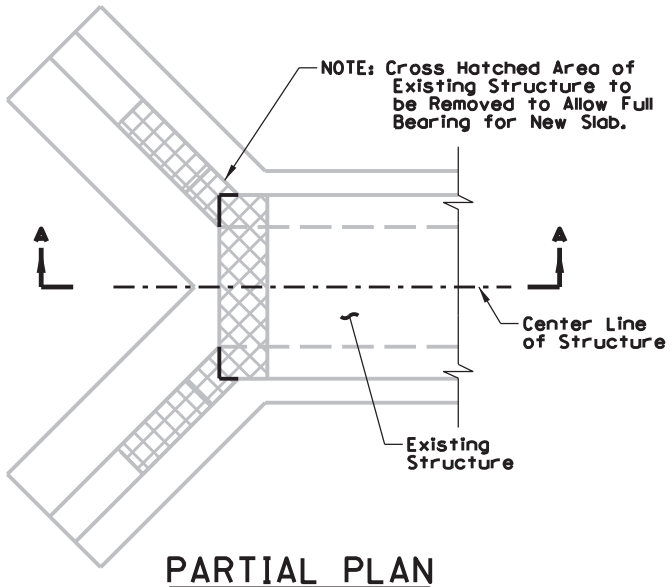
PIKE COUNTY
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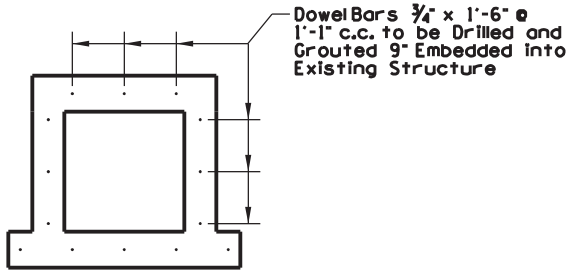
COUNTY OF	ITEM NO.
PIKE	12-9008.00



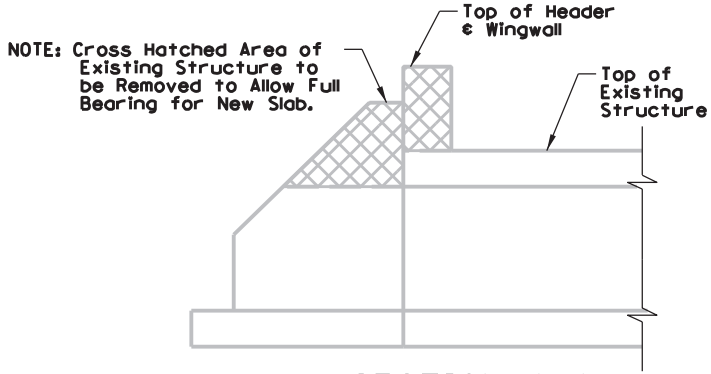
PARTIAL PLAN
(Showing Doweling)



PARTIAL PLAN
(Showing Demolition)



CROSS-SECTION
(Showing Doweling)



SECTION A-A
(Showing Demolition)

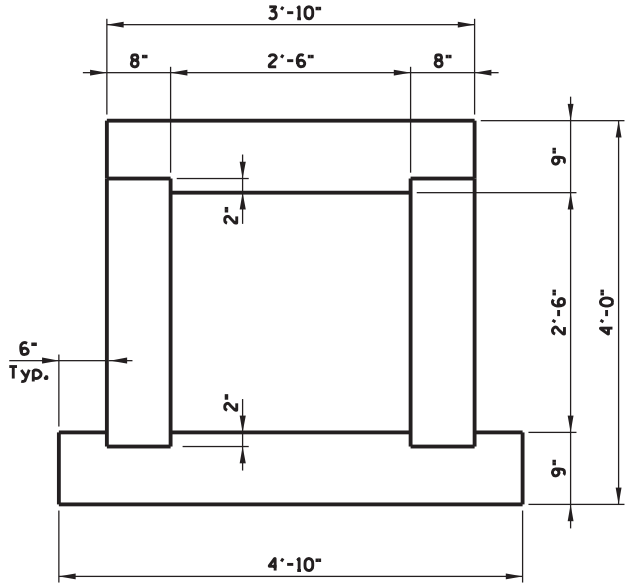
(HSIP) KY 197
STA. 769+10 LT
BOX CULVERT DETAILS

Sheet 1 of 4

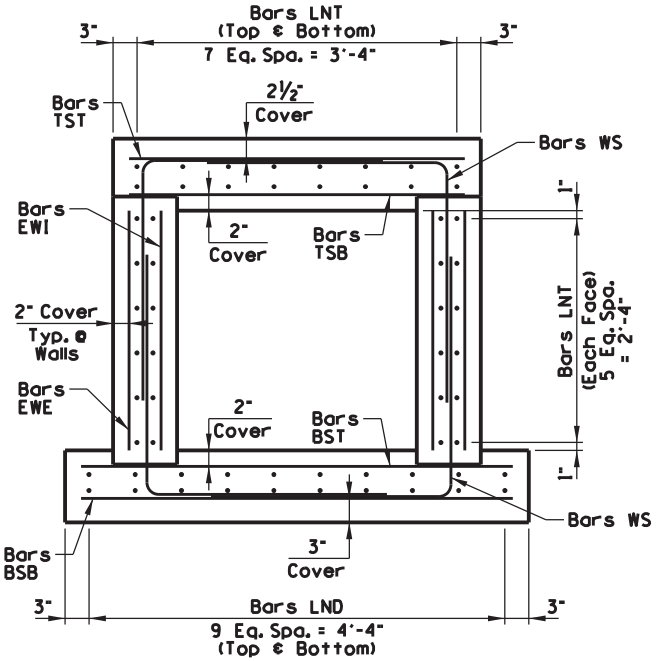
PIKE COUNTY
098SR2301001HSIP & FD05

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COUNTY OF	ITEM NO.
PIKE	12-9008.00



TYPICAL SECTION
(Showing Structure Dimensions)



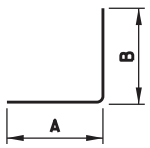
TYPICAL SECTION
(Showing Reinforcement)

Special Note: Field Cut Bars in Bottom Slab as Needed to Match up to Existing Structure.

BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
TST	STR	10	4	3'-6"	TOP SLAB				
TSB	STR	24	7	3'-6"	TOP SLAB				
LNT	STR	40	4	7'-9"	TOP SLAB/WALLS				
WS	5	32	8	5'-0"	ALL MEMBERS	2'-6"	2'-6"		
EWE	STR	16	4	2'-6"	WALLS				
EWI	STR	16	5	2'-6"	WALLS				
BST	STR	19	6	4'-6"	BOTTOM SLAB				
BSB	STR	19	4	4'-6"	BOTTOM SLAB				
LND	STR	20	5	9'-3"	BOTTOM SLAB				

Note: 14 - Dowel Bars ¾" x 1'-6" Joining Existing Structure and New Structure.



TYPE 5

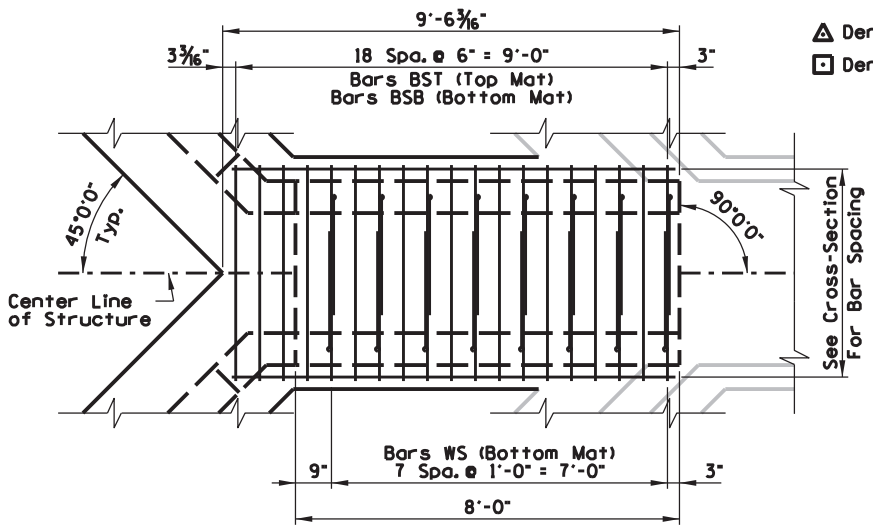
(HSIP) KY 197
STA. 769+10 LT
BOX CULVERT DETAILS

Sheet 2 of 4

PIKE COUNTY
098SR23T001HSIP & FD05

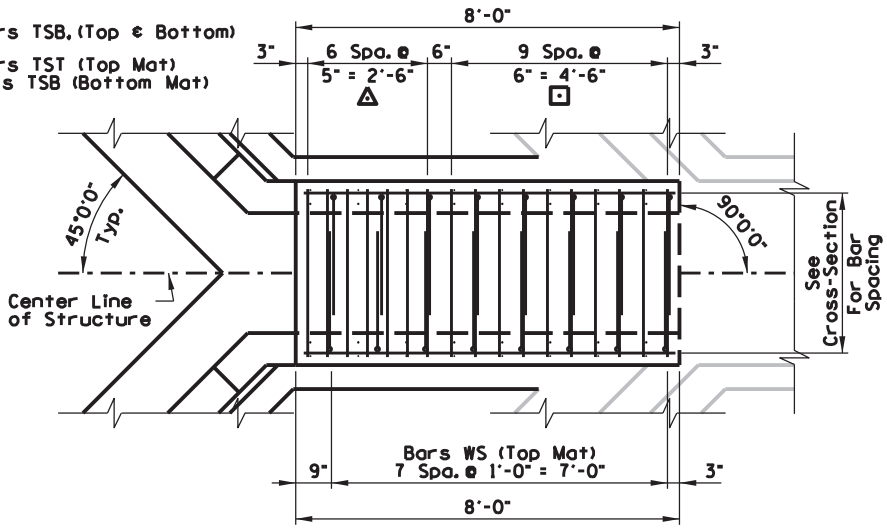
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COUNTY OF	ITEM NO.
PIKE	12-9008.00

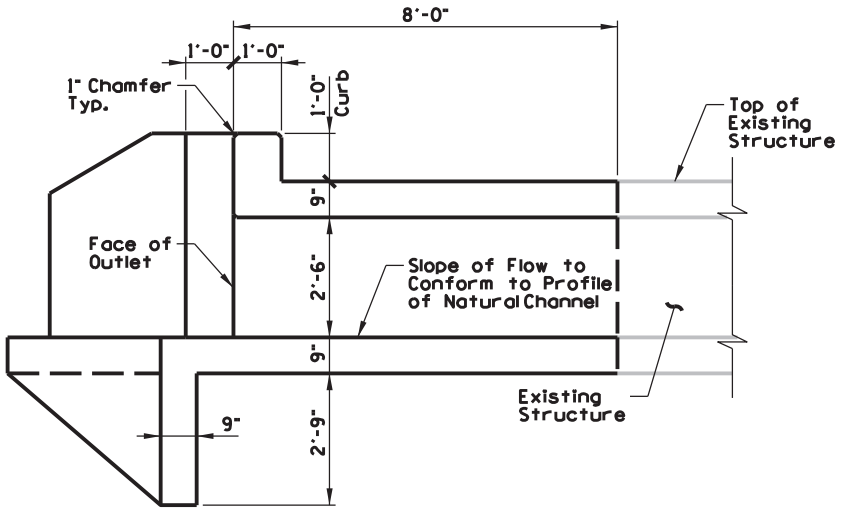


PLAN VIEW
(Bottom Mat of Steel)

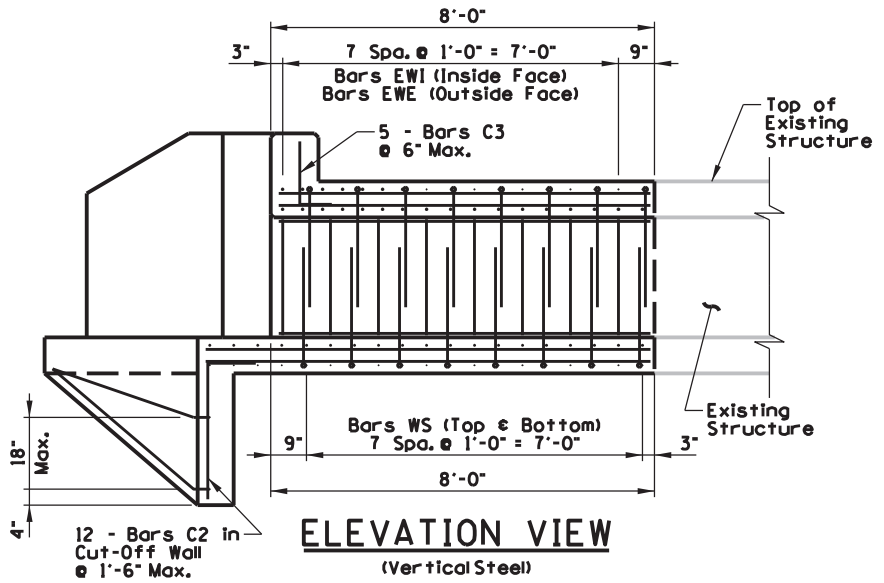
△ Denotes: Bars TSB, (Top & Bottom)
⊡ Denotes: Bars TST (Top Mat)
Bars TSB (Bottom Mat)



PLAN VIEW
(Top Mat of Steel)



ELEVATION VIEW
(Showing Structure Dimensions)



ELEVATION VIEW
(Vertical Steel)

(HSIP) KY 197
STA. 769+10 LT
BOX CULVERT DETAILS

Sheet 3 of 4

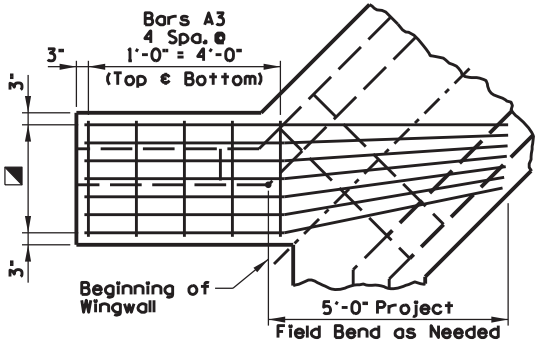
PIKE COUNTY
098SR1231001HSIP & FD05

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PIKE	12-9008.00

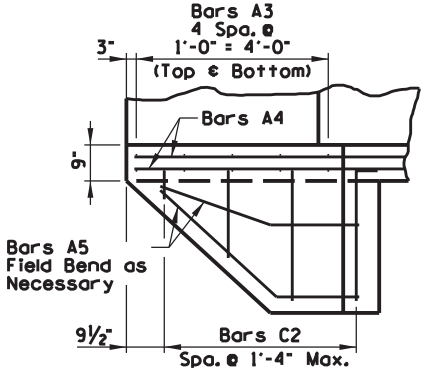
BILL OF REINFORCEMENT

MARK	TYPE	NUMBER	SIZE	LENGTH	LOCATION	A	B	C	D
A1	STR	20	4	5'-9"	WINGWALLS				
A2	STR	14	4	4'-8"	WINGWALLS				
A3	STR	20	4	2'-5"	Wing Footing				
A4	STR	28	4	8'-10"	Wing Footing				
A5	STR	2	4	10'-0"	CUT OFF WALL				
C1	5	14	4	6'-5"	WINGWALLS	1'-10"	4'-8"		
C2	5	7	4	3'-8½"	CUT OFF WALL	1'-0"	2'-8½"		
C3	5	5	4	2'-0"	CURB	8"	1'-4"		

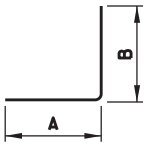


PLAN OF WING FOOTING

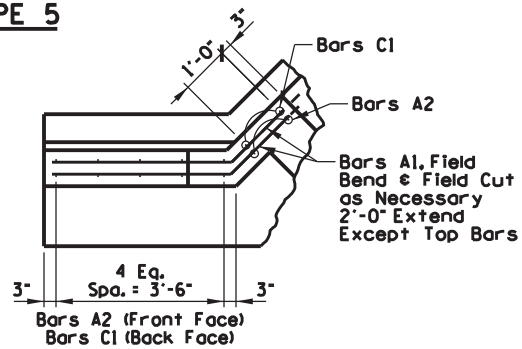
◪ Denote: Bars A4, 6 Eq. Spa. = 2'-3"
(Top & Bottom)



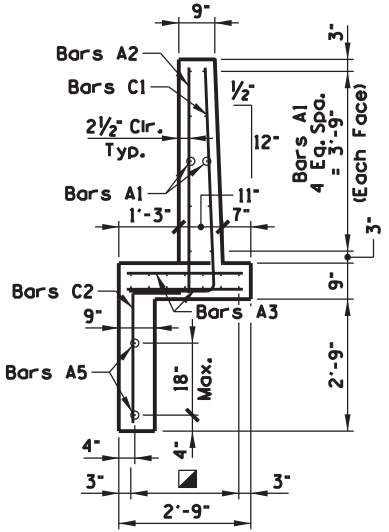
ELEVATION OF WING FOOTING



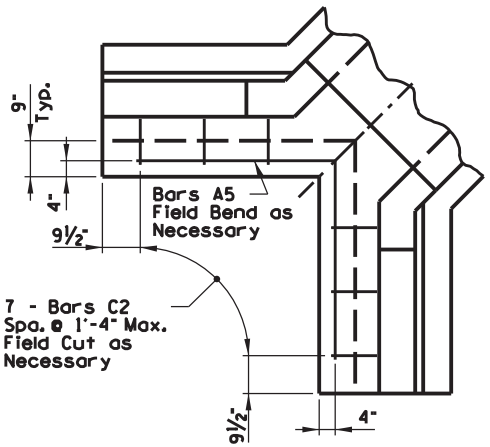
TYPE 5



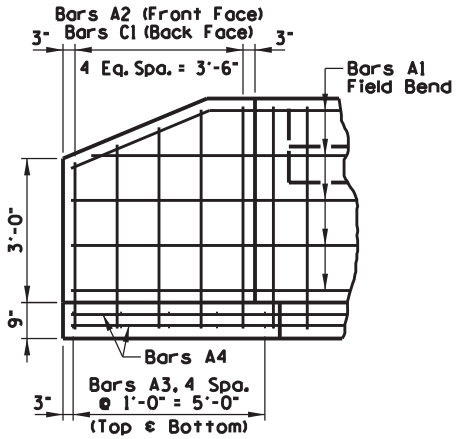
PLAN OF WING FOOTING



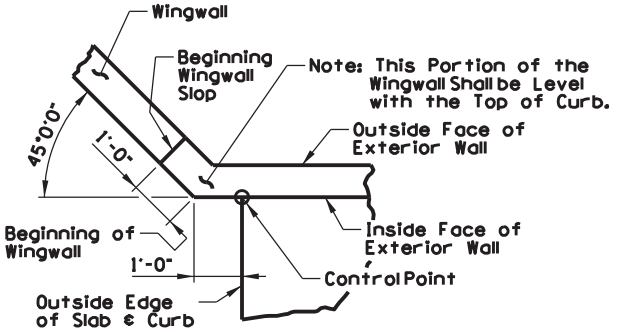
SECTION A-A



PLAN OF CUT-OFF WALL



ELEVATION OF WING FOOTING



CORNER DETAIL

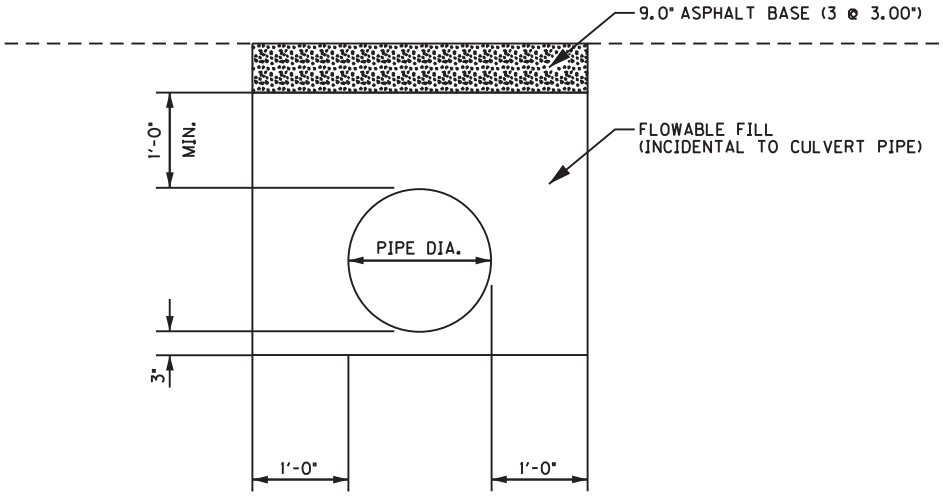
(HSIP) KY 197
STA. 769+10 LT
BOX CULVERT DETAILS

Sheet 4 of 4

PIKE COUNTY
098SR23T001HSIP & FD05

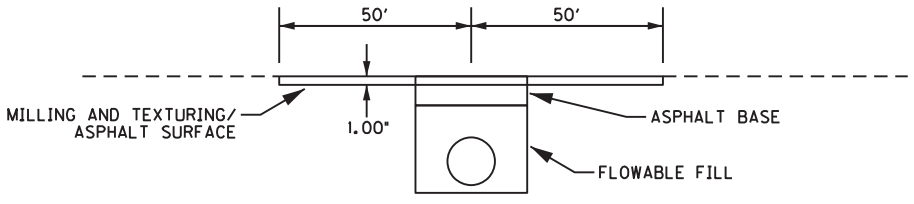
COUNTY OF	ITEM NO.
PIKE	12-9008.00

CULVERT PIPE EXTENSION DETAIL



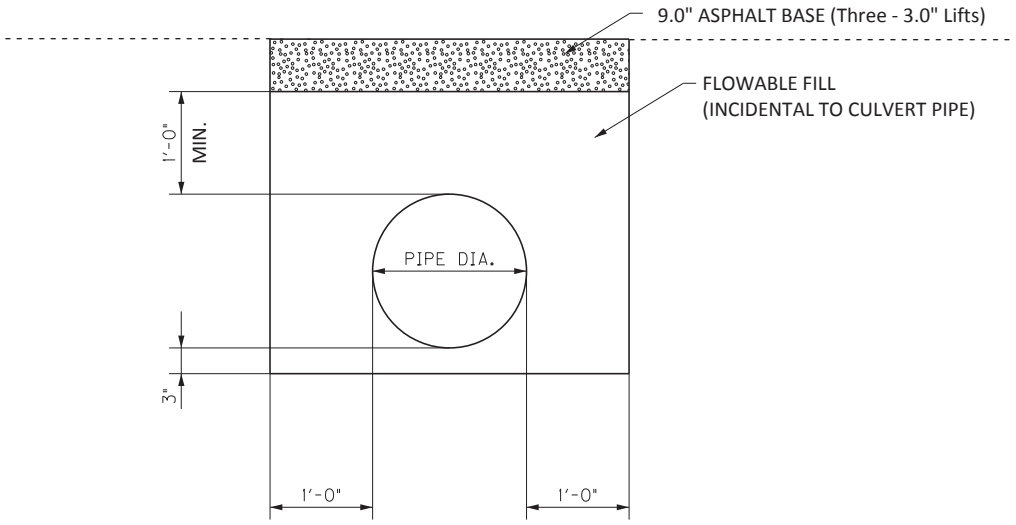
CULVERT PIPE EXTENSIONS - INITIAL BACKFILL

CULVERT PIPE EXTENSIONS WITH DISTURBANCE TO THE ROADWAY PAVEMENT SHALL BE CONSTRUCTED ACCORDING TO THE INITIAL BACKFILL DETAIL SHOWN ABOVE, OR AS DIRECTED BY THE ENGINEER. ALLOW THE ASPHALT BASE TO BE EXPOSED TO TRAFFIC A MINIMUM OF 14 DAYS TO ALLOW FOR SETTLEMENT. LEVEL & WEDGE SETTLEMENT AREAS AS DIRECTED BY THE ENGINEER DURING THIS TIME. AFTER THE WAITING PERIOD, MILL AND INLAY 1.00 INCHES OF ASPHALT SURFACE ACCORDING TO THE DETAIL BELOW.



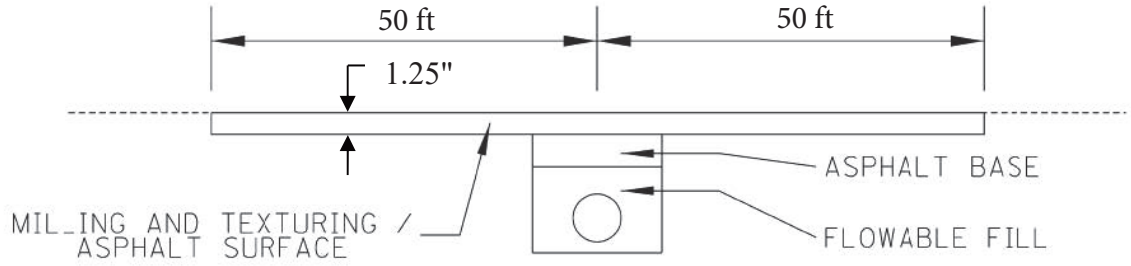
KY 1966
CULVERT PIPE EXTENSION
DETAIL SHEET

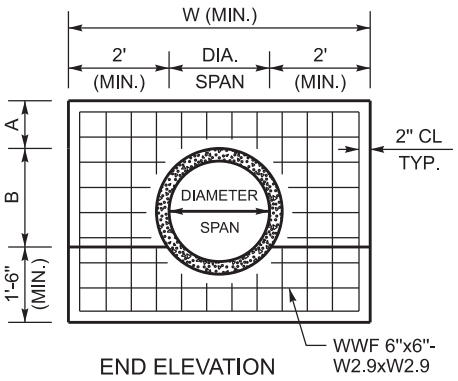
CULVERT PIPE REPLACEMENT DETAIL



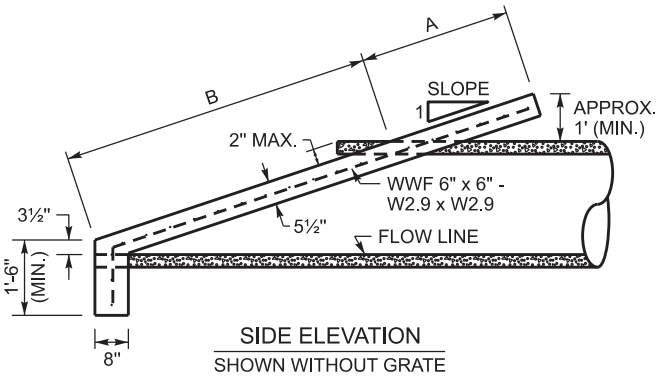
CULVERT PIPE REPLACEMENTS - INITIAL BACKFILL

Culvert Pipe Replacements shall be constructed according to the Initial Backfill Detail shown above, or as directed by the Engineer. Allow the asphalt base to be exposed to traffic a minimum of 14 days to allow for settlement. After the 14 day waiting period, mill and inlay 1.25 inches of asphalt surface according to the detail below.

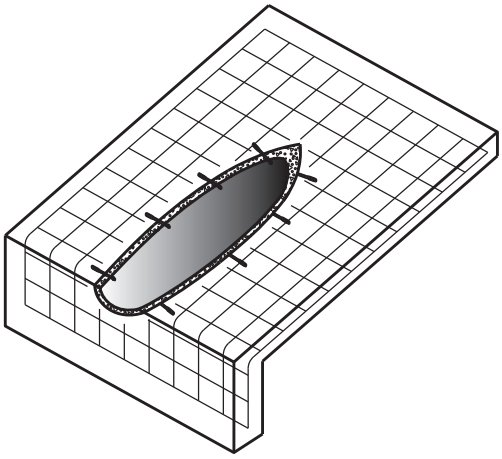




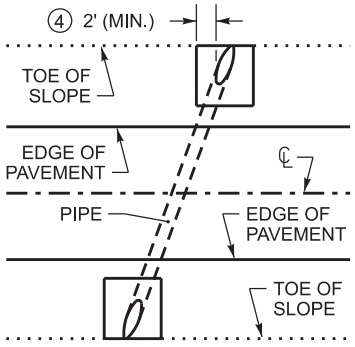
END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT



SIDE ELEVATION
SHOWN WITHOUT GRATE



ISOMETRIC VIEW
SHOWN WITH WOVEN WIRE REINFORCEMENT AND WEDGE ANCHORS



PLAN VIEW
SHOWN WHEN THE PIPE IS ON A SKEW ④

~ NOTES ~

1. FOR PIPES THAT RECEIVE THE SLOPED & MITERED CONCRETE HEADWALL, THE PIPE LENGTH SHALL BE MEASURED TO THE FURTHEST POINT ALONG THE MITERED END OF THE PIPE.
2. THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
3. THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.

④ WHEN THE PIPE IS ON A SKEW, INSTALL THE HEADWALL AND MITER THE PIPE SO THAT THE CONCRETE SLOPE PAVING IS PERPENDICULAR TO THE ROADWAY. FOR HEADWALLS ON SKEWED PIPES, THE HEADWALL WIDTH, W, SHALL BE WIDENED, AS NEEDED, SO THAT THE OUTSIDE EDGE OF THE CONCRETE SLOPE PAVING IS A MINIMUM OF 2' FROM THE OUTER MOST EDGE OF THE PIPE.

5. THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. THE FINAL HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
6. WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
7. DIMENSIONS AND CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL, INSTALLED ON A PIPE WITH SKEW = 0°.
8. AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.

⑨ THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
SEE SHEET 2 FOR GRATE DETAILS

10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

** DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND ARE LISTED FOR INFORMATIONAL PURPOSES ONLY **

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
15"	3'	3'-7½"	5'-3"	0.79	4'	4'-8¾"	5'-3"	0.97	6'	6'-11¾"	5'-3"	1.35	NO
18"	3'	4'-5¾"	5'-6"	0.89	4'	5'-10"	5'-6"	1.10	6'	8'-7¼"	5'-6"	1.54	NO
24"	3'	6'-2½"	6'-0"	1.11	4'	8'-1"	6'-0"	1.38	6'	11'-11"	6'-0"	1.93	SEE ⑨
30"	3'	7'-10¾"	6'-6"	1.33	4'	10'-3¾"	6'-6"	1.67	6'	15'-2½"	6'-6"	2.35	SEE ⑨

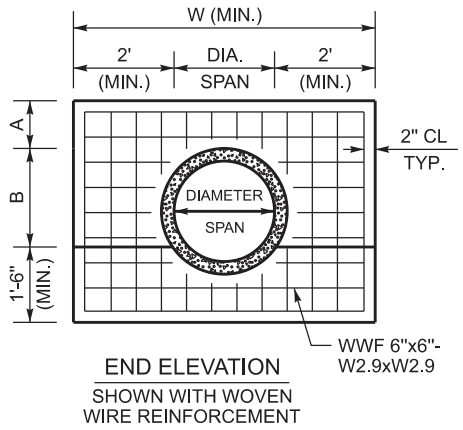
++ SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER ++

BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _ IN EACH

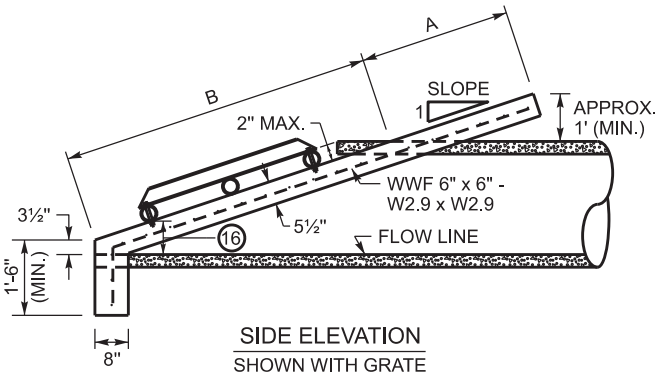
BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

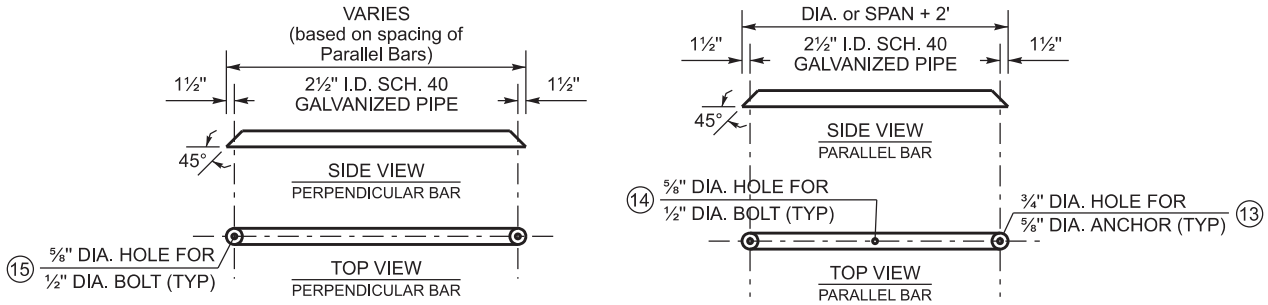
SLOPED & MITERED CONCRETE HEADWALL (SHEET 1 OF 2)



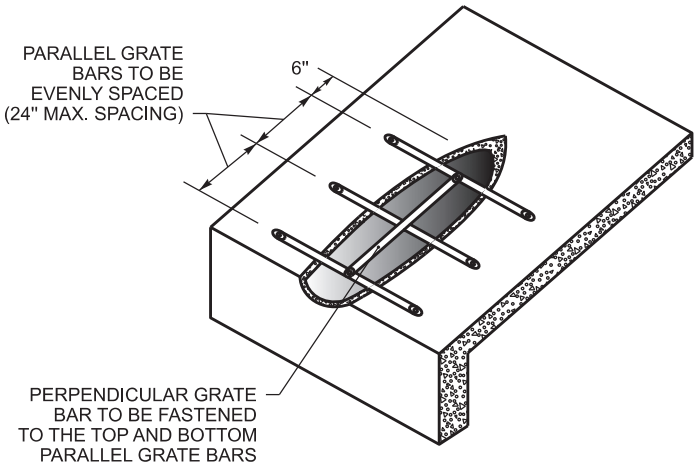
END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT



SIDE ELEVATION
SHOWN WITH GRATE



PIPE FOR GRATE DETAILS
SEE NOTE 9 TO DETERMINE IF GRATE IS REQUIRED



ISOMETRIC VIEW
SHOWING HEADWALL WITH GRATE

~ NOTES ~

SEE SHEET 1 FOR NOTES 1 THRU 8

9. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
11. THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AFTER FABRICATION.
12. ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
13. FASTEN PARALLEL BARS TO HEADWALL WITH ⅝" DIA. x 4½" LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = 2¾" HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE.
14. CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
15. FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH ½" DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
16. THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.

** DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND ARE LISTED FOR INFORMATIONAL PURPOSES ONLY **

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) (4)

PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
36"	3'	9'-7½"	7'-0"	1.57	4'	12'-6½"	7'-0"	1.98	6'	18'-6"	7'-0"	2.80	YES
42"	3'	11'-4"	7'-6"	1.83	4'	14'-9¼"	7'-6"	2.31	6'	21'-9½"	7'-6"	3.27	YES
48"	3'	12'-11"	8'-0"	2.07	4'	16'-10"	8'-0"	2.40	6'	24'-10"	8'-0"	3.33	YES

++ SEE SHEET 1 FOR DIMENSIONS OF HEADWALLS FOR PIPE 30" DIAMETER & LESS ++

BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _ IN EACH

BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

SLOPED & MITERED CONCRETE HEADWALL (SHEET 2 OF 2)

FIGURE 1

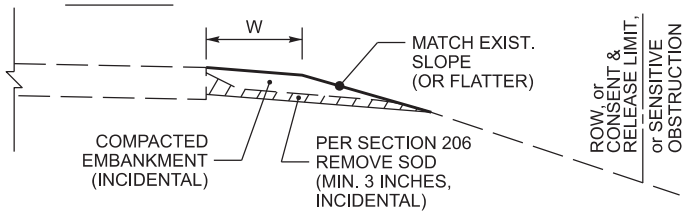


FIGURE 2

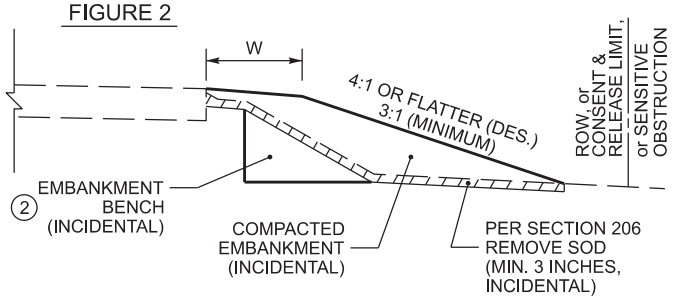


FIGURE 3

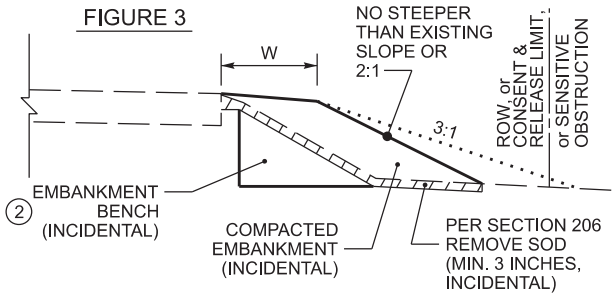


FIGURE 4

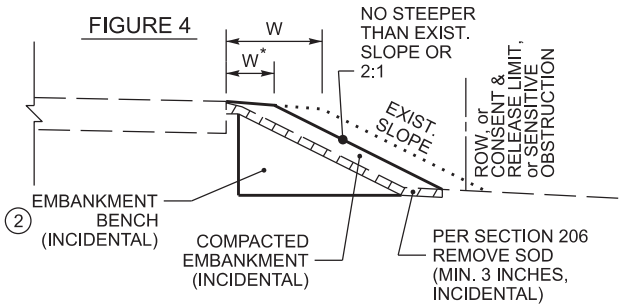


FIGURE 5

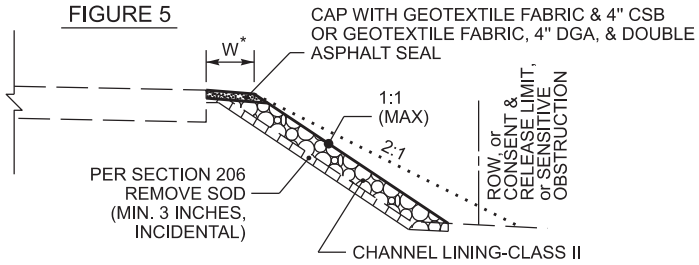
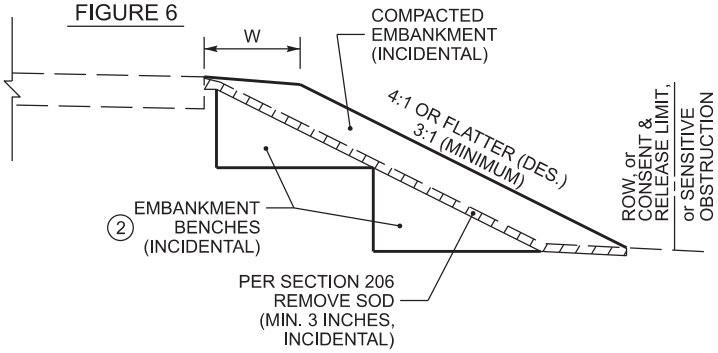


FIGURE 6



~ NOTES ~

BID ITEM AND UNIT TO BID:
26175EC - ROADSIDE REGRADING - LF

1. THE BID ITEM 'ROADSIDE REGRADING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF ROADSIDE REGRADING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE ROADSIDE REGRADING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, ROADSIDE REGRADING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:
   - PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
     NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
   - EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
   - EMBANKMENT BENCHING

(2) EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'ROADSIDE REGRADING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'ROADSIDE REGRADING':
   - THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
   - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
   - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK AND MAY HELP AVOID ANY EXISTING UNDERGROUND UTILITIES.

3. AS SHOWN IN FIGURE 1, IN SOME SITUATIONS, MINOR SHOULDERING, WITH MINIMAL ADDITIONAL EARTH MATERIAL, MAY BE ALL THAT IS REQUIRED TO RESHAPE THE EARTH SHOULDER TO THE PROPOSED WIDTH AND BRING IT FLUSH WITH THE EDGE OF PAVEMENT.
4. AS SHOWN IN FIGURE 2, MOST SITUATIONS WILL REQUIRE ADDITIONAL EARTH MATERIAL TO ACHIEVE THE PROPOSED EARTH SHOULDER WIDTH. IT IS DESIRED THAT THE RESULTING FILL SLOPE BE INSTALLED AS FLAT AS POSSIBLE AND SHALL REMAIN WITHIN THE RIGHT-OF-WAY AND/OR ANY CONSENT & RELEASE AREAS OBTAINED BY KYTC NOTED IN THE PROPOSAL, WHILE ALSO AVOIDING ANY SENSITIVE OBSTRUCTIONS.
5. AS SHOWN IN FIGURE 3, IF A 3:1 FILL SLOPE WILL RESULT IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR OUTSIDE OF A CONSENT & RELEASE AREA OBTAINED BY KYTC NOTED IN THE PROPOSAL, OR WILL IMPACT A SENSITIVE OBSTRUCTION, THEN THE FILL SLOPE MAY BE INSTALLED STEEPER THAN 3:1, BUT NO STEEPER THAN THE EXISTING FILL SLOPE, OR A 2:1, WHICHEVER IS FLATTER.
6. AS SHOWN IN FIGURE 4, IF MATCHING THE EXISTING FILL SLOPE OR INSTALLING A 2:1 FILL SLOPE (WHICHEVER IS FLATTER) STILL RESULTS IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR OUTSIDE OF A CONSENT & RELEASE AREA OBTAINED BY KYTC NOTED IN THE PROPOSAL, OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE RESULTING TOE OF SLOPE WILL REMAIN WITHIN THE RIGHT-OF-WAY OR CONSENT & RELEASE AREA, AND/OR NOT IMPACT THE SENSITIVE OBSTRUCTION.
7. AS SHOWN IN FIGURE 5, IF THE EXISTING FILL SLOPE IS STEEPER THAN 2:1 AND THERE IS NOT ENOUGH SPACE TO INSTALL A 2:1 FILL SLOPE WITHOUT EXTENDING BEYOND THE RIGHT-OF-WAY OR A CONSENT & RELEASE AREA OBTAINED BY KYTC NOTED IN THE PROPOSAL AND/OR IMPACTING A SENSITIVE OBSTRUCTION, THEN CLASS II CHANNEL LINING MAY BE INSTALLED ALONG THE STEEP EXISTING SLOPE IN ORDER TO ESTABLISH A WIDTH OF AGGREGATE SHOULDER. THESE LOCATIONS WILL BE NOTED IN THE PROPOSAL. THE CHANNEL LINING IS TO BE CAPPED WITH GEOTEXTILE FABRIC CLASS 1 AND 4" OF CRUSHED STONE BASE OR 4" OF DGA WITH DOUBLE ASPHALT SEAL COAT.
8. AS SHOWN IN FIGURE 6, AS THE HEIGHT OF THE FILL INCREASES, MULTIPLE EMBANKMENT BENCHES MAY BE REQUIRED. REFER TO NOTE (2) FOR MORE INFORMATION ABOUT EMBANKMENT BENCHING.

SEE SHEET 2 FOR NOTES 9 THRU 13

NOT TO SCALE

ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS (SHEET 1 OF 2)

FIGURE 7

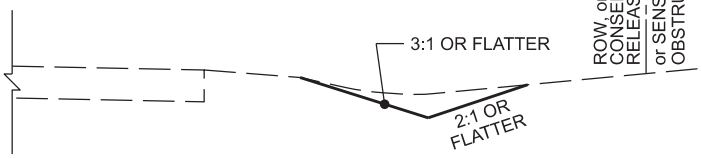


FIGURE 8

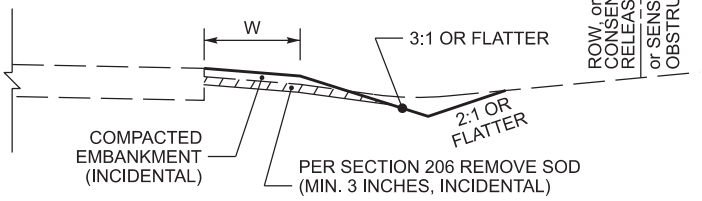


FIGURE 9

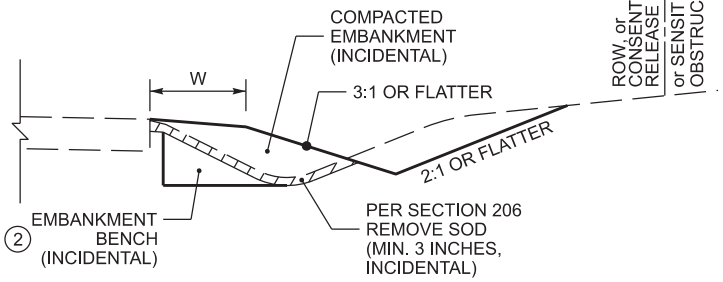


FIGURE 10

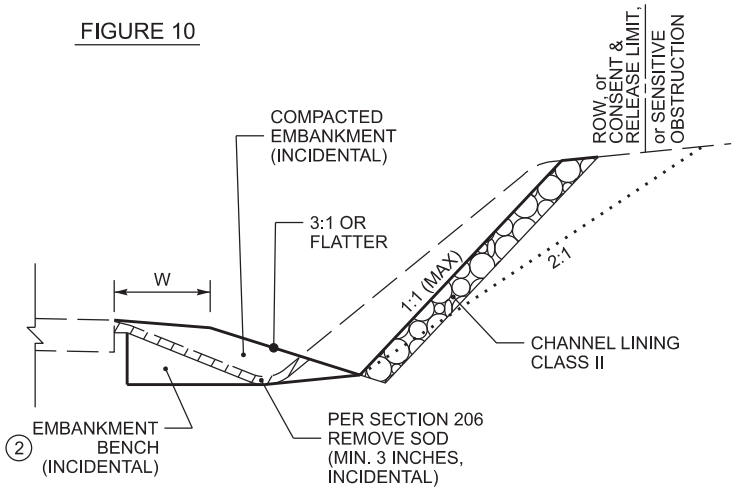
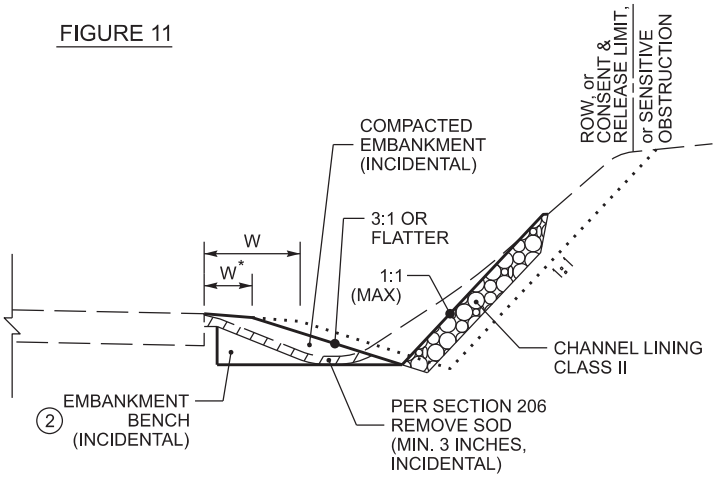


FIGURE 11



~ NOTES ~

BID ITEM AND UNIT TO BID:
26175EC - ROADSIDE REGRADING - LF

1. THE BID ITEM 'ROADSIDE REGRADING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF ROADSIDE REGRADING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE ROADSIDE REGRADING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, ROADSIDE REGRADING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:
   - PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
     NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
   - EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
   - EMBANKMENT BENCHING

(2) EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'ROADSIDE REGRADING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'ROADSIDE REGRADING':
   - THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
   - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
   - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK AND MAY HELP AVOID ANY EXISTING UNDERGROUND UTILITIES.

SEE SHEET 1 FOR NOTES 3. THRU 8.

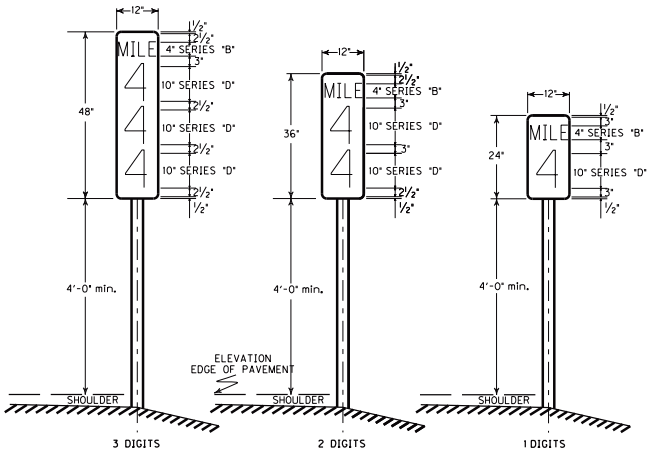
9. AS SHOWN IN FIGURE 7, IN SOME SITUATIONS, ALL THAT MAY BE REQUIRED IS TO CLEAN OUT THE EXISTING DITCH AND RESHAPE IT TO THE PROPOSED DIMENIONS. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE RE-USED ELSEWHERE ON THE PROJECT, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR THE INTENDED RE-USE.
10. AS SHOWN IN FIGURE 8, IN SOME SITUATIONS, THE DITCH AND SHOULDER MAY ONLY NEED MINOR REGRADING AND/OR RESHAPING. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO RESHAPE THE EARTH SHOULDER, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR SHOULDERING. IF THE MATERIAL IS NOT SUITABLE, ADDITIONAL EARTH MATERIAL MAY BE REQUIRED.
11. AS SHOWN IN FIGURE 9, IN MOST SITUATIONS, REGRADING AND RESHAPING THE ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS WILL RESULT IN MOVING THE DITCH FURTHER AWAY FROM THE ROADWAY. IT IS DESIRED THAT DITCH FORESLOPES BE 3:1 OR FLATTER AND DITCH BACKSLOPES BE 2:1 OR FLATTER. IT IS ALSO DESIRED THAT THE NEW DITCH BACKSLOPE REMAIN WITHIN THE RIGHT-OF-WAY AND/OR ANY CONSENT & RELEASE AREAS OBTAINED BY KYTC NOTED IN THE PROPOSAL, WHILE ALSO AVOIDING ANY SENSITIVE OBSTRUCTIONS.
12. AS SHOWN IN FIGURE 10, IF INSTALLING A 2:1 DITCH BACKSLOPE WILL RESULT IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR OUTSIDE OF ANY CONSENT & RELEASE AREA OBTAINED BY KYTC NOTED IN THE PROPOSAL, AND/OR IMPACTING A SENSITIVE OBSTRUCTION, THEN THE DITCH BACK SLOPE MAY BE INSTALLED STEEPER THAN 2:1, UP TO 1:1 MAXIMUM. IN THIS SITUATION, THE DITCH BACKSLOPE SHALL HAVE CLASS II CHANNEL LINING INSTALLED FOR SLOPE PROTECTION.
13. AS SHOWN IN FIGURE 11, IF USING A 1:1 DITCH BACKSLOPE STILL RESULTS IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR OUTSIDE ANY CONSENT & RELEASE AREA OBTAINED BY KYTC NOTED IN THE PROPOSAL, AND/OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE STEEP DITCH BACKSLOPE CAN BE INSTALLED WITHIN THE RIGHT-OF-WAY AND/OR TO AVOID A SENSITIVE OBSTRUCTION.

NOT TO SCALE

ROADSIDE REGRADING AND EMBANKMENT BENCHING DETAILS (SHEET 2 OF 2)

COUNTY OF	ITEM NO.	SHEET NO.

MILEPOST MARKERS



TYPICAL SIGN PANEL DIMENSIONS AND MILEPOST LOCATIONS

MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

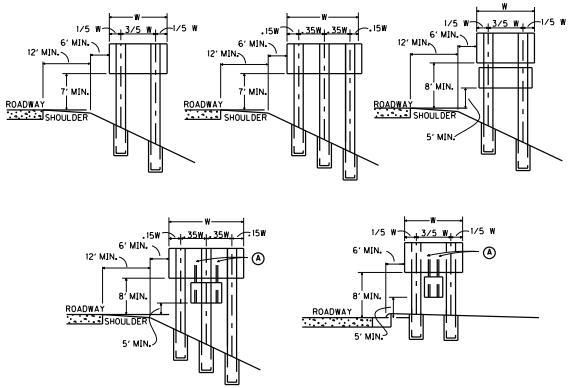
MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

NOTE: STATION NUMBERS ARE GIVEN FOR NOTED DIRECTION OF TRAVEL ONLY. CORRESPONDING MILEPOST MARKERS FOR OTHER DIRECTION SHOULD BE PLACED DIRECTLY OPPOSITE THOSE FOR WHICH STATION NUMBERS ARE GIVEN.

IN JEFFERSON COUNTY, FINAL LOCATION OF MILEPOST MARKERS SHALL BE VERIFIED BY TRIMARC. NOTIFY TRIMARC AT LEAST TWO WEEKS PRIOR TO BEGINNING WORK ON THIS ITEM:

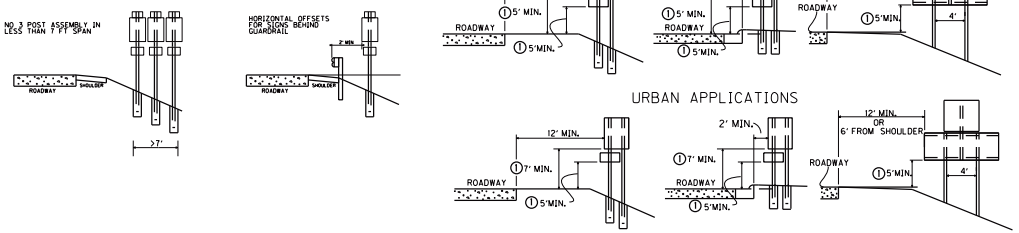
901 WEST MAIN STREET
LOUISVILLE, KY 40202
502-587-6624
270-307-7456

PANEL SIGNS



Ⓐ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" X 3" X 3/16" ANGLES OF SUFFICIENT LENGTH TO EXTEND FROM THE LOWER EDGE OF THE SECONDARY SIGN TO AT LEAST THREE FEET UP THE BACK OF THE MAJOR SIGN. A MINIMUM OF ONE POST CLIP PER FOOT SHALL BE USED IN ATTACHING EXTRUSIONS TO EACH ANGLE.

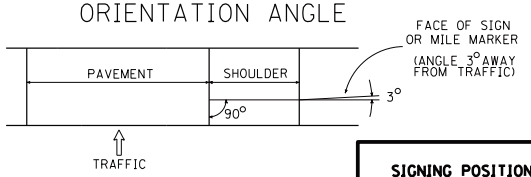
SHEETING SIGNS



NOTE: SHOULD A SIGN BE LOCATED AT A POINT WHERE GUARDRAIL IS CALLED FOR OR EXISTING, ALL SIGN SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL AND LATERAL OFFSET SHALL BE MEASURED FROM THE GUARDRAIL.

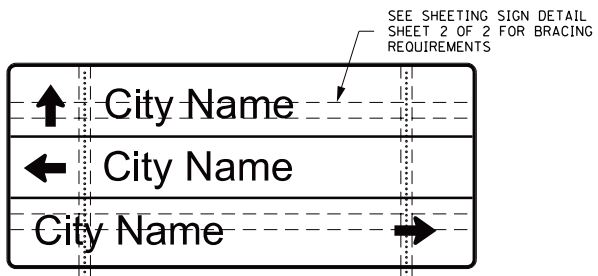
ⓘ NOT TO EXCEED 8' IN URBAN AREAS AND 6' IN RURAL AREAS UNLESS SPECIFIED BY THE ENGINEER

ORIENTATION ANGLE

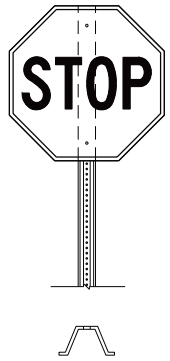


SIGNING POSITIONING DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.

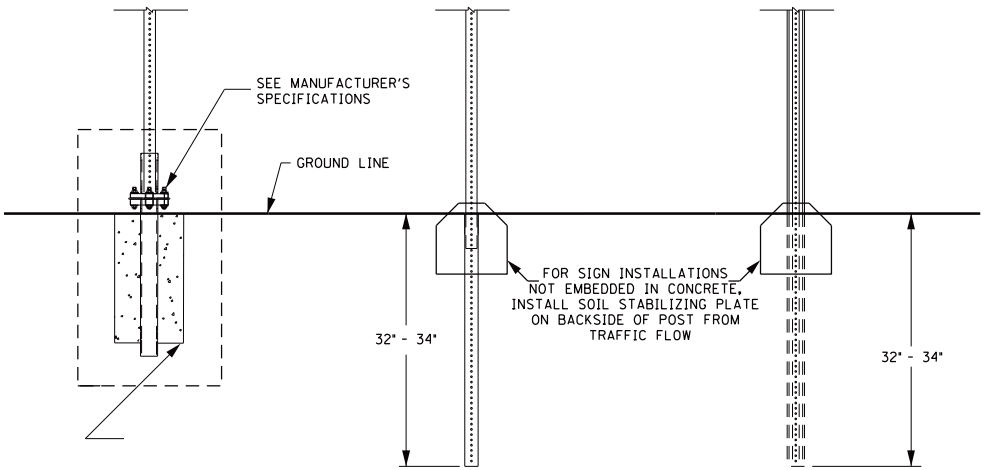


PLAN VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

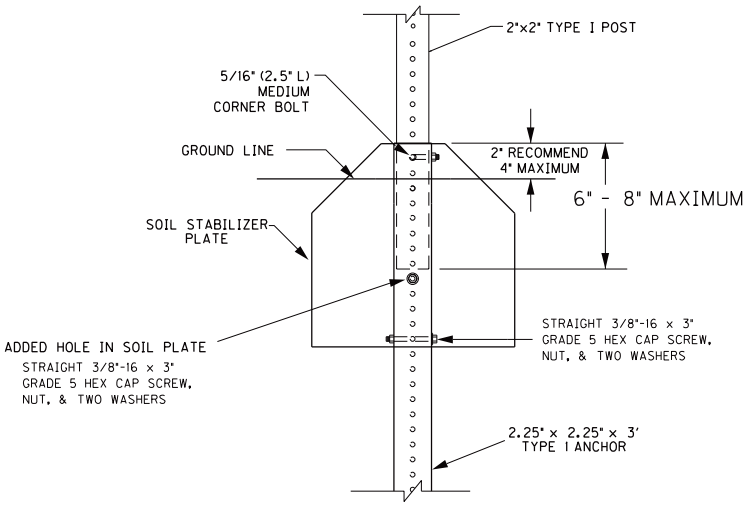
TRAFFIC FLOW



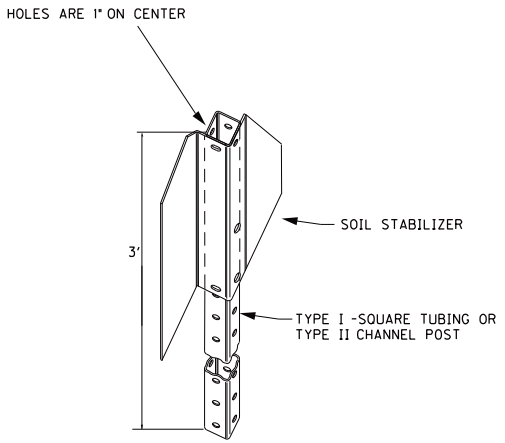
TYPE I
SQUARE TUBING POST
WITH TYPE "D" SUPPORT

TYPE I
SQUARE TUBING POST
WITH SOIL STABILIZER

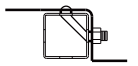
TYPE II
CHANNEL POST
WITH SOIL STABILIZER



SOIL STABILIZER DETAIL
FOR TYPE I POST



SOIL STABILIZER DETAIL



PLAN VIEW
NOT TO SCALE

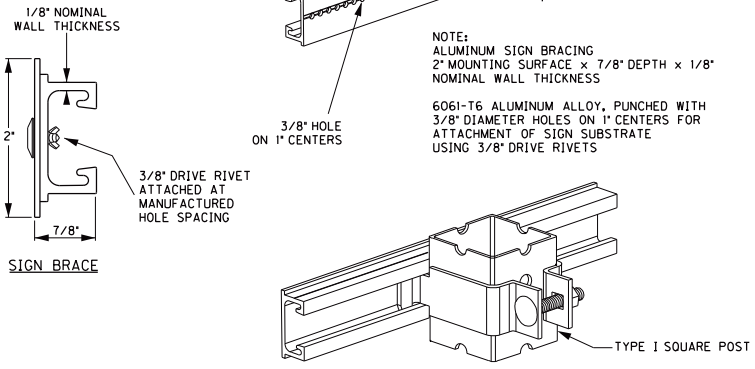
TRAFFIC FLOW

NOT TO SCALE

SHEETING SIGN DETAIL
SHEET 1 OF 2

COUNTY OF	ITEM NO.	SHEET NO.

FOR ATTACHMENT OF SIGNS LESS THAN 72" IN WIDTH USING MANUFACTURED 3/8" HOLES ACCORDING TO 2004 STANDARD HIGHWAY SIGNS BLANK STANDARDS PGS 7-1 THRU 7-6

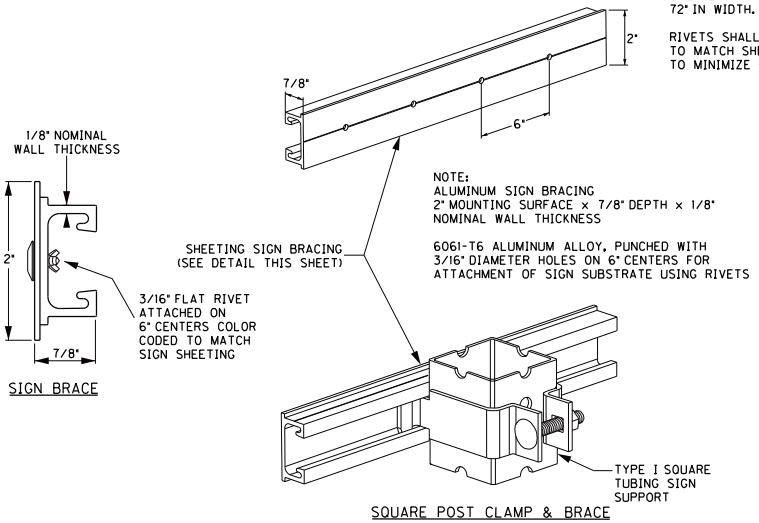


SIGN BRACE

SQUARE POST CLAMP & BRACE

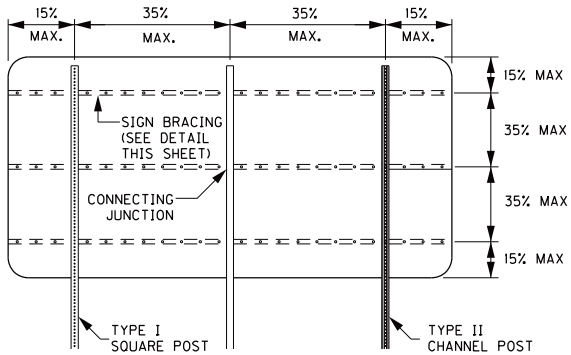
FOR ATTACHMENT OF SIGNS GREATER THAN, OR EQUAL TO, 72" IN WIDTH.

RIVETS SHALL BE COLOR CODED TO MATCH SHEETING IN ORDER TO MINIMIZE GLARE FROM RIVETS



SIGN BRACE

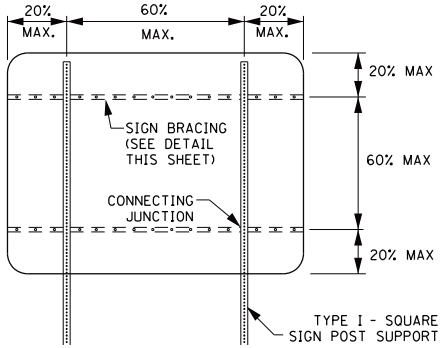
SQUARE POST CLAMP & BRACE



3 POST - BRACING DIAGRAM

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

2. BRACING SHOULD NOT BE SPLICED WITHIN 6" OF A BRACE TO POST JUNCTION.



2 POST - BRACING DIAGRAM

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

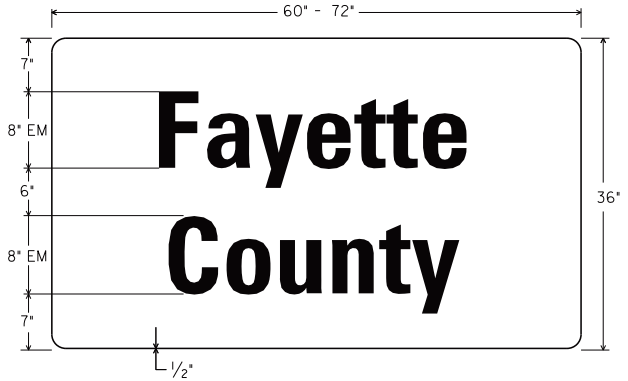
NOT TO SCALE

SHEETING SIGN DETAIL

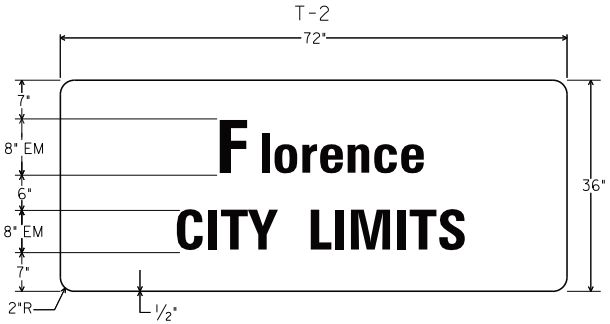
SHEET 2 OF 2

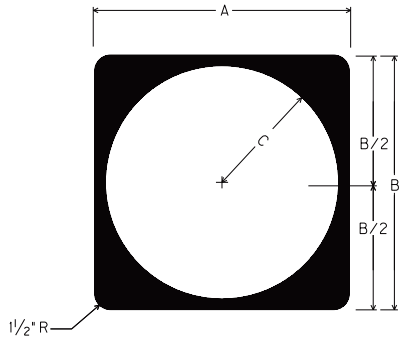
COUNTY OF	ITEM NO.	SHEET NO.

T-1

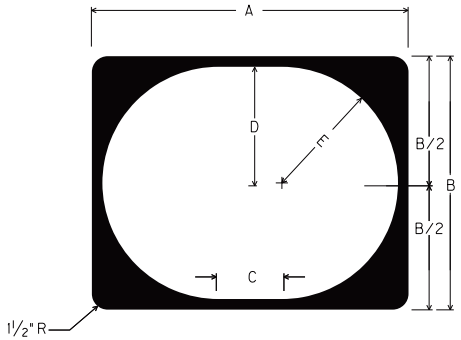


T-2





M1-5 (1 OR 2 DIGIT)



M1-5 (3 OR 4 DIGIT)

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

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

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

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

S-1



NOT TO SCALE

TYPICAL SIGNS

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____ **Contractor: _____**

Section Engineer: _____ **District & County: _____**

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

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

Printed Section Engineer's Representative_____ & Date_____

Signature Section Engineer's Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

Printed Bailey Bridge Yard Representative_____ & Date_____

Signature Bailey Bridge Yard Representative_____& Date_____

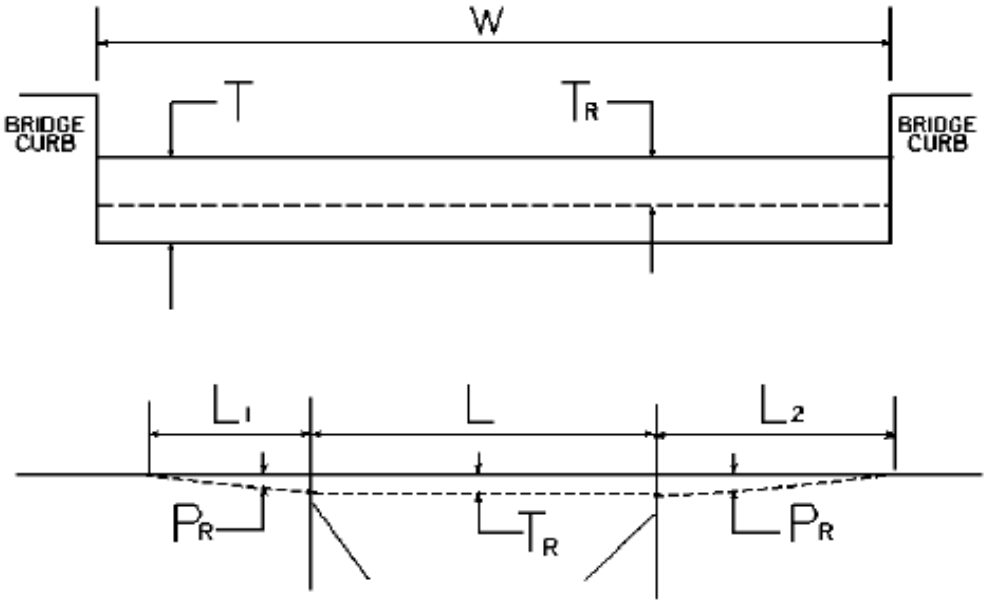
Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

Completed Form Submitted to Section Engineer Date: _____ By: _____

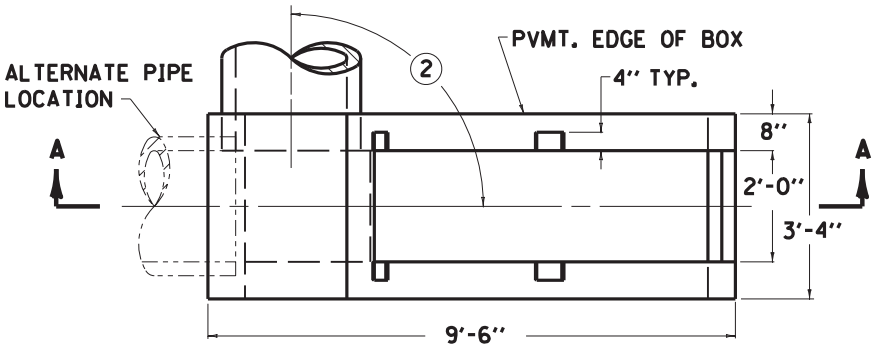
BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb
T = thickness of existing asphalt overlay
L = length of bridge
L_1 & L_2 = length of approach pavement to be removed
T_R = thickness to be removed and replaced on bridge
P_R = thickness to be removed and replaced on pavement
Note: L_1 & L_2 lengths shall be determined by using a transition rate of 100 ft/in of thickness

Bridge No.	MP	W (ft)	T (in)	L_1 (ft)	L_2 (ft)	T_R (in)	L (ft)	P_R (in)
B00255N	6.710	23.00	0.00	100.00	100.00	0.00	46.00	1.00

COUNTY OF	ITEM NO.	SHEET NO.



PLAN VIEW

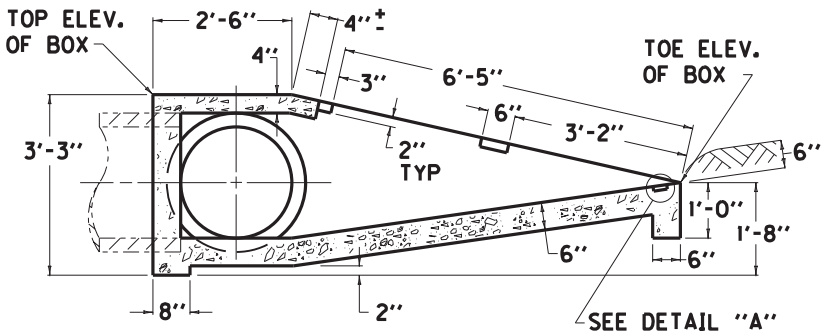
NOTES

ITEM CODE	BID ITEM	UNIT
1726	SAFETY BOX INLET-18 INCH SDB-1	EACH
1727	SAFETY BOX INLET-24 INCH SDB-1	EACH

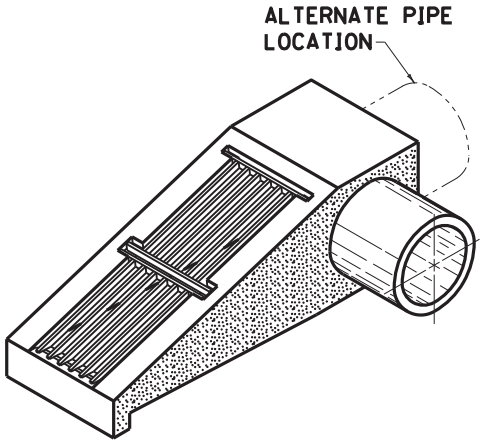
THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

(2) SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.

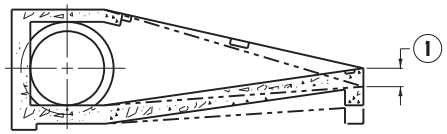


SECTION A-A

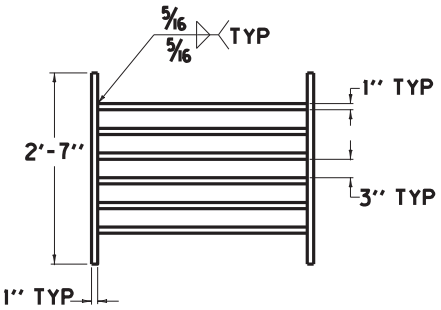


ISOMETRIC VIEW

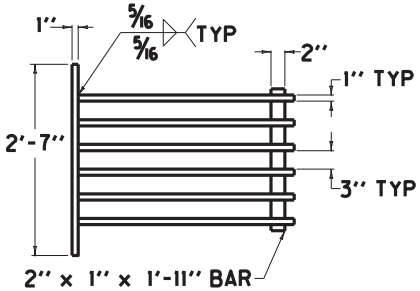
APPROXIMATE QUANTITIES			
CLASS "A" CONC.	GRATE	LBS. STRUCTURAL STEEL	
CUBIC YARDS	NUMBER	EACH GRATE	TOTAL POUNDS
1.44	1	145	298
	2	153	



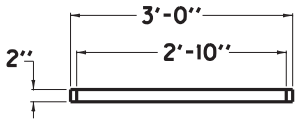
SECTIONAL VIEW



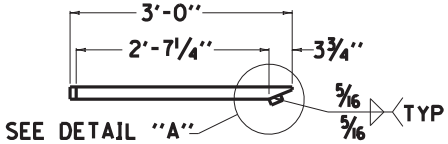
GRATE NO. 1
PLAN VIEW



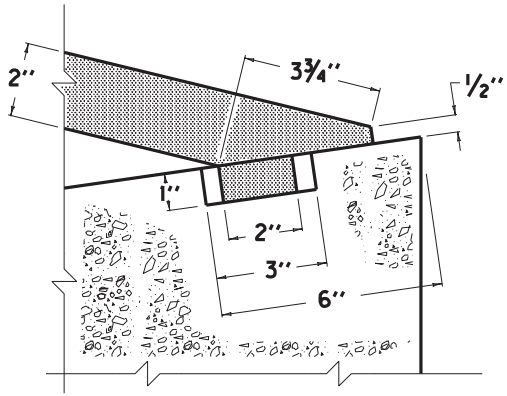
GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION



DETAIL "A"

KENTUCKY
DEPARTMENT OF HIGHWAYS

SAFETY TYPE BOX INLET (18" OR 24")

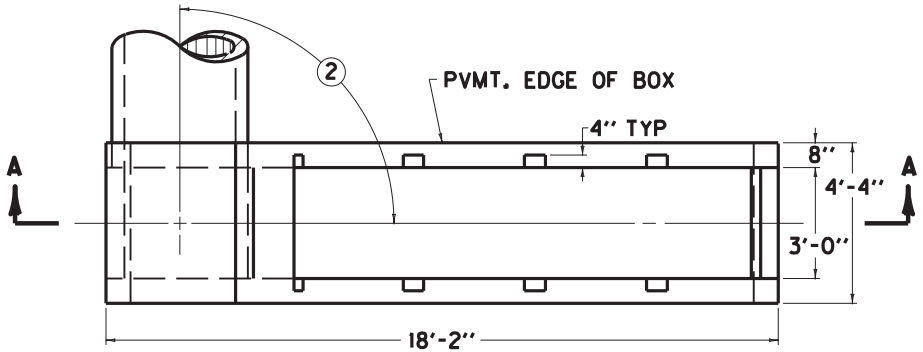
APPROVED _____ PROJECT ENGINEER

DATE 06-04-2008

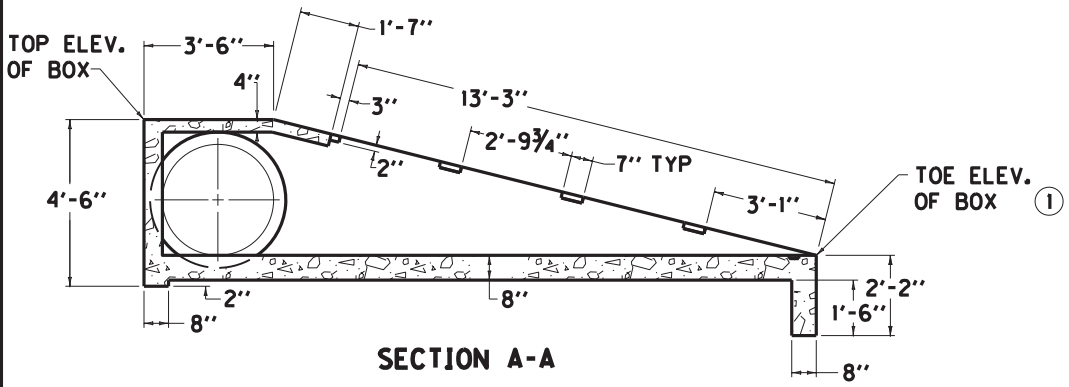
Contract ID: 234100
Page 146 of 294

PIKE COUNTY
08BGR23T001 HSIP & FD05

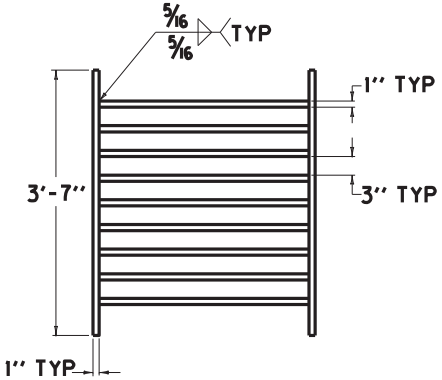
COUNTY OF	ITEM NO.	SHEET NO.



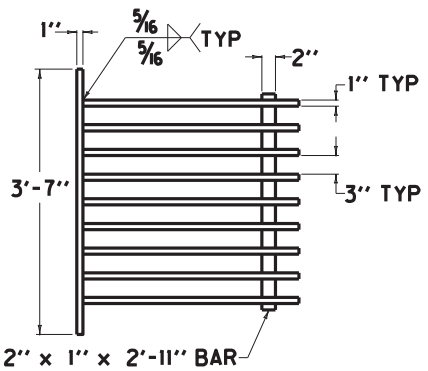
PLAN VIEW



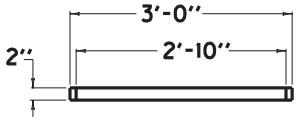
SECTION A-A



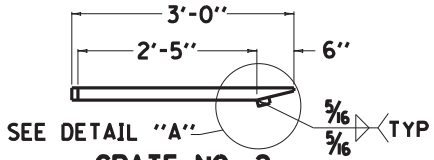
GRATE NO. 1
PLAN VIEW



GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION

NOTES

ITEM CODE	BID ITEM	UNIT
23044NS710	SAFETY BOX INLET-36 INCH SDB-1	EACH

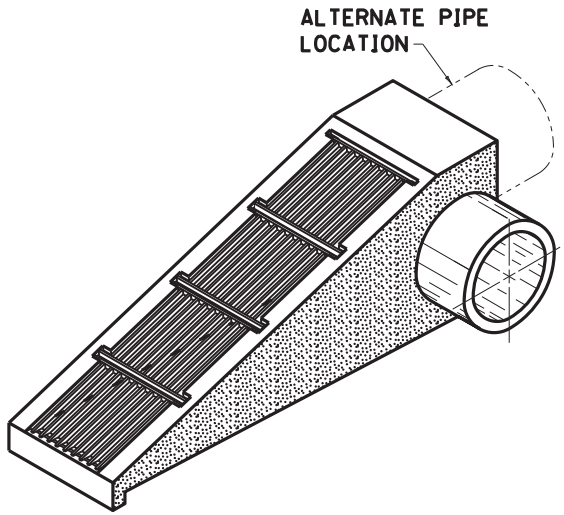
THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

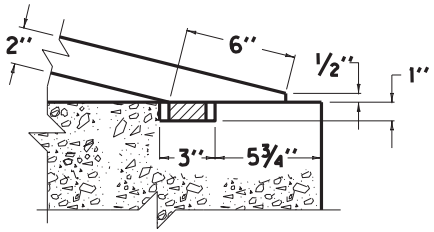
(2) SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.

3. ALL QUANTITIES ARE FOR ONE HEADWALL.

APPROXIMATE QUANTITIES					
CLASS "A" CONC.	GRATE	NO. OF GRATES REQ'D.	LBS.		
			STRUCTURAL STEEL		REINF. STEEL
CUBIC YARDS	NUMBER		EACH GRATE		
4.51	1	3	222	896	261
	2	1	230		



ISOMETRIC VIEW



DETAIL "A"

SHEET 1 OF 2

KENTUCKY
DEPARTMENT OF HIGHWAYS

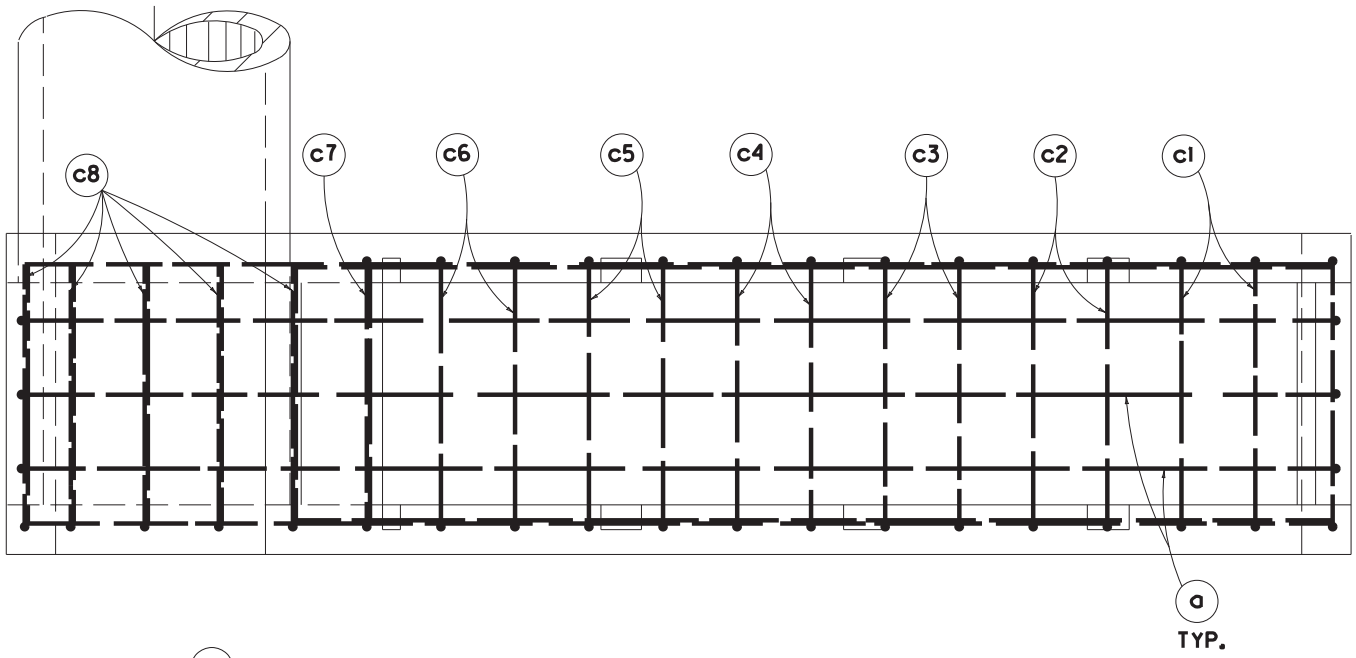
SAFETY TYPE
BOX INLET
(36")

APPROVED _____ PROJECT ENGINEER _____ DATE 06-04-2008

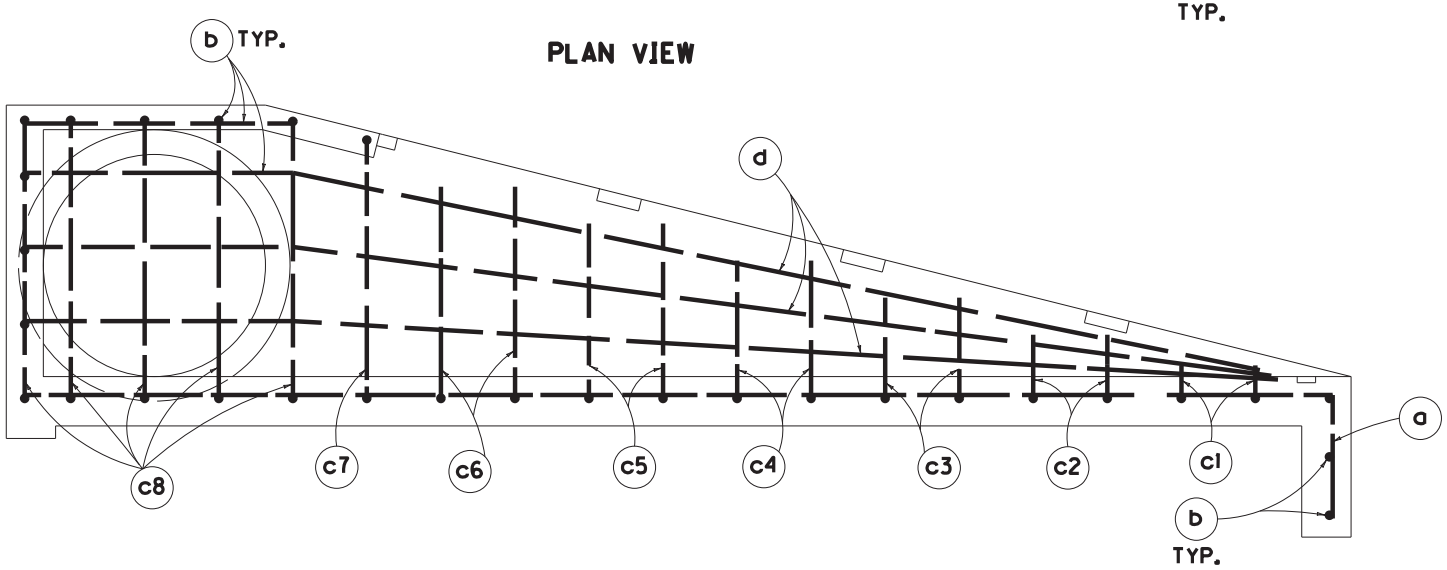
PIKE COUNTY
08BGR23T001 HSIP & D05

Contract ID: 234100
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COUNTY OF	ITEM NO.	SHEET NO.



PLAN VIEW



ELEVATION VIEW

NOTES

1. NUMBER OF BARS IN ONE HEADWALL.
2. DIMENSIONS ARE O. TO O. OF BARS.
3. ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.

BENT BAR SHAPES



K=3'-6"

BARS (c)



K=1'-8"

BARS (a)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
36"						
a	4	5	19	6	1	8
b	4	16	3	6		
c1	4	2	5	0	3	6
c2	4	2	5	10	3	6
c3	4	2	6	10	3	6
c4	4	2	7	10	3	6
c5	4	2	8	10	3	6
c6	4	2	9	10	3	6
c7	4	1	11	0	3	6
c8	4	5	11	6	3	6
d	4	6	13	4		

SHEET 2 OF 2

KENTUCKY
DEPARTMENT OF HIGHWAYS

BILL OF REINFORCEMENT SAFETY TYPE BOX INLET (36")

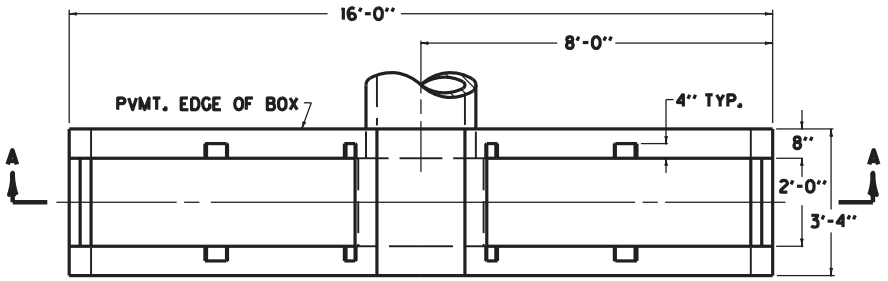
APPROVED _____ PROJECT ENGINEER

06-04-2008 DATE

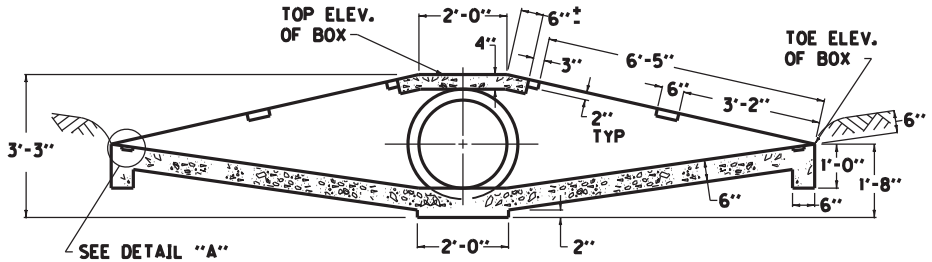
PIKE COUNTY
08BGR23T001 HSIP & SD0[illegible]

Contract ID: 234100
Page 448 of 294

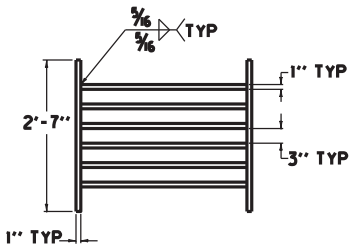
COUNTY OF	ITEM NO.	SHEET



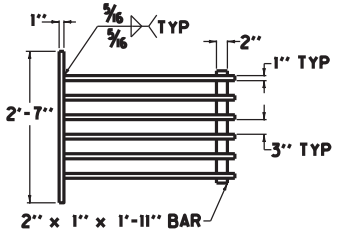
PLAN VIEW



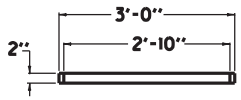
SECTION A-A



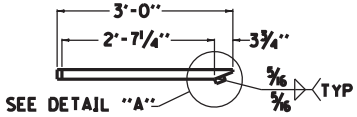
GRATE NO. 1
PLAN VIEW



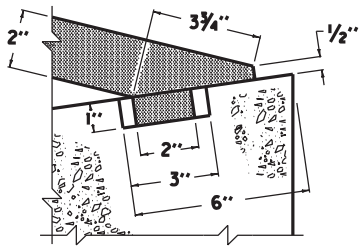
GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION



DETAIL "A"

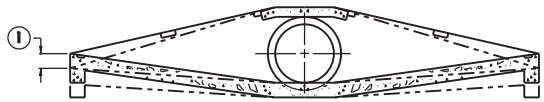
NOTES

ITEM CODE	BID ITEM	UNIT
1728	SAFETY BOX INLET-18 IN DBL SDB-5	EACH
1729	SAFETY BOX INLET-24 IN DBL SDB-5	EACH

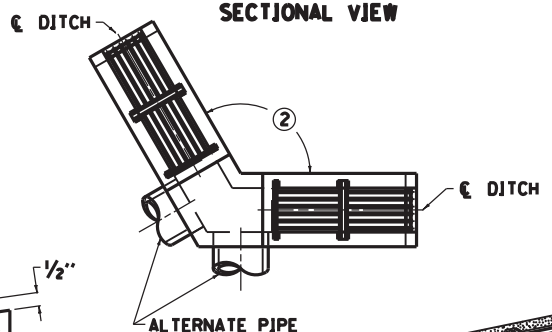
THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

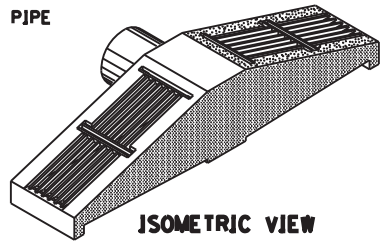
(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

(2) ANGLE BETWEEN BOX WALLS MAY VARY TO FIT EXISTING FIELD CONDITIONS.



SECTIONAL VIEW





ISOMETRIC VIEW

APPROXIMATE QUANTITIES			
CLASS "A" CONC.	GRATE	LBS. STRUCTURAL STEEL	
CUBIC YARDS	NUMBER	EACH GRATE	TOTAL POUNDS
2.07	1	145	596
	2	153	

N/A

DBL SAFETY BOX INLET DETAIL SHEET

MicroStation v8.11.7.443
E-SHEET NAME: ——
USER: Patrick.Stone
DATE PLOTTED: September 24, 2013
FILE NAME: C:\USERS\PATRICK.STONE\APPDATA\LOCAL\MICROSOFT\WINDOWS\TEMPORARY INTERNET FILES\CONTENT.OUTLOOK\YO843LNA\SAFETY BOX.DGN

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

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

SUPPLEMENTAL SPECIFICATIONS

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

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

SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

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

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

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

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

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

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

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

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

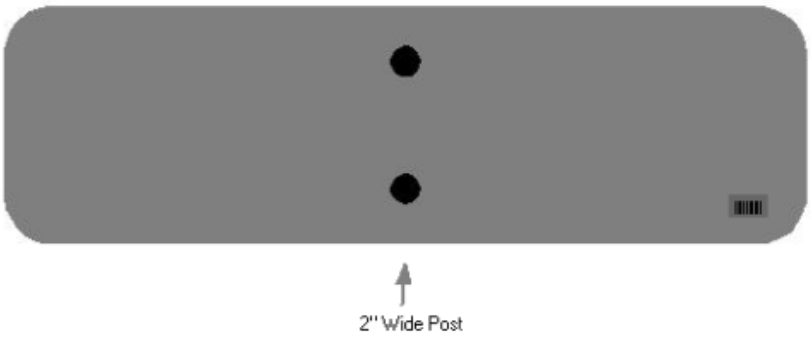
The installation of the permanent sign will be measured in accordance to Section 715.

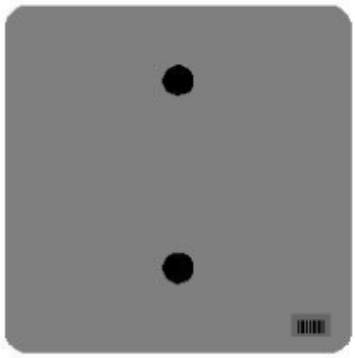
5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
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.

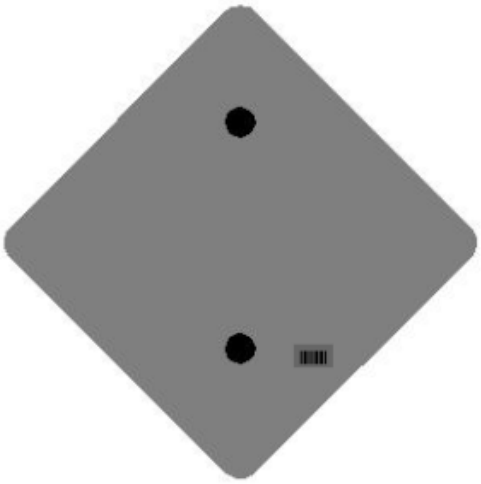
One Sign Post

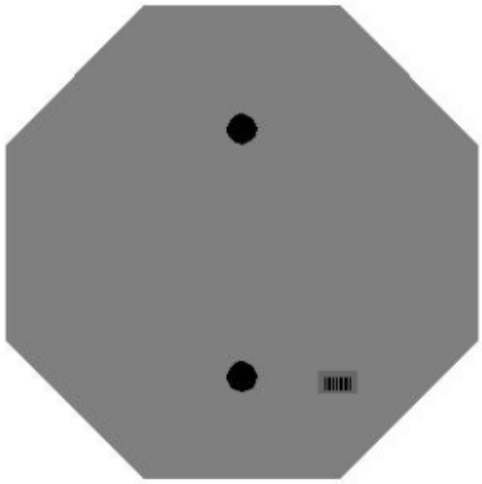


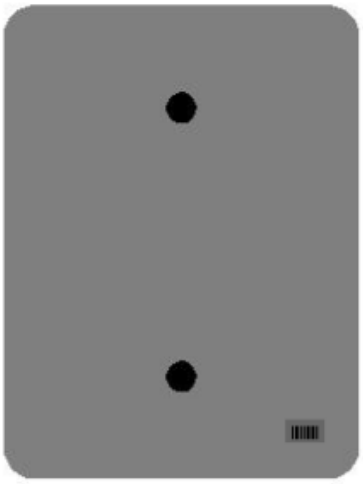


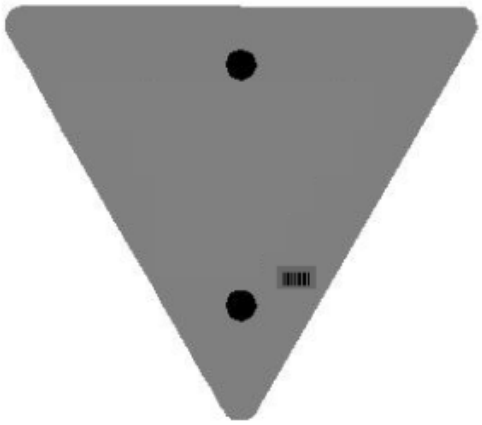


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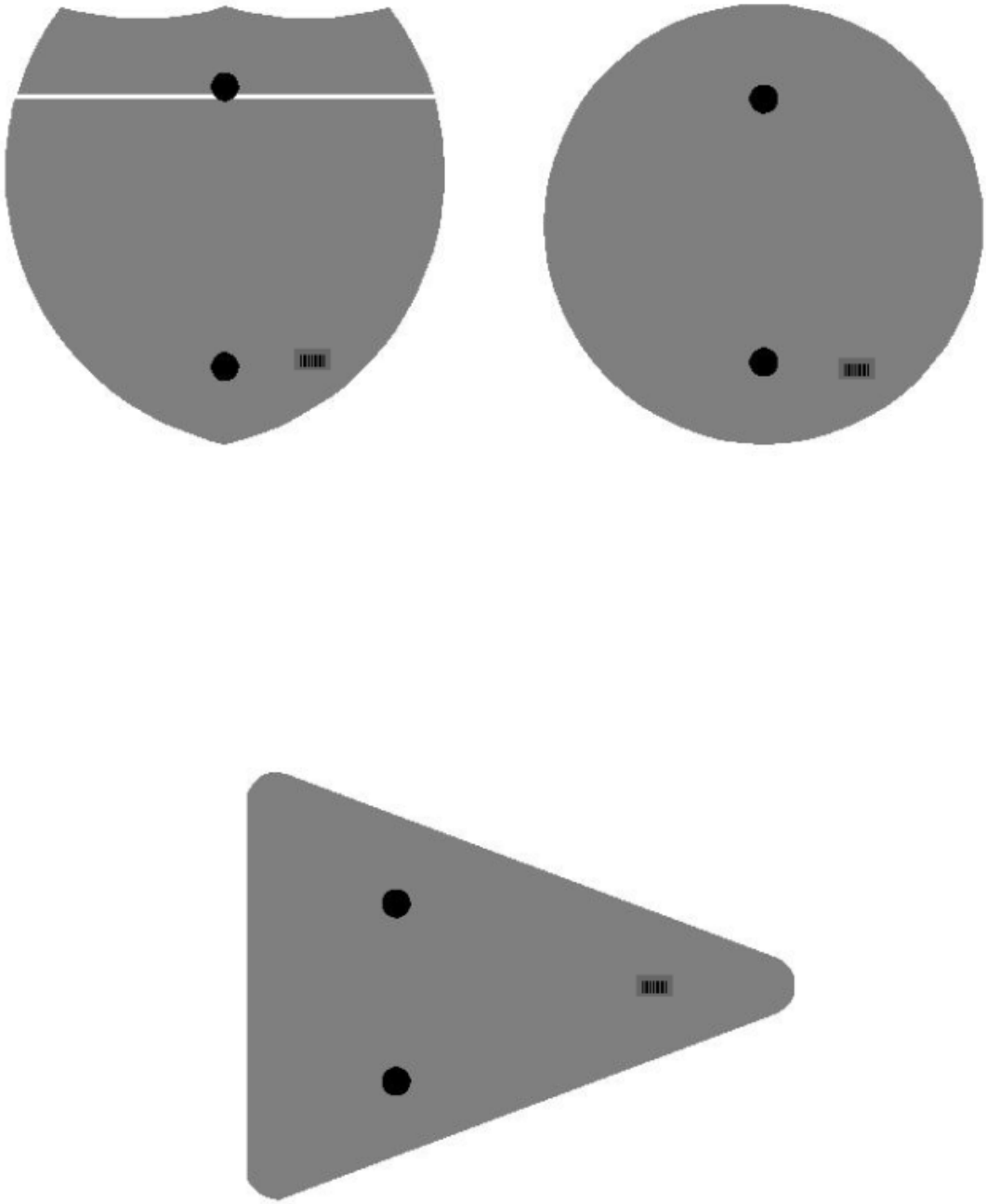




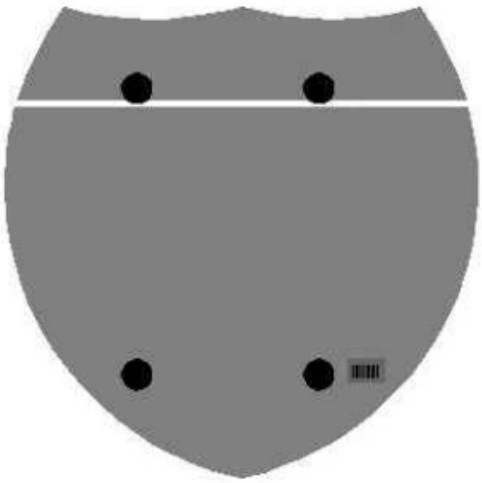




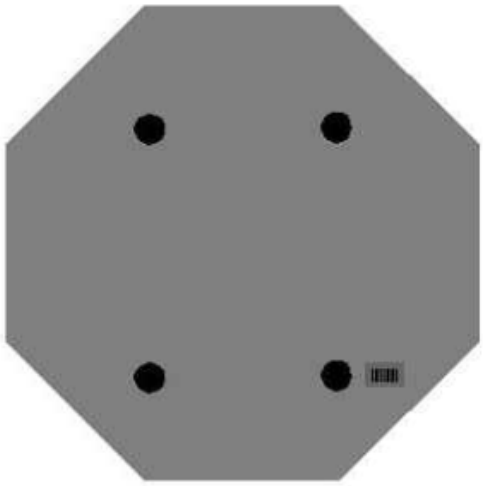
One Sign Post



Double Sign Post



Interstate
Shield

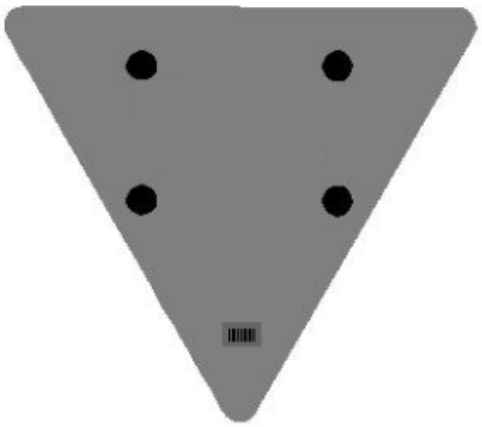


48" Stop

2 Post Signs







2020 STANDARD DRAWINGS THAT APPLY

ROADWAY

~ BARRIERS ~

GUARDRAIL AND BRIDGE END DRAINAGE

GUARDRAIL AND BRIDGE END DRAINAGE FOR SINGLE STRUCTURES RBB-001-09

GUARDRAIL CONNECTORS TO BRIDGE ENDS

GUARDRAIL CONNECTOR TO BRIDGE END TYPE D..... RBC-004-08
GUARDRAIL CONNECTOR TO BRIDGE END TYPE D NOTES..... RBC-004N

TYPICAL BARRIER INSTALLATIONS

TYPICAL GUARDRAIL INSTALLATIONS..... RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS..... RBI-002-07
TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A..... RBI-003-09
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1 ..... RBI-004-06

GUARDRAIL HARDWARE

STEEL BEAM GUARDRAIL (W-BEAM)..... RBR-001-13
GUARDRAIL COMPONENTS RBR-005-11
GUARDRAIL TERMINAL SECTIONS RBR-010-06
STEEL GUARDRAIL POSTS RBR-015-06
GUARDRAIL END TREATMENT TYPE 1 ..... RBR-020-07
GUARDRAIL END TREATMENT TYPE 2A..... RBR-025-06
GUARDRAIL END TREATMENT TYPE 4A..... RBR-035-12
GUARDRAIL END TREATMENT TYPE 7 ..... RBR-050-08
GUARDRAIL END TREATMENT TYPE 7 ALTERNATE ANCHOR RBR-051-01
DELINEATORS FOR GUARDRAIL..... RBR-005-01

~ DRAINAGE ~

PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS

CHANNEL LINING CLASS II AND III RDD-040-05

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12” – 24” PIPE) RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (27” – 42” PIPE) RDI-002-05
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE RDI-021-01
PIPE BEDDING, TRENCH CONDITION RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE RDI-026-01
EROSION CONTROL BLANKET SLOPE INSTALLATION.....RDI-040-01
FILL HEIGHTS FOR PRECAST REINFORCED CONCRETE BOX CULVERTS.....RDI-100-05
BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS, AND THEIR COMBINATIONS.....RDI-120-04

Standard Drawings That Apply
Page 2 of 3

MISCELLANEOUS DRAINAGE

INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE RDX-060-04
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS RDX-160-06
TEMPORARY SILT FENCE RDX-210-03
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC RDX-215-01
SILT TRAP - TYPE A RDX-220-05
SILT TRAP - TYPE B RDX-225-01
SILT TRAP - TYPE C RDX-230-01

~ GENERAL ~

CURVE WIDENING AND SUPERELEVATION

CURVE WIDENING AND SUPERELEVATION TRANSITIONS RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENTS RGS-002-06

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS RGX-001-06
TYPICAL EMBANKMENT FOUNDATION BENCHES RGX-010-04
TYPE D BREAKAWAY SIGN SUPPORT RGX-065-02

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT RPM-110-07

TRAFFIC

~ PERMANENT ~

MARKERS

PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS ..... Sepia 017

RUMBLE STRIPS

CENTERLINE RUMBLE STRIPS PLACEMENT DETAILS TPR-100
CENTERLINE RUMBLE STRIPS 6 INCH STRIPING TPR-110
SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS TPR-115
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS TPR-120

~ TEMPORARY ~

TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY TTC-100-05
LANE CLOSURE MULTI-LANE HIGHWAY CASE I TTC-115-04
DOUBLE LANE CLOSURE TTC-125-04
SHOULDER CLOSURE TTC-135-03

DEVICES

DOUBLE FINES ZONE SIGNS TTD-120-03
PAVEMENT CONDITION WARNING SIGNS TTD-125-03

Standard Drawings That Apply
Page 3 of 3

SPEED ZONE SIGNING FOR WORK ZONES TTD-130

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE I..... TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II..... TTS-105-02

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised July 5, 2022

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. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

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

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

2. Withholding (29 CFR 5.5)

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

3. Payrolls and basic records (29 CFR 5.5)

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

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

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

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

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

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees (29 CFR 5.5)

a. Apprentices (programs of the USDOL).

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

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

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

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the

corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 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 journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract 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 (29 CFR 5.5)

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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 watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 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. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum 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. 29 CFR 5.5.

* $27 as of January 23, 2019 (See 84 FR 213-01, 218) 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. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section. 29 CFR 5.5.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

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 200.326.

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 200.326.

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.

* * * * *

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.

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.

* * * * *

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(a) 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;

(b) 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

(c) 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)

2. 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.

* * * * *

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 administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or
    b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

General Decision Number: KY20230107 01/06/2023

Superseded General Decision Number: KY20220107

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

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:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $16.20 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 2023.
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:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 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 2023.

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	01/06/2023

SUKY2015-047 10/20/2015

	Rates	Fringes
BOILERMAKER	$ 24.65	12.94
BRICKLAYER		
Bricklayer	$ 22.90	8.50
Stone Mason	$ 21.50	8.50
CARPENTER		
Carpenter	$ 24.90	14.50
Piledriver	$ 24.55	14.50
CEMENT MASON	$ 21.25	8.50
ELECTRICIAN		
Electrician	$ 29.36	10.55
Equipment Operator	$ 26.90	10.31
Groundsman	$ 17.79	8.51
Lineman	$ 30.09	10.94

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

IRONWORKER	$ 27.56	20.57
LABORER		
Group 1	$ 21.80	12.36
Group 2	$ 22.05	12.36
Group 3	$ 22.10	12.36
Group 4	$ 22.70	12.36

GROUP 1: Aging and Curing of Concrete (Any Mode or Method), Asbestos Abatement Worker, Asphalt Plant Laborers, Asphalt Laborers, Batch Truck Dumpers, Carpenter Tenders, Cement Mason Tenders, Cleaning of Machines, Concrete Laborers, Demolition Laborers, Dredging Laborers, Drill Tender, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level D, Flagmen, Grade Checkers, All Hand Digging and Hand Back Filling, Highway Marker Placers, Landscaping Laborers, Mesh Handlers and Placers, Puddler, Railroad Laborers, Rip-rap and Grouters, Right of Way Laborers, Sign, Guard Rail and Fence Installers (All Types), Signalmen, Sound Barrier Installer, Storm and Sanitary Sewer Laborers, Swampers, Truck Spotters and Dumpers, Wrecking of Concrete Forms, General Cleanup

GROUP 2: Batter Board Men (Sanitary and Storm Sewer), Brickmason Tenders, Mortar Mixer Operator, Scaffold Builders, Burner and Welder, Bushammers, Chain Saw Operator, Concrete Saw Operators, Deckhand Scow Man, Dry Cement Handlers, Environmental Laborers - Nuclear, Radiation, Toxic and

Hazardous Waste - Level C, Forklift Operators for Masonry, Form Setters, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jack Hammers, Lead Paint Abatement, Pavement Breakers, Paving Joint Machine, Pipe Layers - Laser Operators (Non-metallic), Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, Power Post Hole Diggers, Precast Manhole Setters, Walk-behind Tampers, Walk-behind Trenchers, Sand Blasters, Concrete Chippers, Surface Grinders, Vibrator Operators, Wagon Drillers
GROUP 3: Air Track Driller (All Types), Asphalt Luteman and Rakers, Gunnite Nozzleman, Gunnite Operators and Mixers, Grout Pump Operator, Powderman and Blaster, Side Rail Setters, Rail Paved Ditches, Screw Operators, Tunnel Laborers (Free Air), Water Blasters
GROUP 4: Caisson Workers (Free Air), Cement Finishers, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level A and B, miners and Drillers (Free Air), Tunnel Blasters, and Tunnel Mockers (Free Air), Directional and Horizontal Boring, Air Track Drillers (All Types), Powder Man and Blasters, Troxler and Concrete Tester if Laborer is Utilized

PAINTER		
All Excluding Bridges	$ 19.92	9.57
Bridges	$ 23.92	10.07
PLUMBER	$ 22.52	7.80
POWER EQUIPMENT OPERATOR:		
Group 1	$ 29.95	14.40
Group 2	$ 29.95	14.40
Group 3	$ 27.26	14.40
Group 4	$ 26.96	14.40

GROUP 1: Auto Patrol, Batcher Plant, Bituminous Paver, Cable-Way, Clamshell, Concrete Mixer (21 cu ft or over), Concrete Pump, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Engineer, Elevator (regardless of ownership when used for hoisting any building material), Elevating Grader and all types of Loaders, Hoe-type Machine, Hoisting Engine, Locomotive, LeTourneau or Carry-all Scoop, Bulldozer, Mechanic, Orangepeel Bucket, Piledriver, Power Blade, Roller (Bituminous), Roller (Earth), Roller (Rock), Scarifier, Shovel, Tractor Shovel, Truck Crane, Well Point, Winch Truck, Push Dozer, Grout Pump, High Lift, Fork Lift (regardless of lift height), all types of Boom Cats, Multiple Operator, Core Drill, Tow or Push Boat, A-Frame Winch Truck, Concrete Paver, Grade-All, Hoist, Hyster, Material Pump, Pumpcrete, Ross Carrier, Sheepfoot, Sideboom, Throttle-Valve Man, Rotary Drill, Power Generator, Mucking Machine, Rock Spreader attached to Equipment, Scoopmobile, KeCal Loader, Tower Cranes,(French, German and other types), Hydrocrane, Tugger, Backfiller Gurries, Self-propelled Compactor, Self-Contained Hydraulic Percussion Drill
GROUP 2: All Air Compressors (200 cu ft/min or greater), Bituminous Mixer, Concrete Mixer (21 cu. ft. or over), Welding Machine, Form Grader, Tractor (50 hp and over), Bull Float,

Finish Machine, Outboard Motor Boat, Brakeman, Mechanic Tender, Whirly Oiler, Tract-air, Road Widening Trencher, Articulating Trucks
GROUP 3: Greaser on Grease Facilities servicing Heavy Equipment
GROUP 4: Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Pump, Tamping Machine, Tractor (under 50 hp), Vibrator, Oiler, Air Compressor (under 200 cu ft per minute), Concrete Saw, Burlap and Curing Machine, Hydro Seeder, Power Form Handling Equipment, Deckhand Oiler, Hydraulic Post Driver

SHEET METAL WORKER	$ 20.40	7.80
TRUCK DRIVER		
Driver (3 Tons and Over), Driver (Truck Mounted Rotary Drill)	$ 23.74	14.50
Driver (3 Tons and Under), Tire Changer and Truck Mechanic Tender	$ 23.53	14.50
Driver (Semi-Trailer or Pole Trailer), Driver (Dump Truck, Tandem Axle), Driver of Distributor	$ 23.40	14.50
Driver on Mixer Trucks (All Types)	$ 23.45	14.50
Driver on Pavement Breakers	$ 23.55	14.50
Driver, Euclid and Other Heavy Earth Moving Equipment and Low Boy	$ 24.31	14.50
Driver, Winch Truck and A-Frame when used in Transporting Materials	$ 23.30	14.50
Greaser on Greasing Facilities	$ 24.40	14.50
Truck Mechanic	$ 23.50	14.50
Truck Tender and Warehouseman	$ 23.20	14.50

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average

calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL 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

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

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
2.5%	6.9%

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

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

3. The Notification of Construction Contract Award Portal (NCAP) is OFCCP's preferred method for receiving construction contract award notifications. The NCAP can be found on OFCCP's website at https://www.dol.gov/agencies/ofccp/ncap. Users who prefer not to use the portal maintain the option to send their notifications via mail, email and facsimile to the OFCCP Regional office in which the work will be performed. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification must include: Prime Contract Number (issued by the federal agency or applicant); Name of Awarding Federal Agency, Applicant or Contractor; Contracting Officer, Applicant Representative or Contractor Representative Submitting Notification with name, phone number, email address; Contractor Awarded Contract or Subcontract with name, address, phone number, email address, EIN, dollar amount of the contract, estimated start date of the contract, estimated completion date of the contract, geographical area in which the contract is to be performed (state, county's city (if applicable)).
The notification shall be mailed to:

Regional Director
Office of Federal Contract Compliance Programs
61 Forsyth Street, SW, Suite 7B75
Atlanta, Georgia 30303-8931
Main Number: 404-893-4545 Fax: 404-893-4546
Regional Director Contact: OFCCP-SE@dol.gov
Construction Award Email: OFCCP-SE-ConstructionAward@dol.gov

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

(Revised: 1/1/2023)

PART IV

INSURANCE

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

PART V

BID ITEMS

234100

PROPOSAL BID ITEMS

Report Date 12/28/22

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190		LEVELING & WEDGING PG64-22	931.00	TON		$	
0020	00212		CL2 ASPH BASE 1.00D PG64-22	14.00	TON		$	
0030	00301		CL2 ASPH SURF 0.38D PG64-22	7,503.00	TON		$	
0040	00356		ASPHALT MATERIAL FOR TACK	62.10	TON		$	
0050	02562		TEMPORARY SIGNS	800.00	SQFT		$	
0060	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		$	
0070	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		$	
0080	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING	1,957.00	TON		$	
0100	02697		EDGELINE RUMBLE STRIPS	67,000.00	LF		$	
0110	06510		PAVE STRIPING-TEMP PAINT-4 IN	30,000.00	LF		$	
0120	06515		PAVE STRIPING-PERM PAINT-6 IN	134,000.00	LF		$	
0130	10020NS		FUEL ADJUSTMENT	10,001.00	DOLL	$1.00	$	$10,001.00
0140	10030NS		ASPHALT ADJUSTMENT	25,119.00	DOLL	$1.00	$	$25,119.00
0150	20458ES403		CENTERLINE RUMBLE STRIPS	33,450.00	LF		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0160	02159		TEMP DITCH	22,461.00	LF		$	
0170	02160		CLEAN TEMP DITCH	11,231.00	LF		$	
0180	02650		MAINTAIN & CONTROL TRAFFIC (PIKE KY 197 HSIP)	1.00	LS		$	
0190	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		$	
0200	02701		TEMP SILT FENCE	22,461.00	LF		$	
0210	02703		SILT TRAP TYPE A	10.00	EACH		$	
0220	02704		SILT TRAP TYPE B	10.00	EACH		$	
0230	02705		SILT TRAP TYPE C	10.00	EACH		$	
0240	02706		CLEAN SILT TRAP TYPE A	10.00	EACH		$	
0250	02707		CLEAN SILT TRAP TYPE B	10.00	EACH		$	
0260	02708		CLEAN SILT TRAP TYPE C	10.00	EACH		$	
0270	02726		STAKING (PIKE KY 197 HSIP)	1.00	LS		$	
0280	05950		EROSION CONTROL BLANKET	1,000.00	SQYD		$	
0290	05952		TEMP MULCH	30,976.00	SQYD		$	
0300	05953		TEMP SEEDING AND PROTECTION	23,232.00	SQYD		$	
0310	05963		INITIAL FERTILIZER	2.40	TON		$	
0320	05964		MAINTENANCE FERTILIZER	1.44	TON		$	
0330	05985		SEEDING AND PROTECTION	26,494.00	SQYD		$	
0340	05992		AGRICULTURAL LIMESTONE	28.80	TON		$	
0350	06510		PAVE STRIPING-TEMP PAINT-4 IN	42,230.00	LF		$	
0360	06515		PAVE STRIPING-PERM PAINT-6 IN	101,016.00	LF		$	
0370	06572		PAVE MARKING-DOTTED LANE EXTEN	140.00	LF		$	
0380	26175EC		ROADSIDE REGRADING	15,953.00	LF		$	

234100

PROPOSAL BID ITEMS

Report Date 12/28/22

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0390	00462		CULVERT PIPE-18 IN	108.00	LF		$	
0400	00464		CULVERT PIPE-24 IN	117.00	LF		$	
0410	01310		REMOVE PIPE	78.00	LF		$	
0420	02483		CHANNEL LINING CLASS II	170.00	TON		$	
0430	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	384.00	SQYD	$2.00	$	$768.00
0440	02625		REMOVE HEADWALL	17.00	EACH		$	
0450	03262		CLEAN PIPE STRUCTURE	12.00	EACH		$	
0460	08003		FOUNDATION PREPARATION (MP 10.91 - STA. 576+08)	1.00	LS		$	
0470	08003		FOUNDATION PREPARATION (MP 12.72 - STA. 671+40)	1.00	LS		$	
0480	08003		FOUNDATION PREPARATION (MP 14.02 - STA. 740+00)	1.00	LS		$	
0490	08003		FOUNDATION PREPARATION (MP 14.43 - STA. 761+64)	1.00	LS		$	
0500	08003		FOUNDATION PREPARATION (MP 14.57 - STA. 769+10)	1.00	LS		$	
0510	08100		CONCRETE-CLASS A (CULVERTS)	90.12	CUYD		$	
0520	08100		CONCRETE-CLASS A (FOR INTERMEDIATE ANCHOR/COLLAR)	22.39	CUYD		$	
0530	08150		STEEL REINFORCEMENT (CULVERTS)	24,119.00	LB		$	
0540	20465EC		CLEAN CULVERT (MP 10.91 - STA. 576+08)	1.00	LS		$	
0550	20465EC		CLEAN CULVERT (MP 12.72 - STA. 671+40)	1.00	LS		$	
0560	20465EC		CLEAN CULVERT (MP 14.02 - STA. 740+00)	1.00	LS		$	
0570	20465EC		CLEAN CULVERT (MP 14.43 - STA. 761+64)	1.00	LS		$	
0580	20465EC		CLEAN CULVERT (MP 14.57 - STA. 769+10)	1.00	LS		$	
0590	26131ED		SLOPED AND MITERED HEADWALL-18 IN	7.00	EACH		$	
0600	26132ED		SLOPED AND MITERED HEADWALL-24 IN	8.00	EACH		$	

Section: 0004 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0610	02562		TEMPORARY SIGNS	800.00	SQFT		$	
0620	06406		SBM ALUM SHEET SIGNS .080 IN	1,709.19	SQFT		$	
0630	06407		SBM ALUM SHEET SIGNS .125 IN	69.16	SQFT		$	
0640	06410		STEEL POST TYPE 1	4,115.00	LF		$	
0650	21134ND		REMOVE-STORE AND REINSTALL SIGN	10.00	EACH		$	
0660	21373ND		REMOVE SIGN	117.00	EACH		$	
0670	24631EC		BARCODE SIGN INVENTORY	471.00	EACH		$	

Section: 0005 - GUARDRAIL

PROPOSAL BID ITEMS

234100

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Report Date 12/28/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0680	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	81.00	EACH		$	
0690	02351		GUARDRAIL-STEEL W BEAM-S FACE	3,858.75	LF		$	
0700	02355		GUARDRAIL-STEEL W BEAM-S FACE A	50.00	LF		$	
0710	02360		GUARDRAIL TERMINAL SECTION NO 1	6.00	EACH		$	
0720	02367		GUARDRAIL END TREATMENT TYPE 1	2.00	EACH		$	
0730	02369		GUARDRAIL END TREATMENT TYPE 2A	5.00	EACH		$	
0740	02371		GUARDRAIL END TREATMENT TYPE 7	2.00	EACH		$	
0750	02378		GUARDRAIL CONNECTOR TO BRIDGE END TY D	4.00	EACH		$	
0760	02381		REMOVE GUARDRAIL	3,583.00	LF		$	
0770	02391		GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH		$	

Section: 0006 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0780	00441		ENTRANCE PIPE-18 IN	40.00	LF		$	
0790	14036		W PIPE DUCTILE IRON 06 INCH	123.00	LF		$	
0800	14094		W TIE-IN 06 INCH	2.00	EACH		$	
0810	23561EC		EXCAVATION TRENCH-ROCK	123.00	LF		$	

Section: 0007 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0820	02569		DEMOBILIZATION	1.00	LS		$	